

## **Trilateral Commission [2]**

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The Honorable Jimmy Carter  
P. O. Box 7667  
Atlanta, Georgia 30309

Dear Jimmy:

It occurred to me that you may soon have to speak up on the question of U.S.-Soviet relations, and thus the enclosed memorandum may be of some help to you.

As you can see, it is based in part on a recent visit by me to Moscow and it contains both an analysis as well as some recommendations. I am generally troubled by the way the Administration is handling the U.S.-Soviet detente, though on the whole I do feel that it is in the American interest to promote an American-Soviet detente. However, that detente ought to be more reciprocal and it ought to be shaped with clearer American political objectives in mind.

I hope all goes well with you, and do let me know if I can be of some further help.

The strength of the Soviet will to pursue the course of missile parity (or, going further, "parity of the great powers" at the turn of the century). The most important element has been a historical drive for parity in the life of many Russians, and I am impressed by its vitality among the great Russians especially its political implications should not be underestimated.

The Soviets clearly desire detente with the West, and I believe, is a genuine desire, but such depends on how detente is defined and what substance it is given. The emphasis ought to be put on reciprocity. The Soviet strategy for detente is much more fully than

Cordially,

Zbigniew Brzezinski

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June 18, 1975

CONFIDENTIAL PERSONAL MEMORANDUM - NOT FOR CIRCULATION

FROM: Zbigniew Brzezinski *ZB*  
SUBJECT: Detente: A Strategic Review

Basic Propositions:

- 1) That in the course of the last three years, the U.S.-Soviet detente has increasingly acquired a content and a character more largely in keeping with Soviet foreign policy objectives than with the presumed initial U.S. goals for such detente;
- 2) That as a consequence of the above the balance of benefits and costs has become more favorable to the Soviet side;
- 3) That the manner in which the U.S. has conducted its detente policy has contributed to the political and military decomposition of the western alliance;
- 4) That Soviet gains obtained from detente, instead of making the Soviet Union more "responsible" and "restrained," could precipitate a new wave of Soviet assertiveness, from a position of greater confidence, the latter further stimulated by the current crisis of the West;
- 5) That a more reciprocal detente, and not a return to Cold War tensions, should be the U.S. goal.

With reference to 1)\*:

Neither side, understandably, announced in advance its goals for detente. Each side, for its own reasons, desired detente, and thus detente has not been a case of successful courtship of one by the other; rather, it has involved the interaction of two varying sets of goals within a mutually desired framework of gradual accommodation and normalization of relations (i.e., detente).

Soviet objectives can be inferred from Soviet statements and actions. After a period of uncertainty following Khrushchev's removal, an uncertainty intensified by the events in Czechoslovakia, the Soviet leadership by the early seventies gradually crystallized a new policy, the purpose of which was essentially:

1. to forestall a renewed "encirclement" of the Soviet Union, this time by the United States and China;
2. to obtain the status of global political equality with the United States;
3. to improve the Soviet strategic posture, at least initially to the level of parity, without precipitating countervailing U.S. moves;
4. to obtain de facto and de jure acquiescence by the West to the division of Europe and of Germany, and to Soviet predominance in Eastern Europe;
5. to gain additional influence in areas broadly contiguous to the Soviet sphere, notably the Middle East and South Asia, perhaps even Western Europe;
6. to relieve Soviet economic bottlenecks through the importation of Western technology, preferably on a credit basis.

The new Brezhnev design involved a continental policy, unlike Khrushchev's premature globalism; it was to be pursued and achieved with less fanfare, without arising Western anxieties and reactions. It took for granted a period of international quiescence; the Soviet leaders went even as far as to forsake publicly the older goal of Soviet economic autarchy, proclaiming instead the need for closer economic ties with the industrially advanced countries of the West.

All of this was to be sought while avoiding the internal ideological and political challenges that earlier periods of detente, notably that of the mid-sixties, had generated. The occupation of Czechoslovakia, stricter doctrinal controls, and the deliberate compartmentalization of detente to

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\* "That in the course of the last three years, the U.S.-Soviet detente has increasingly acquired a content and a character more largely in keeping with Soviet foreign policy objectives than with the presumed initial U.S. goals for such detente."

external issues were to forestall any repetition of the earlier contagion. The new detente was to be limited and conservative; it was not to be accompanied by any domestic evolution in Soviet or East European politics.

The Soviet approach interacted with the new foreign policy fashioned by the U.S. Administration that took over in January of 1969. The U.S. side, too, felt it desirable to move "from confrontation to negotiation," in order, it would appear, to attain the following objectives:

1. to obtain Soviet collaboration in achieving a tolerable U.S. disengagement from Vietnam;
2. to use the leverage obtained through a gradual improvement in U.S.-Chinese relations to increase the Soviet stake in less tense U.S.-Soviet relations;
3. to slow down the pace of the strategic arms race at a time of declining American, and of increasing Soviet, momentum in order to stabilize a relationship of approximate strategic parity;
4. to spin a wider web of various relationships, including economic, thereby increasing the Soviet stake in stability;
5. to derive from the foregoing greater Soviet accommodation in the resolution of various regional conflicts.

To promote these ends, the U.S. moved on two fronts at the same time, towards both Peking and Moscow, exploiting the Sino-Soviet dispute to enhance the Soviet stake in the U.S.-Soviet accommodation. This accommodation did initially result in some regional arrangements (as in regards to Berlin), though evidence of Soviet help in extricating the U.S. from Vietnam is less clearcut. Moreover, the Soviet side promptly began to exploit the new U.S.-Soviet summits as proof that a new, globally decisive bilateral relationship has been forged over the heads of other governments.

Soviet ability to exploit detente to its ends was enhanced by the growing domestic weakness of the U.S. President. His domestic difficulties increasingly began to dominate his conduct, prompting him to attach exceptional significance to the U.S.-Soviet summits as offering tangible proof of progress in building "a generation of peace." More generally, our foreign affairs principals have created a widespread feeling that the U.S. is receptive to the idea of a special Washington-Moscow relationship.

With reference to 2)\*:

As a consequence of the above, it would appear that initial Soviet concerns over the implications of the feared U.S.-Chinese collusion were gradually

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\* "That as a consequence of the above, the balance of benefits and costs has become more favorable to the Soviet side."

dissipated. By 1974 or possibly even 1973 the Soviets could justifiably conclude that they had succeeded in downgrading the Washington-Peking relationship, while American acceptance of Soviet formulations concerning the U.S.-Soviet relationship (including the symbolically important use of the Soviet concept of "peaceful coexistence" to define the relationship and the use of phrases signifying the special global co-responsibility of the two powers) also had the effect of helping to attain the Soviets' second objective.

Thirdly, the Soviet side has been able to improve very substantially its position in the strategic equation, without precipitating U.S. reactions, creating thereby grounds for concern that perceived Soviet predominance could become a political threat to U.S. interests. This the Soviet Union has done by carefully programming a steady growth in its military capabilities, without (unlike Khrushchev) advance public announcements or political boasts, thereby making it more difficult for U.S. political leadership to generate an offsetting effort.

The Soviet side, furthermore, might be justified in concluding that it has largely achieved also its fourth goal. It has been taking advantage of the prevailing situation to strengthen its controls over Eastern Europe, while the U.S. appears increasingly disinterested in the region.

Fifthly, the Soviet Union has increased substantially its role in South Asia and it has retained its presence in the Mediterranean, though with some retraction of its political influence in Egypt. Moreover, events in Portugal have created the possibility of a Soviet "leapfrog" to the Atlantic.

The Soviet side has been partially successful in attaining its sixth objective, though somewhat less so in the United States, given the appearance of congressional opposition to large U.S. credits. Nonetheless, American-Soviet trade relations also gave the Soviet side additional leverage vis-a-vis Western Europe and Japan, particularly in regards to credits.

On the U.S. side, with respect to the first U.S. goal, there is no conclusive way of establishing that detente contributed to a greater Soviet willingness to help the U.S. to extricate itself from Vietnam. It is relevant to note here that the bombing and blockade of North Vietnam (including Soviet ships) seems to have been related more directly to the restraint shown in 1972.

With respect to the second goal, it is likely, in fact probable, that the Soviet stake in better U.S.-Soviet relations was actually heightened by the opening of U.S.-Chinese relations. However, it is the substance of the improvement rather than its fact that is a more important indication of relative success or failure, since an improvement was in any case also desired by the Soviet side.

Thirdly, there are grounds for concluding that detente may have somewhat slowed down the pace of Soviet strategic deployment, since it is unlikely that a firm limit on Soviet missile strength could have been set in the

context of high tensions. Thus the attainment of the third goal of U.S. policy was, in all likelihood, abetted by detente, notwithstanding some possible dissatisfaction over the actual numerical limits arranged thereby.

It is certainly premature to conclude that the various cooperative arrangements so far contrived (space, medicine, science, etc.); not to speak of the limited increase in trade, have spun a web of relations capable of restraining the Soviet Union from adopting a more assertive posture, should an appropriate opportunity be perceived by Moscow. Thus the fourth goal is yet to be obtained, or its attainment truly tested.

With regards to the fifth goal, one can certainly argue that Soviet "restraint" in the Middle East during and preceding the 1973 war, was conditioned by long-standing standards of prudence which traditionally have shaped Soviet policy. It seems highly doubtful that -- given the historical record -- the Soviet Union would have acted very differently even without the summit meetings, without the U.S. acceptance of the Soviet view of "peaceful coexistence," without the tacit signs of U.S. disinterest in Eastern Europe, and without U.S. credits.

It should be noted, finally, that as a byproduct of detente, probably at least initially unintentional, the Soviet side has gained unprecedented access to the U.S. elite, which it has fully exploited, especially in Congress but also in business. U.S. access to Soviet political decision-makers has not increased on the same scale.

Accordingly, on balance it would appear proper to conclude that all six of the postulated goals of the Soviet detente policy have been already attained or are well on the way to being attained; that this is largely not the case -- or, at least, not yet the case -- with the majority of the postulated goals on the American side of the detente equation. Moreover, the more tangible concessions, both material and symbolic, have been made by the U.S. side.

With reference to 3)\*:

There is a fundamental difference between a detente which promotes peaceful change within the communist world, and one which obstructs it; between a detente which consolidates the West and one which facilitates the emergence of non-democratic pro-Soviet governments; between a detente which keeps moral issues in sharp focus, and one which obscures them.

In recent years U.S. foreign affairs principals have spoken loosely of "a generation of peace" and have pointed to alleged Soviet restraint, claiming both to be the consequence of the current U.S. detente policy. The public has been encouraged to believe that U.S.-Soviet rivalry (or the Cold War) has ended; symbolic gestures (such as the joint space flight) and rhetoric

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\* "That the manner in which the U.S. has conducted its detente policy has contributed to the political and military decomposition of the western alliance."

of moral equivalence have contributed at home and abroad to the impression that a new condominium of peace might be in the making. Finally, various governmental and business spokesmen have claimed that U.S. credits and transfer of technology to the Soviet Union would also firm up the new relationship.

All this has taken place at a time when the Soviet Union has been moving steadily and ably to consolidate its position in Eastern Europe and to create the preconditions for a more assertive relationship with a post-Tito Yugoslavia. Eastern Europe, faced with higher fuel costs and increased difficulties in its trade with the West, has been drawn more tightly into the Soviet orbit, and this process has been accompanied by the tightening of ideological controls even in such relatively more autonomous states as Poland. Within the Soviet Union there has also been a more effective crackdown on dissent. Yet at the same time, the U.S. side has been quietly reducing the political thrust of the principal organs for the dissemination of independent points of view in Eastern Europe and in the Soviet Union, namely Radio Free Europe and Radio Liberty, instruments which over the years have given the U.S. unique leverage on the minds of the populations of Eastern Europe and the Soviet Union.

The deliberate downgrading of moral and philosophical concerns in our relationship has made it easier also for communist parties in the West to discard their image as anti-democratic and to pursue more effectively the goal of sharing and eventually assuming governmental power. The fact of the matter is that democratic publics can be held together in prolonged historical efforts only if their sense of moral concern is fully tapped. Diluted, the resulting moral relativism makes it easier for non-democratic communist parties to reach out for power, be it in Italy, Portugal, or before long in Spain or France.

This is made all the easier, and therefore also all the more ominous, by the widespread feeling (which public opinion polls indicate is shared both by the U.S. and West European publics) that the Soviet Union no longer represents a security threat. Despite the unprecedented growth in Soviet power, the prevailing viewpoint is that security issues are no longer important; indeed, there is a paradox here for in the past the Western publics tended to overestimate Soviet power at a time of relative Soviet weakness. Today, that power is matching that of the United States, and when all indications point to major Soviet efforts to exceed the United States, the public response is complacent. The unpopular task of reminding the public that power still counts is left in the U.S. to the Secretary of Defense, with no other major Administration figure engaging his prestige in this critically important issue.

Finally, the linkage between U.S.-Soviet summits and U.S.-Soviet agreements has tended to place more pressure on the U.S. side to reach specific accommodations, even if the negotiating process in regard to specific issues has not been consummated. With political expectations "of progress" running high at home, U.S. leaders have found themselves more tempted and pressured than their Soviet colleagues to turn such summits into seeming diplomatic triumphs by announcing various specific agreements.

With reference to 4)\*:

There are signs that the Soviet leadership is concluding that the phase of historical quiescence is coming to an end, that "the general crisis of capitalism" means that the possibility of qualitative political changes is shifting back to the advanced world from the LDC's, and that the strategy of decomposition (rather than, as in the past, of revolution or of confrontation) is best suited for the times.

That strategy of decomposition is to be pursued prudently but also assertively. The moment is not ripe for overt pressure; indeed, it would be counterproductive since it would alert the U.S. and perhaps cause reaction. Instead, detente and military parity provide the best umbrellas for a policy designed to encourage change in Western Europe -- a policy of active detente similar in many ways to the policy which the U.S. had pursued towards the East in the sixties, until the Soviet occupation of Czechoslovakia.

The present Soviet perception of the situation has been shaped in the course of inner debates held in the latter months of 1974 and lately it has been authoritatively articulated for the communist elite at home and abroad. (This is standard practice, since strategic concepts must be shared more widely.) A particularly revealing and important statement of these views is contained in two major pronouncements made earlier this year by Boris Ponomarev, candidate member of the Politburo and Secretary of the CPSU, entitled "The Role of Socialism in Modern World Development," (Problemy Mira i Sotsializma, No. 1, 1975) and by A. I. Sobolev, Member of the Central Committee Staff, "Questions of Strategy and Tactics of Class Struggle in the Present Stage of the General Crisis of Capitalism," (Rabochiy Klass i Sovremenny Mir, No. 1, 1975).

Both statements are quite explicit, and they deserve careful reading. The Soviet authors insist that the combination of detente and parity makes it impossible for the U.S. to respond politically or militarily to the consequences of the present "general crisis of capitalism." In this connection, Sobolev speaks explicitly of Portugal, Italy and France, as well as some other areas. Rejecting the arguments of ultra-revolutionaries for more activist policy, the two Soviets argue that the present policy is the one most likely to promote the internal decomposition of the West, without precipitating, as Stalin and Khrushchev did, a Western reaction.

The above analysis should be kept in mind when evaluating the argument that economic links with the Soviet Union will in time integrate the Soviet Union into the world economy, thus reducing its capacity (or inclination) for unilateral action. One should bear in mind that such "integration" is, at best, a prolonged process, which in the meantime may reduce Soviet short-term difficulties, thus actually enhancing its capacity for unilateral

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behavior. This is especially the case with the transfer of highly advanced technology, which of itself produces no necessary changes in the outlook of those who gain access to it. On the contrary, enhanced ability to act may enhance the desire to act.

With reference to 5)\*:

The above is not an argument for resuming the Cold War, but for a more deliberate and concerted U.S. policy designed to pursue a detente that is truly reciprocal. In some ways, reciprocity is the key word, and it ought to be the benchmark for every relationship:

a) the Soviet side never fails to exploit as anti-detente any new U.S. military allocation or change in strategic concepts. Yet to this day its own concepts are secret, so is its military budget and longer term plans for weapons development. Even arms control arrangements and negotiations are based entirely on U.S. estimates of Soviet weapons characteristics and numbers. We have no knowledge of Soviet long-term strategic planning. We have no idea whether it is geared to a permanent relationship of parity or whether it is designed to obtain something which might be called political-military superiority. Can we not insist more publicly that the above is not compatible with detente, that the Soviet side must break this habit of secrecy which produces its own fears and uncertainties in the U.S.? Does such secrecy not lend itself to the justifiable suspicion that detente is a cover for quietly gaining politically significant military dominance?<sup>1</sup>

b) the increased Soviet access to the U.S. elite should be matched by an increased U.S. access to the Soviet elite. I gather that the U.S. Embassy now has somewhat increased access but not sufficient staff to exploit this access effectively. Are the respective Embassy staffs symmetrical? Could the U.S. Embassy staff be increased? Can we insist on more access to Soviet Central Committee staffs, as reciprocity for Soviet lobbying in Congress?

c) the Soviet side never tires of insisting that larger trade relations are an inherent part of political relations. But in our interdependent world, so are social relations. Cannot the U.S. side make more explicit its desire for more open contacts, instead of letting Congress turn this vitally important issue largely into the question of emigration from the Soviet Union? For detente to endure, our two societies must develop more ongoing links and this calls for more openness. (A minor example, with thousands of U.S. tourists in the Soviet Union, the Soviet side still continues to bar Western newspapers even from its hotels for foreign tourists.)

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\* "That a more reciprocal detente, and not a return to Cold War tensions, should be the U.S. goal.

<sup>1</sup> One step in that direction might involve the release to the public of the protocols of earlier SALT talks. Broader circles of the Soviet elite would thus also gain access to these discussions. This would have the effect of chipping away at the tradition of secrecy.

d) if the Soviet side insists that changes in Portugal are a natural corollary of the fading of the Cold War, what about changes earlier in Czechoslovakia? What about withdrawal of Soviet troops from Czechoslovakia, so that both Portugal and Czechoslovakia can seek "socialism with a human face"? Perhaps both should be allowed eventually to leave NATO and the Warsaw Pact, respectively? Is the current tightening of Soviet control over Eastern Europe compatible with detente? Though the above may sound like debating points, there is a larger reality involved here: to be stable, detente should be allowed to promote political changes on both sides of the dividing line.

e) should we not insist more on the principle that U.S.-Soviet accommodation entails also a more cooperative Soviet involvement in dealing with some of the emerging global problems (food, population, oceans, development, etc.)? Is it a real detente if at the same time in international forums the Soviet side takes a decidedly self-centered or expedient position, fanning the extremist rhetoric of some states and refusing to join in constructive engagement in regard to some of the central problems of our time?

f) should we not seek to cut the linkage between summits and agreements -- turning them deliberately into consultative meetings, designed to create greater confidence between our heads of governments? Otherwise, given the role of public opinion and the nature of our political process, any President finds himself under pressure to produce agreements, however halfbaked.

g) should the U.S. not again cultivate more actively our relations with China, especially since leadership changes there could result in some undesirable outcomes? Have not Soviet actions in regard to Vietnam (arms deliveries) or the Middle East justified a new look at the implications for us of the Sino-Soviet relationship?

To conclude, U.S.-Soviet accommodation is desirable and essential. But it must be comprehensive and reciprocal if it is to endure.

# Dialogue

A Bulletin of North American - European - Japanese Affairs

## IS REFORM AN ILLUSION? A Trilateral Perspective on International Problems

by CHRISTOPHER J. MAKINS

The Trilateral Commission entered its third year shortly after the Kyoto meeting in May.<sup>1</sup> The Commission's second birthday coincided with increasing public awareness of its activities and reports. The Kyoto meeting attracted extensive coverage both in the Japanese press and in North America. And, in a different vein, the Commission's work has increasingly become the subject of more sustained academic critiques. For example, Professor Geoffrey Barraclough, writing in *The New York Review of Books*, has produced a lengthy examination of the Commission which he sees as one of the most prominent and "vociferous" front organizations of the liberal establishment. In Professor Barraclough's view these organizations, like the U.S. Administration to which he attributes a more conservative and defensive approach, are advocating international policies which are seriously flawed because they fail to take due account of the new realities of international power.

In a somewhat similar way, Professor Richard Falk, in the *Yale Law Journal*, interprets the Commission's ideas as reflecting the transnational ideology of the multinational corporation. This ideology, as described by Professor Falk, seeks to subordinate territorial policies to non-territorial economic goals just as the Pope in his encyclical *Unam Sanctam* in 1302 sought to place the spiritual sword of the Church above the secular sword of kings. The Commission, he alleges, is seeking a formula which will preserve intact the concentration of wealth in the hands of the capitalist sector of the developed world. This approach, in Professor Falk's view, is that of predators and is a creature of economic inequality. But because, he believes, it is a credible strategy of transition through the current international economic disorders, it must be actively opposed by those sympathetic to his preferred, if indistinct, vision of a world order based on "global populism."

These academic critiques of the Commission deserve attention if only because of their authors' apparent unwill-

ingness to accept a gradualist or reformist approach to building a new and more equitable international system. Such critiques imply that the only two options for the developed world are essentially a more or less enlightened defense of the existing, "predatory," world order and the acceptance of what would in effect be a revolutionary, though possibly peaceful, transformation of the current structure of international relations. Paradoxically, the apparent conclusion of Professors Barraclough and Falk that there is no acceptable middle way of reform between these two extremes threatens a global confrontation scarcely less acute than that which they accuse Dr. Kissinger of seeking to provoke.

Is the reformist approach, the middle way between the rock of conservatism and the whirlpool of revolution, an illusion as such critics assert? The question is not easy to answer dogmatically. Among other things the middle ground on which any reformist path would be found tends to be occupied by a number of conservative and revolutionary wolves clad in the clothing of reformist sheep. This is how Professor Barraclough judges Dr. Kissinger. After arguing persuasively that the initial response of the U.S. and other governments to OPEC's decision to raise the oil price in 1973 was profoundly defensive and conservative, he contends that the changes in Dr. Kissinger's ideas announced since then have not affected this basic approach. (Perhaps unfortunately for Professor Barraclough, he launched his article before Dr. Kissinger's recent major statement to the 7th Special Session of the UN General Assembly.) Likewise Professor Falk, who at times loudly proclaims the relevance of a peaceful revolution in political priorities whose social and economic implications could hardly be other than far-reaching, can also declare his goals to be reformist.

### *The Advantages of Gradualism*

Difficult though it may be to distinguish the sheep from the wolves, the question whether a viable reformist approach exists is important and cannot be shirked. Its importance lies, first, in the fact that the achievement of

<sup>1</sup>A full account of the Kyoto meeting was given in *Dialogue* No. 7.

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420 WEST 118TH STREET

October 8, 1975

Governor Jimmy Carter  
Jimmy Carter Presidential Campaign  
Post Office Box 7667  
Atlanta, Georgia 30309

Dear Jimmy:

In case you have not seen last Sunday's New York Times I am sending you a copy of an article of mine that appeared in it. Its general theme seems to me to be quite pertinent to any critical discussion of the present U.S. foreign policy and I thought that it might be of interest to you.

Best regards,



Zbigniew Brzezinski

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October 9, 1975

CHRISTOPHER J. MAKINS  
DEPUTY DIRECTOR

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MEMORANDUM

TO: Members of the Commission  
FROM: Zbigniew Brzezinski *ZB*

I think you will find the enclosed issue of Dialogue particularly interesting because the articles in it by my colleagues Makins and Heck bear directly on some current policy issues.

I also enclose a recent New York Times article by me.

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# The Changing International System, and America's Role

By Zbigniew Brzezinski

The recently concluded debate in the special United Nations General Assembly concerning "the new world economic order" highlights the basic change that is now taking place in the international system as a whole. It is important that Americans see this change in its proper historical perspective and also appreciate its far-reaching and longer-term consequences.

The essence of that change can be expressed as follows: The international system is changing from a system designed to promote interstate peace to a system also designed to promote intrastate progress; from a system designed to make possible greater global economic productivity to a system also designed to enhance greater economic equity.

Changes of such historic proportions do not come about easily, nor can they be given in advance a precise definition. The process of transformation will necessarily involve protracted debates, clashing interests and values. It is bound to be full of inconsistencies and paradoxes.

For example, one of the most cherished principles of international politics is that of sovereignty and noninterference.

The new nations are particularly sensitive about it. Yet it is also these nations that are especially insistent that the international system increasingly shift the focus of its concern from a preoccupation with the preservation of peace to a greater concern with the promotion of global development, especially in order to obviate the existing inequalities in the material conditions of humanity.

To accomplish that objective, closer cooperation among nations, and a measure of interference in the internal affairs of some by others, will almost be inevitable.

Just as in our domestic societies, the shift from a government concerned with the preservation of order to a government concerned with the promotion of welfare has involved inevitably an expansion in the government's scope of social interference, so on the global scene the assumption of new responsibilities by the "system" vis-à-vis its participants is bound to involve limitations on national sovereignty, contrary to the desires of the élites of the many new nations.

The shift from an emphasis on pro-

ductivity to a greater concern with global equity is similarly not going to be easy. A rapidly expanding world product is certainly less difficult to divide than one which grows more slowly. Yet lower rates of growth are likely in a system in which considerations other than those bearing on productivity are the point of departure for international economic decisions, and this will make more equitable and voluntary distribution of global wealth more difficult to achieve. The result might well be more conflicting demands and less chance of compromise.

These are thus changes of truly major dimensions; they involve changes both in basic values and in processes. Moreover, some of them are likely to be in conflict with our domestic standards and views.

Many might feel that international arrangements should not be concerned with social progress nor that we should sacrifice productivity to equity. Yet we must also realize that these changes are inherent in the far-reaching transformation of the political character of the globe that has been taking place during the century.

Until quite recently most of the globe's population has been politically pliant. This is now less and less the case—be it in Papua New Guinea or Bangladesh or in Portugal. We are witnessing today a rapid expansion in political awareness and an increasing activation of hitherto dormant masses.

Unlike the initial phases of the Industrial Revolution, when the way people lived tended to change more rapidly than how they thought, today—

because of mass communications and education—the way people think is changing more rapidly than how they live. All this makes for higher political awareness, increasingly focused on the desire to eliminate the enormous disparities in the global standard of living.

This general mood is channeled through sovereign states, which today number approximately 150 and provide the basic framework for the political organization of mankind. The rapid expansion in the number of states from approximately 40 to 150 in the last 30 years, thereby altering drastically the distribution of voting power in the United Nations, has further enhanced the pressures for the transformation of the international system, of which the recent special General Assembly ses-

sion is but the latest symptom.

The American response to these changes has been hesitant and, until very recently, lacking in foresight. The basic predisposition has been to avoid facing the emerging realities, to delay change, to use the Organization of Petroleum Exporting countries as a specter, rather than to try to give more positive and responsible direction to the inflamed emotions and often unrealistic aspirations that these fundamental changes have been generating.

This is why the recent American initiative taken in the special General Assembly is so much to be welcomed. The speech presented by Ambassador Daniel P. Moynihan on Secretary of State Kissinger's behalf, in which the United States called for the creation

to assure the developing countries greater opportunity and stability for their development, contained a realistic and thoughtful program, though much overdue.

It received, deservedly, a positive response, and it averted an immediate and divisive North-South confrontation. It helped to focus debate on practical and serious aspects of the problem, searching for concrete solutions, and avoiding the rhetoric either of confrontation or of illusion.

It represented a much-needed step toward a more responsible—and less doctrinaire—discussion of what can be changed in the existing global arrangements.

It would be wrong, however, to assume that the danger inherent in the pressures for a fundamental transformation of the international system has been averted. The United States has bought time, and that in itself is a precious thing and a major accomplishment.

But should it turn out that all that the United States had in mind was to buy time, should it turn out that the measures proposed to the United Nations by Mr. Kissinger have been essentially of a cosmetic character, then the long-range costs of the disappointment and irritation thereby engendered will be enormous.

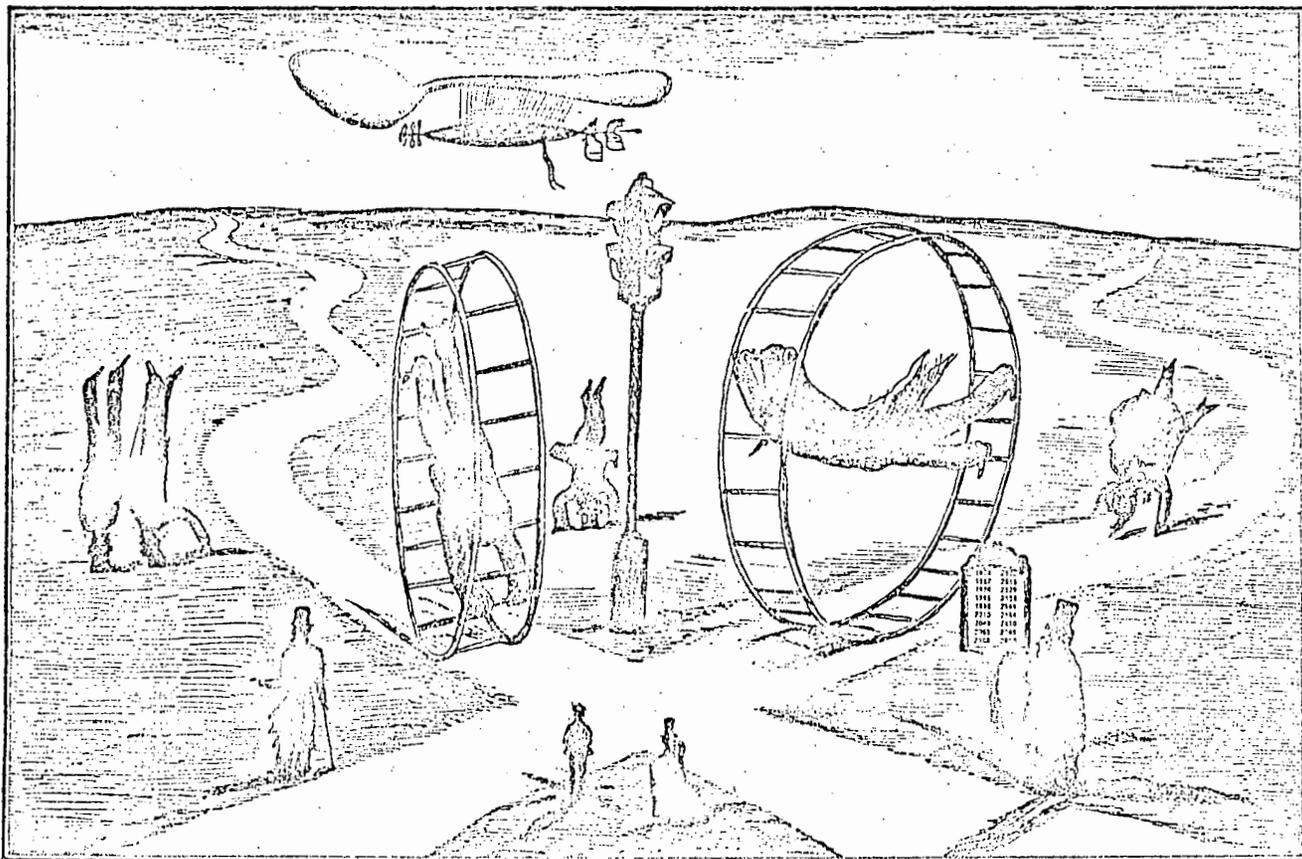
A new and more violent cycle of confrontations will be set in motion, with the United States threatened increasingly by isolation and worldwide hostility.

This danger was averted during the special session and the contrast between the thoughtful presentation of the United States and the totally empty Soviet rhetoric spoke well for the United States and for its role in the world.

What is now needed is sustained and serious follow-through, based on Congressional support and broad popular understanding of the need for a truly historical effort to update and reform the international system.

In the post-Vietnam mood of abnegation, made grimmer by the present recession, the notion that American initiative and leadership are needed might not be very popular—but their absence could make for an international system that provides neither peace nor progress.

Zbigniew Brzezinski is Herbert Lehman Professor of Government, and director of the Research Institute on International Change, at Columbia University.



EUROPEAN ARCHIVES

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# The Changing International System, and America's Role

By Zbigniew Brzezinski

The recently concluded debate in the special United Nations General Assembly concerning "the new world economic order" highlights the basic change that is now taking place in the international system as a whole. It is important that Americans see this change in its proper historical perspective and also appreciate its far-reaching and longer-term consequences.

The essence of that change can be expressed as follows: The international system is changing from a system designed to promote interstate peace to a system also designed to promote intrastate progress; from a system designed to make possible greater global economic productivity to a system also designed to enhance greater economic equity.

Changes of such historic proportions do not come about easily, nor can they be given in advance a precise definition. The process of transformation will necessarily involve protracted debates, clashing interests and values. It is bound to be full of inconsistencies and paradoxes.

For example, one of the most cherished principles of international politics is that of sovereignty and noninterference.

The new nations are particularly sensitive about it. Yet it is also these nations that are especially insistent that the international system increasingly shift the focus of its concern from a preoccupation with the preservation of peace to a greater concern with the promotion of global development, especially in order to obviate the existing inequalities in the material conditions of humanity.

To accomplish that objective, closer cooperation among nations, and a measure of interference in the internal affairs of some by others, will almost be inevitable.

Just as in our domestic societies, the shift from a government concerned with the preservation of order to a government concerned with the promotion of welfare has involved inevitably an expansion in the government's scope of social interference, so on the global scene the assumption of new responsibilities by the "system," vis-à-vis its participants is bound to involve limitations on national sovereignty, contrary to the desires of the élites of the many new nations.

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Many might feel that international arrangements should not be concerned with social progress nor that we should sacrifice productivity to equity. Yet we must also realize that these changes are inherent in the far-reaching transformation of the political character of the globe that has been taking place during the century.

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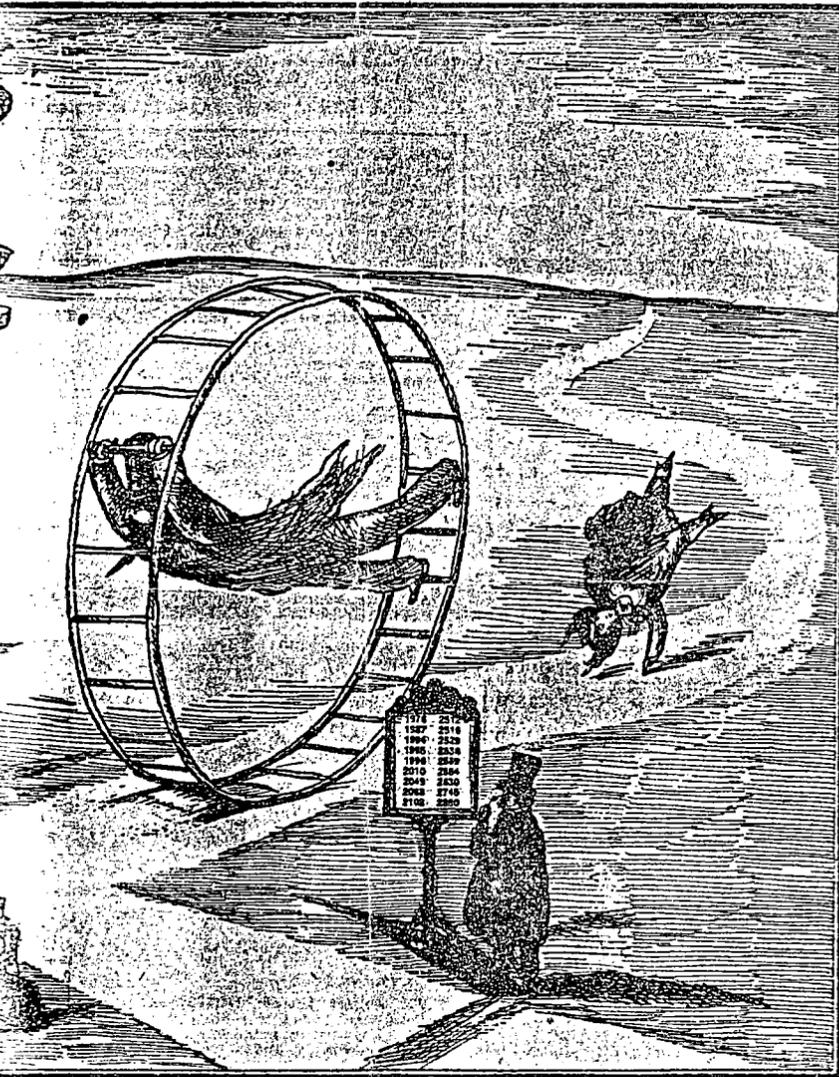
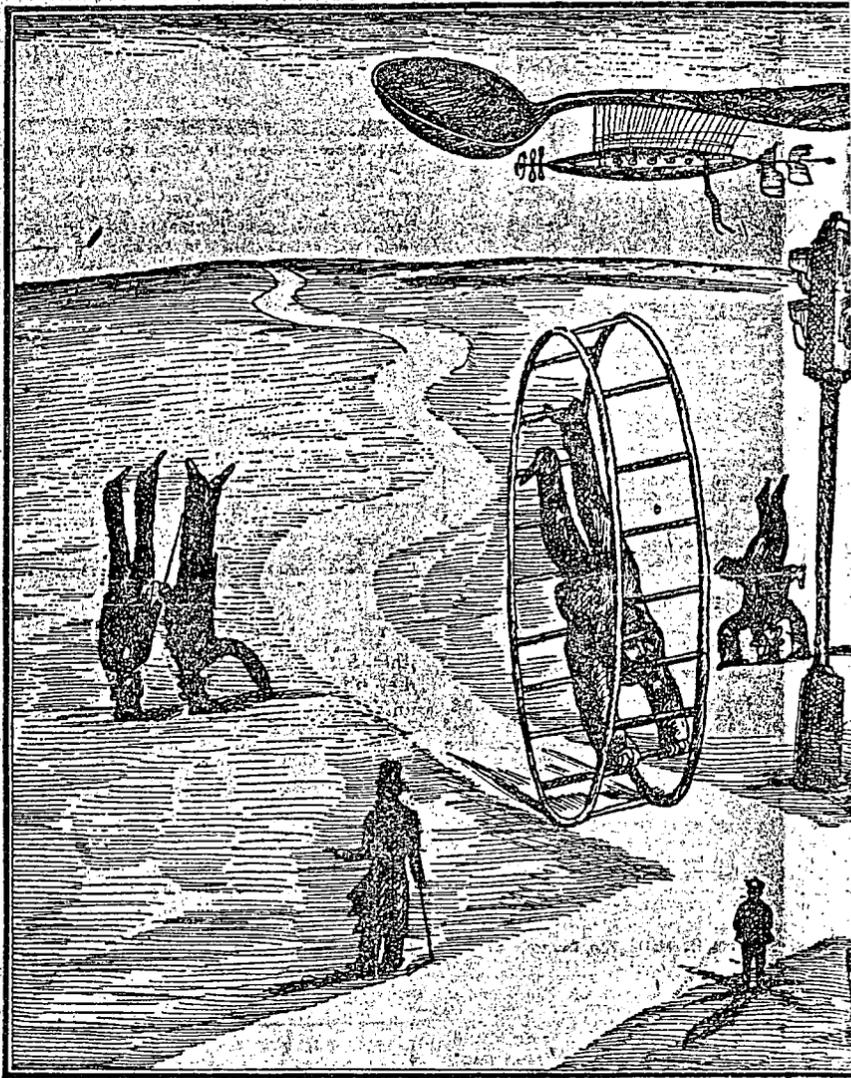
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|------|------|
| 1970 | 2170 |
| 1980 | 2214 |
| 1990 | 2258 |
| 1995 | 2299 |
| 2010 | 2344 |
| 2045 | 2410 |
| 2065 | 2470 |
| 2100 | 2530 |

3 Copies

let's have full personnel  
city has on hand in cash, securities and so on.

### A DISTURBING REPORT

The newest edition of Jane's Fighting Ships, the accepted authority on sea power, provides a comparison of Soviet and U.S. naval strength that will shock many Americans.

Russia now has an uncontested lead over this country in submarines and cruisers; is building fleet aircraft carriers as rapidly as its yards can turn them out; leads the world in sea-going missile strength, surface and undersea. The USSR's Navy now has 1,062 ships of all sizes, while ours has shrunk, since 1968, from 1,000 vessels to 514.

To those figures, Jane's editors add this trenchant comment:

"Of those countries to whom a navy is today essential, the U.S. is one of the foremost, and the U.S. Navy is probably also in the van of navies subjected to misinformed, illogical and irrational attacks by some of those who depend upon it most."

We hope certain parties in Washington are turned in.

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2 copies

CS Mon News, 1974

# U.S. mineral dependence grows

## Firms must buy from overseas nations; deficit of \$17 billion forecast for 1974

By Harry B. Ellis  
Staff correspondent of  
The Christian Science Monitor

### Washington

Each American consumes more than 40,000 pounds of raw materials a year, and U.S. dependence on foreign minerals steadily grows.

This year, according to the U.S. Bureau of Mines, the U.S. will sustain a \$17 billion trade deficit in raw and processed minerals, up from an \$8 billion loss in 1973.

This deficit, notes Rep. Thomas M. Rees (D) of California, is almost as huge as the much-publicized dollar outflow this year to pay for foreign oil. A House subcommittee chaired by Mr. Rees is completing a study dealing, among other things, "with natural resources upon which the United States is dependent."

### Turning point seen

During the 1920's, described by subcommittee staffer Michael A. Rattigan as a "turning point," the United States "became a net importer of many key industrial materials."

Now, he adds, "total U.S. consumption of raw materials [is] a mix of 85 percent domestic production and 15 percent imports."

Fifteen percent may not sound like much. But it conceals the fact that the U.S. imports more than 75 percent of its bauxite (for aluminum), alumina ore, and tin. More than half of all zinc ore comes from abroad. Imports of iron ore and lead supply between 25 and 50 percent of U.S. requirements.

"Of the 13 basic industrial raw materials required by a modern economy," writes Lester R. Brown in "World Without Borders," the U.S., by the end of this century, "will be dependent primarily on foreign sources for its supply [of all 13] except phosphate."

### Big change forecast

The U.S., says the subcommittee report, "will undergo a basic transformation from a position of relative abundance to a position of relative scarcity between now and the year 2000."

Part of the reason is the insatiable and growing demand of Americans

for cars, houses, consumer goods, and food — all of which require metals and other minerals to produce. U.S. demand for nonfuel minerals soars almost 5 percent yearly.

But the world demand grows even faster. So prices of raw materials jump, as industrialized nations compete with the U.S. for limited supplies.

What can be done? The House study, still in a preliminary stage, suggests:

- o Economic growth, not only in the United States but throughout the industrialized world, must slow down. (This is one aspect of the general argument that inflation can only be licked by slowing down growth rates.)

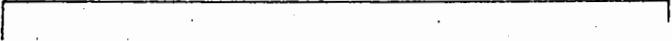
- o Recycling of used materials must be greatly expanded. Technology of mining and refining minerals needs improvement.

- o Industry requires "proper economic incentives," including depletion allowances and investment tax credits, to explore and develop secondary U.S. mineral deposits.

- o U.S. mining laws, which "are archaic, vague, unworkable, and a source of uncertainty," need to be overhauled.

- o The United States should vigorously oppose the "formation of any mineral cartel" — as for bauxite or tin — similar to the OPEC oil cartel.

- o Beyond this, Washington should work with other industrialized states for access to global mineral supplies.



The current administration has demonstrated a propensity for selling off strategic stockpiles - so far the Congress has prevented this -

*3 copies*

tour — it could be made with a half-pound.”  
The fourth expert agreed that Americans

### **America's Navy Twice as Strong As Russia's Fleet of Warships**

The Soviet Union has more military ships than the United States, but the U.S. Navy is twice as strong considering total fleet tonnage and fighting ability.

That's the word from Congressman Bill Dickinson of Alabama, a member of the House Armed Services Committee.

Dickinson says "Jane's Fighting Ships" shows the U.S. Navy floats 5.6 million tons while the Soviet Navy has only 2.6 million tons.

"Jane's Fighting Ships" is the leading reference book on naval power.

**Deadline**

*Note that the bulk of U.S. "excess" tonnage is concentrated in 14 "super" aircraft carriers*

*"Tonnage" per se is no longer an adequate comparative reference. Of more pertinence are factors such as range and characteristics of missiles (surface to surface, air to surface, and surface to air) - Propulsion capability (ie nuclear powered or fossil-fueled) - and demonstrated water-type coordination capabilities for the achievement of local tactical superiority in a diversified force -*

(2)

Memorandum For Governor Carter

January 20, 1974

July: Naval Force Review + Energy Notes + Galbraith

1. I enclose two Center for Defense Information studies concerning naval force and plans which provide some interesting background. The force figures, however, do not correspond with Janis All The World's Fighting Ships, accepted as a standard reference and in some cases "ships funded" are included in U.S. force levels apparently to make us look better. I am beginning a dialogue with Rear Admiral La Roque on this and have asked Vice Admiral M. G. Bayne (President, National War College) to comment on the Center's output.

2. A brief article on Petrodollars prepared by the States Department is enclosed.

3. A review of Galbraith's most recent book is enclosed - It is a distinct departure in thinking & probably is worth the reading - I can furnish a more detailed synopsis if desired - but it is easy reading.

4. Comment on President's Energy Policy

a. Still can't get a good handle on "wildcat work" - should know more by end of week from friends in Washington.

b. Previous comments on inflationary aspects still apply - include transportation - also no mention of how to raise capital for energy development & no stockpiling

c. Note a subtlety in the tax per barrel of crude - East Coast (North East) has few refineries & receives 24% of its heating oil from foreign sources but in the refined and hence untaxed condition ~~Heat~~ Fuel for 90% of electrical generating plants also comes in from foreign sources - it is unclear whether this will be taxed or not - have asked people in Washington. The President's proposal, as presented, was by no means the studied output of an 8 month study effort as Frank Turk stated (Sunday - Free the Nation) - It was the compromise result of a "knock down - drag out" fight in the FEA and Energy Council areas - Simon's people feel very bruised

d. An insight on the gasoline "whipping boy" - Remember that transportation accounts for about 27% of our energy use in this country and that, of this percentage, only 55% goes to automobiles - on the other hand, Dr. Doye has calculated that the automobile, in fuel usage, is no more than 5% efficient.

e. A letter by Professor Horner of Georgia State is attached concerning a workable ration system - Actually the Governor proposed this 8 months ago -

Reed  
Howard

ENERGY

1. Do you have a general program to help conserve our energy? If so, what are the outlines of the program?

Coming -

2. Would you favor a gas tax? Please explain.

Only if tax can be devoted to the development of domestic energy resources

3. Would you favor reducing our dependence on foreign imports of oil and other energy sources? If so, how can this dependence be reduced?

We must reduce our dependence on foreign sources - This requires a two-step program - One is to rigorously conserve across the board - not just in gasoline. Two - A major industry/government coordinated effort to develop domestic resources - fossil fuel to begin with and non-fossil fueled thereafter.

4. Do you feel that there should be some relaxation in environmental pollution regulations in light of the energy crisis? If not, please explain.

The use of coal is imperative if we are to reduce dependence upon Arab oil. In some cases coal can be cleanly resorted to without significant pollution increases. Where this is the case we should shift. In other areas good depollutant equipment must be provided. This is a major energy program necessity.

5. What is your position on so called "Superports"?

It will probably prove more economical (and less hazardous ecologically) to develop some superports off-shore along the East Coast - If we press forward with a valid Project Independence the need for these ports could be dispensed with within 10 years. Government subsidy is probably necessary because the cost of the ports would not be amortized during the period of their use -

LETTERS

# Price Ploy Won't Work on Gas

The Editors: The Republican administration has proposed to solve the energy problem through a tariff. This tariff will increase the cost of gasoline. The administration believes that increasing the cost of gasoline will have a significant effect on the consumption.

While consumption might be reduced somewhat there is very good evidence that the demand for gasoline is fairly inelastic and that a large percentage increase in price results in a smaller decrease in consumption. Therefore, the price mechanism is not the most efficient way to reduce gasoline consumption.

The administration also believes that their tariff will reduce foreign imports and increase domestic crude consumption. While this has certain favorable balance of payments effects, it reduces the amount of crude oil reserves which the United States holds.

The greatest negative of the administration proposal is that it will primarily have a serious adverse effect on the poor. The many persons who live on expense-accounts do not care how much gasoline costs since they charge it to their expense account. But the poor worker who has to drive from southeast and southwest Atlanta to his place of employment is unable to charge his gasoline to his employer.

I would like to propose for your consideration a very novel, simple, efficient and certain method of reducing gasoline consumption without the adverse effects set forth above.

I propose that the total amount of gasoline which the United States wishes to consume in a year period be defined. That amount should be placed in the numerator of a fraction; the denominator of the fraction is the total population of men, women and children in the United States. That amount should be divided by four to get the desired gasoline consumption per calendar quarter in the United States. Ration tickets of 10 gallons each should be issued in such amount to each man, woman and child regardless of age or whether they have an automobile or not. Those persons who do not use or need their tickets could sell their ration tickets on the open market. Brokerage firms and banks would set up systems of trading ration tickets as they have for stocks, bonds, gold, and other commodities. . . .

Unlike the administration system of using a tariff, what I have recommended would set a definite ceiling on gasoline consumption. There would even be a shortfall from this figure since some ration coupons would expire before people used them.

It is exceedingly democratic since it divides the gasoline supply on a per capita basis. It is exceedingly flexible since those persons and firms which need gasoline could buy the ration tickets through established brokerage and banking channels.

It would provide an economic asset (ration tickets) to persons who presently have no economic assets, and it would create a number of jobs in administering the issuance of ration

coupons and in handling the trading therein. . . .

ELIZUR P. HOOVER  
Professor  
Georgia State University  
Atlanta

## Saving Needed

The Editors: I wish to comment on the merit of saving.

Saving is apparently part of mankind's basic nature since we see on every hand busy people working at the task of saving. Stores campaign to save us money on the items we buy. The salvationists are bent on saving souls. The Congress saves daylight. The safety council works at saving lives. Products for the home are labeled "step savers." Even the candy mints in our pocket proclaim the word. . . .

Saving is one of the most widely disseminated doctrines ever known in human history. Its merit is simple to discern in that it presents a key to survival. . . .

With such a thorough preoccupation among our people, what reasonable explanation can accompany the irresponsible fiscal policies of our governments? How can endless deficit spending be justified?

Perhaps with a better class of leadership we might still have the opportunity to save our country.

L. F. CAWTHON

Tucker

For Background  
only - Statistics  
are wrong in  
many instances



# THE DEFENSE MONITOR

CENTER FOR DEFENSE INFORMATION — A Project of the Fund for Peace

Volume Three Number Eight

September 1974

## THE NAVAL ARMS RACE Need for Naval Arms Limitation Talks

### THE DEFENSE MONITOR IN BRIEF

- The U.S. and U.S.S.R. are both spending huge sums on naval forces.
- The U.S. is spending \$3.5 billion this year for new navy ships.
- The U.S. Navy will request up to \$5 billion for new ships next year.
- The U.S. Navy has arbitrarily and unilaterally cut its number of ships.
- The U.S. Navy maintains a separate expensive air force. The Soviet Union has a small land based naval air force.
- The U.S. maintains a large and expensive Marine Corps. The U.S.S.R. maintains a small force of naval troops.

### Conclusions

Based on its analysis of the growing U.S. and U.S.S.R. navies the Center concludes:

- Limits on naval forces would benefit both the U.S. and U.S.S.R.
- Limits on naval forces are practicable.
- Negotiations between the U.S. and U.S.S.R. to limit naval forces should be initiated.

*"We . . . consider useful the withdrawal from the Mediterranean of all Soviet & U.S. ships carrying nuclear weapons. Regretfully, no agreement on this score has been so far achieved. But we are convinced that implementation of our proposals would be a real contribution to the strengthening of peace."*

*General Secretary Leonid Brezhnev  
July 21, 1974*

*"I would agree that the impressive growth of the Soviet Navy may give some superficial attractiveness to the subject of naval limitations but for several reasons I think that it would be a serious mistake to enter into such discussions with the Soviet Union."*

*Admiral Elmo Zumwalt, USN (Ret.)  
Former CNO  
February 19, 1974*

*"If the Soviet Navy is a growing threat, then it is time to bargain in order to reduce the threat. If the U.S. Navy is more powerful, then we should begin to bargain from a position of strength. Either way the time to begin Naval Arms Limitations Talks (NALT) is now."*

*Rear Admiral Gene R. La Rocque  
U.S. Navy (Ret.)*

## THE SCOPE AND THE COST OF THE NAVAL RACE

The purposes of arms limitations are to save money, save national resources and improve relations between the two superpowers by reducing tensions. The last of these is especially important because the U.S. and the Soviet Union are engaged in a naval arms race even more costly than the strategic weapons race. The U.S. Navy has the highest budget of all the services for the third year in a row and it is growing. U.S. naval shipbuilding costs about \$3.5 billion per year and will soon increase to \$5 billion per year. Because each nation predicates its ship construction on the basis of the other's construction and bases arguments for additional ships on what the other is doing or intends to do, American programs have a significant impact on the Soviets and Soviet programs on the U.S. As a result, projected growth of both navies will be uncontrollable unless prompt agreements are reached to slow the growth.

**Since 1968 the cost of new U.S. ship construction has shot up 700 per cent. Between 1973 and 1975 the cost of new construction doubled. Total cost for ship repairs, alterations, conversions and new construction tripled between 1968 and 1975.**

During the period of 1965 to 1974 the U.S. built about 169 surface ships over 1000 tons. For the same period the Soviet Union built about 175 surface ships. Both built large numbers of submarines. The cost to the U.S. for new ships was \$20 billion. However, the U.S. Navy plans in the next five years to build about 157 new ships and submarines at a cost of \$21.4 billion — more than the cost of the previous ten years. The U.S. Navy has proposed a \$50 billion shipbuilding program for the next ten years. The Center expects the Soviet Union will build approximately 133 new ships in the next five years.

A conscious decision by the Navy to build ships larger, faster and more complex is driving the cost higher. The U.S.S. California, a recently commissioned nuclear frigate, at 10,000 tons is faster and more sophisticated than any Soviet surface ship afloat. Soviet ships are smaller and less complex than those being built by the U.S.

Since 1968 the cost of new U.S. ship construction has shot up 700 per cent. Between 1973 and 1975 the cost of new construction doubled. Total cost for ship repairs, alterations, conversions and new construction tripled between 1968 and 1975.

The phenomenal cost of each ship has skyrocketed two to three times in the last few years, and the Navy's newest nuclear powered aircraft carrier CVN-70, will cost more than a billion dollars, which is greater than the annual budget of the State Department — \$894 million.

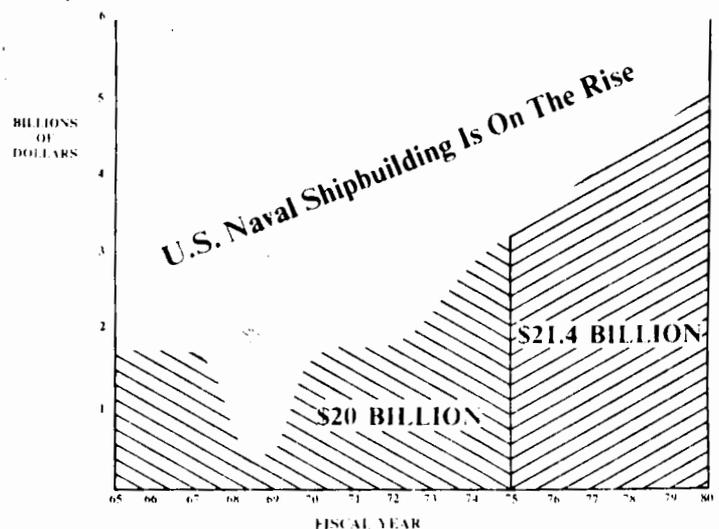
**One Poseidon submarine has the capacity to destroy 160 Soviet cities. By comparison Soviet strategic submarines now carry only 636 nuclear weapons and one Soviet submarine can destroy only 16 U.S. cities.**

**Total tonnages** of the two fleets tell an interesting story. (See Table.) The U.S. presently has a sizeable lead over the Soviet Union and will increase the lead by 1980. The advantage in 1974 is 3,000,000 tons and will be 3,700,000 by 1980. In 1964 the U.S. had 4.5 times the tonnage of the Soviet Union. In 1974 the U.S. leads by over twice as much and the same will be true in 1980. In the next six years the tonnage of the U.S. Navy will increase about 20 per cent. For the U.S.S.R. tonnage will increase 14 per cent in the next six years.

Another dimension of continued U.S. Navy expansion is the plan to build still more **bases outside the U.S.** New naval bases at Tinian in the Pacific Ocean and Diego Garcia in the Indian Ocean are being built. The planned build-up at Diego Garcia would undoubtedly lead to the permanent presence of a carrier task force in the Indian Ocean. Also, the U.S. is increasing the number of ships home-ported overseas. The U.S. Navy has 22 major bases and home ports outside the U.S. By contrast, Russia has no forward bases and no "home ports" in foreign countries.

**The capability of U.S. strategic submarines** is another indicator of the power of the nation's navy. Upon completion of the conversion of Polaris submarines to 31 MIRVed Poseidon boats, U.S. nuclear submarines will carry over 5000 nuclear weapons. One Poseidon submarine has the capacity to destroy 160 Soviet cities. By comparison Soviet strategic submarines now carry only 636 nuclear weapons and one Soviet submarine can destroy only 16 U.S. cities.

Both countries have expensive shipbuilding programs that will increase the number of ships and combat capability. Naval Arms Limitation Talks (NALT) could lead to a slower pace of expansion and the savings of substantial national resources.



## The U.S. Is Superior to the U.S.S.R. in Total Tonnage

|                      | 1964<br>Tons     | 1974<br>Tons     | 1980<br>Tons     |
|----------------------|------------------|------------------|------------------|
| <b>United States</b> |                  |                  |                  |
| Attack Carriers      | 1,807,000        | 1,136,000        | 904,200          |
| Helicopter Carriers  | 210,000          | 128,100          | 440,000          |
| Surface Ships        | 2,313,400        | 926,500          | 1,103,200        |
| Diesel Submarines    | 302,400          | 33,100           | 0                |
| Nuclear Submarines   | 486,600          | 592,300          | 891,200          |
| Amphibious Ships     | 926,400          | 831,000          | 831,000          |
| Support Ships        | 2,697,100        | 1,990,000        | 2,574,700        |
| <b>U.S. TONS</b>     | <b>8,742,900</b> | <b>5,637,000</b> | <b>6,744,300</b> |
| <b>Soviet Union</b>  |                  |                  |                  |
| Attack Carriers      | 0                | 0                | 0                |
| Helicopter Carriers  | 0                | 36,000           | 216,000          |
| Surface Ships        | 1,051,000        | 972,400          | 844,200          |
| Diesel Submarines    | 528,000          | 383,400          | 188,600          |
| Nuclear Submarines   | 120,800          | 673,200          | 1,112,400        |
| Amphibious Ships     | 0                | 136,000          | 220,000          |
| Support Ships        | 206,000          | 402,000          | 490,000          |
| <b>SOVIET TONS</b>   | <b>1,905,800</b> | <b>2,603,000</b> | <b>3,071,200</b> |

## COMPARABLE CATEGORIES

The purposes of both navies are to defend their home lands, keep sea lanes open, and project power overseas in support of their foreign policy.

### Comparison of Two Fleets

There are eleven major categories which lend themselves to comparison:

#### Category 1: Attack Aircraft Carriers

The Soviets do not have large attack aircraft carriers. The U. S. has 14 attack carriers in commission for conventional attacks in Europe and the third world and against Soviet ships. By the early 1980's the U. S. will have a very modern force of four nuclear powered carriers and eight aircraft carriers powered by oil.

#### Category 2: Helicopter Carriers

The U.S. has seven helicopter carriers and the Soviets have two. By the early 1980's the U.S. will have 12 large helicopter carriers while the Soviets will have only six. The purpose of these ships is to make amphibious landings in lightly defended areas of the third world. They can also be used for anti-submarine warfare. In addition the U.S. has a program to build a new class of 8 small helicopter carriers as escorts for merchant ships and other U.S. Navy ships.

#### Category 3: Cruisers/Frigates

The U.S. has seven cruisers and 33 frigates for a total of 40 while the Russians have 28 cruisers. The most recent U.S. frigates are twice the size of new Soviet cruisers and have more modern and better combat characteristics than the Soviet ships.

#### Category 4: Destroyers and Destroyer Escorts

The navies have virtually the same number of these comparable ships — the U.S. has 204; the Soviet Union 216. By 1980 the U.S. should be well ahead because its projected destroyer construction is much greater. The purpose of destroyers and destroyer escorts is to protect aircraft carriers and other ships from air and submarine attacks.

#### Category 5: Amphibious Attack Ships

Numbers are deceiving when comparing amphibious ships. The Soviet Union has 81 and the U.S. has 62. Seventy of the Soviet ships are only 1000 tons. The large majority of American amphibious ships are over 10,000 tons. The U.S. enjoys a lead in tonnage of 600 percent. The purpose is to make amphibious landings.

#### Category 6: Support Ships

The U.S. Navy has a great advantage in support ships as it permits the U.S. ships to operate world wide without relying on bases. The numbers indicate a lead of 86 to 63. However, 83 of the U.S. support ships are over 10,000 tons, while the Soviets only have two over 10,000 tons. Overall the U.S. has 500 per cent more tonnage in support ships.

**Category 7: Strategic Submarines**

The Soviets are building strategic submarines at a higher rate than the U.S. Currently the Soviet Union has 45 strategic subs to 41 for the U.S. By 1978, with building continuing at the present rate, Russia will have 62 strategic submarines, the maximum number allowed under the SALT I agreement. The U.S. will have its fleet of 41 Polaris/Poseidon submarines and the first two of the ten huge Trident class by 1980. In spite of the numerical lead of the Soviet Union in numbers of submarines, the U.S. has seven times the number of nuclear weapons in its submarines.

**Category 8: Attack Submarines**

The purpose of attack submarines is to attack aircraft carriers and surface ships as well as other submarines. The U.S. Navy leads the Soviets in nuclear attack submarines 61 to 32. However, the Soviet Union has 40 nuclear cruise missile submarines to zero for the U.S. Navy. The U.S. has scrapped all but 12 of its diesel powered subs while the

Soviets have retained 178 of their WWII subs. By 1980 the U.S. will no longer have in commission any of this obsolete type of submarine while the U.S.S.R. may retain as many as 50 for coastal defense.

**Category 9: Aircraft**

U.S. Navy has 6700 operational aircraft both on aircraft carriers and on land. The Soviet Union has only 700 naval aircraft, all land-based.

**Category 10: Manpower**

U.S. Navy has 575,000 officers and men to 460,000 for the Soviet Union.

**Category 11: Amphibious Manpower**

U.S. has 197,000 Marines to the Soviets' 14,000 naval troops.

The foregoing 11 categories present specific examples of ships, submarines, aircraft and manpower where naval limitations could be mutually agreed upon.

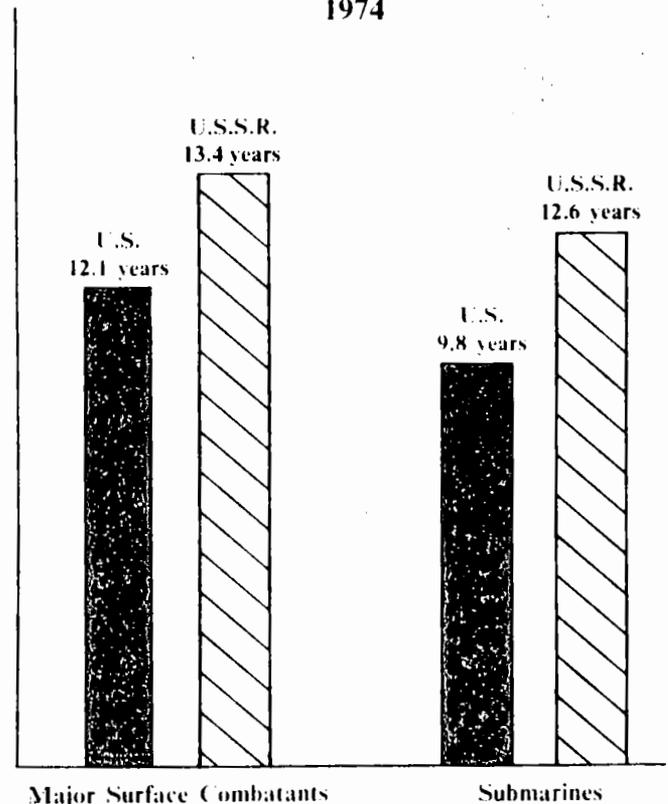
# The Soviet Navy is Older

The U. S. fleet is younger and more modern than the Soviets. The average age of U.S. major surface combatants is 12.1 years and for the Soviets it is 13.4 years. U.S. submarines are also younger with an average age of 9.8 years compared to 12.6 years for the U.S.S.R.

**Soviet Fleet is Older**

|                                 | Age In Years  |            |
|---------------------------------|---------------|------------|
|                                 | United States | Soviet     |
| <b>Major surface combatants</b> |               |            |
| Attack Aircraft carriers        | 18.1          | None       |
| Helicopter carriers             | 8.5           | 5.5        |
| Cruisers                        | 27.7          | 11.3       |
| Destroyers                      | 15.6          | 14.8       |
| Ocean Escorts                   | 4.5           | 12.5       |
| Average ship age:               | 12.1 years    | 13.4 years |
| <b>Submarines:</b>              |               |            |
| Attack submarines               | 9.7           | 12.9       |
| Strategic submarines            | 9.9           | 7.8        |
| Average sub age:                | 9.8 years     | 12.6 years |

Average Age of Ships 1974



Information as of January 1, 1974 presented by Admiral Hyman Rickover to the Joint Committee on Atomic Energy, April 3, 1974.

**Major Naval Surface Combatants and Support Ships Built 1965 - 1974**

|                              | U.S.       | U.S.S.R.   |
|------------------------------|------------|------------|
| Attack Carriers              | 2          | 0          |
| Helicopter Carriers          | 4          | 2          |
| Cruiser/Frigates             | 12         | 12         |
| Destroyers/Destroyer Escorts | 71         | 59         |
| Amphibious Attack Ships      | 47         | 71         |
| <b>Total Combat Ships</b>    | <b>136</b> | <b>144</b> |
| Support Ships                | 33         | 31         |
| <b>Total</b>                 | <b>169</b> | <b>175</b> |

**U.S. and Soviet Navy Submarine Fleet Submarines Built 1965 - 1974**

|                               | U.S. | U.S.S.R. |
|-------------------------------|------|----------|
| Strategic Subs (Nuclear)      | 25   | 36       |
| Attack Subs (Nuclear)         | 47   | 19       |
| Cruise Missile Subs (Nuclear) | 0    | 33       |
| Cruise Missile Subs (Diesel)  | 0    | 8        |
| Attack Subs (Diesel)          | 0    | 24       |

*Handwritten notes:*  
 169 175  
 25 36  
 47 19  
 0 33  
 0 8  
 0 24

**Ships in Operation - 1974**

|                              | U.S.       | U.S.S.R.   |
|------------------------------|------------|------------|
| Attack Carriers              | 14         | 0          |
| Helicopter Carriers          | 7          | 2          |
| Cruiser/Frigates             | 40         | 28         |
| Destroyers/Destroyer Escorts | 204        | 216        |
| Amphibious Attack Ships      | 62         | 81         |
| <b>Total Combat Ships</b>    | <b>327</b> | <b>327</b> |
| Support Ships                | 86         | 63         |
| <b>Total</b>                 | <b>413</b> | <b>390</b> |

**Submarines in Operation - 1974**

|                               | U.S. | U.S.S.R. |
|-------------------------------|------|----------|
| Strategic Subs (Nuclear)      | 41   | 45*      |
| Attack Subs (Nuclear)         | 61   | 32       |
| Cruise Missile Subs (Nuclear) | 0    | 40       |
| Cruise Missile Subs (Diesel)  | 0    | 25       |
| Attack Subs (Diesel)          | 12   | 153      |

\*The Soviets have 22 obsolete diesel submarines with only three missiles each with 700 mile range not included in SALT I because they are obsolete.

*Handwritten note:* Jones' Fighting Ships 514  
 Jones' Fighting Ships 527

*Handwritten note:* Jones' "Fighting Ships" page 1069

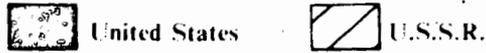
**Surface Ships to Be Built 1974-1980**

|                              | U.S.       | U.S.S.R.  |
|------------------------------|------------|-----------|
| Attack Carriers              | 3          | 0         |
| Helicopter Carriers          | 13         | 4         |
| Cruisers/Frigates            | 6          | 12        |
| Destroyers/Destroyer Escorts | 80         | 20        |
| Amphibious Attack Ships      | 0          | 12        |
| <b>Total Combat Ships</b>    | <b>102</b> | <b>48</b> |
| Support Ships                | 26         | 15        |
| <b>Total</b>                 | <b>128</b> | <b>63</b> |

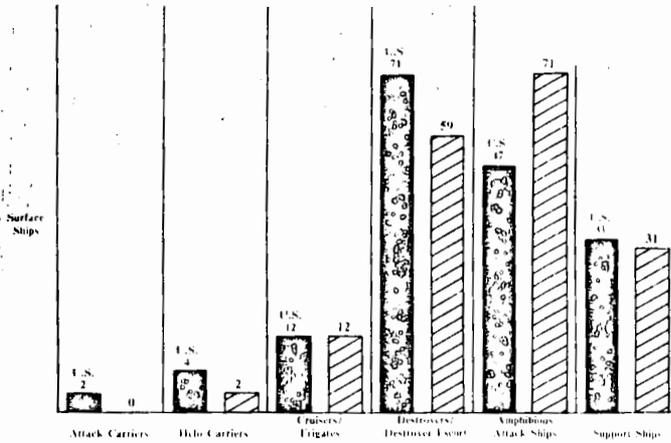
**Submarines to be Built 1974 - 1980**

|                               | U.S. | U.S.S.R. |
|-------------------------------|------|----------|
| Strategic Subs (Nuclear)      | 2*   | 26**     |
| Attack Subs (Nuclear)         | 27   | 30       |
| Cruise Missile Subs (Nuclear) | 0    | 14       |

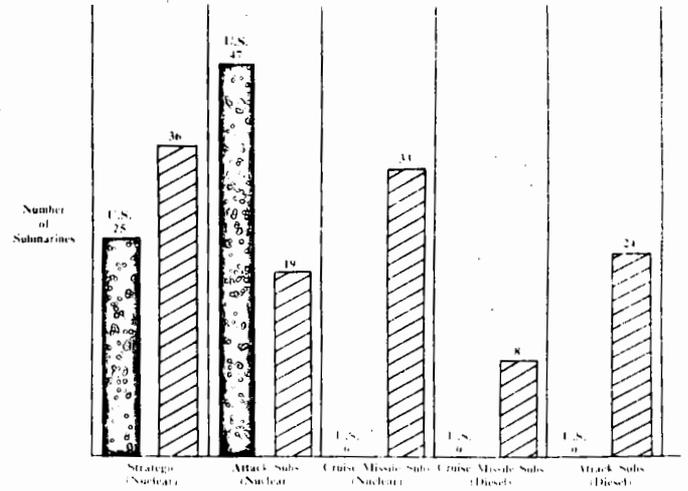
\*First two subs in 10 of Trident class  
 \*\*Soviets will have to scrap nine older subs in order to stay within the 62 total in SALT I agreement.



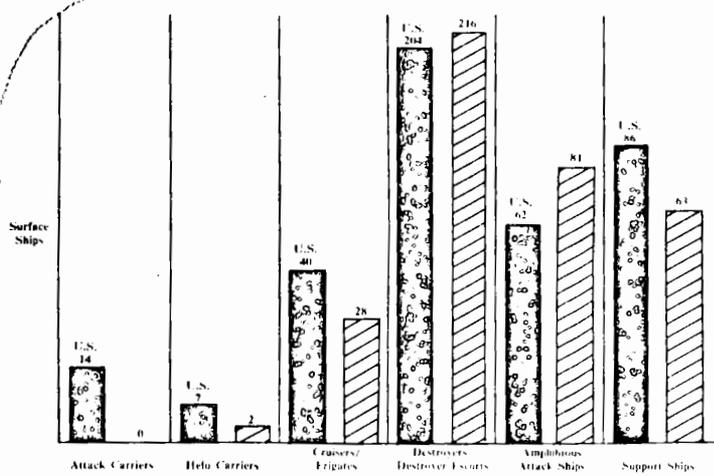
Major Naval Surface Combatants and Support Ships Built 1965 - 1974



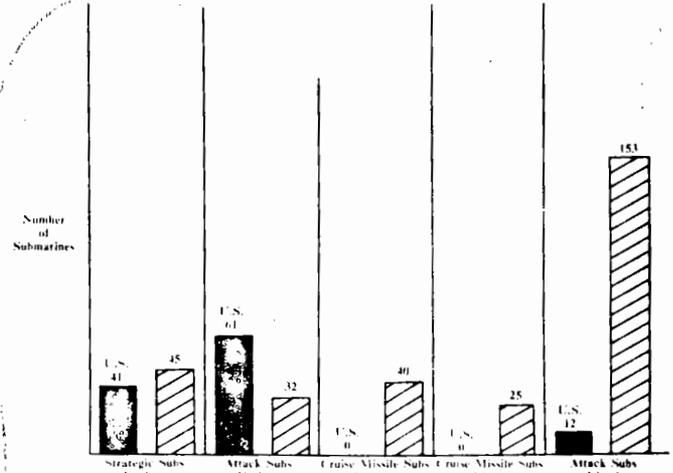
Submarines Built Between 1965 and 1974



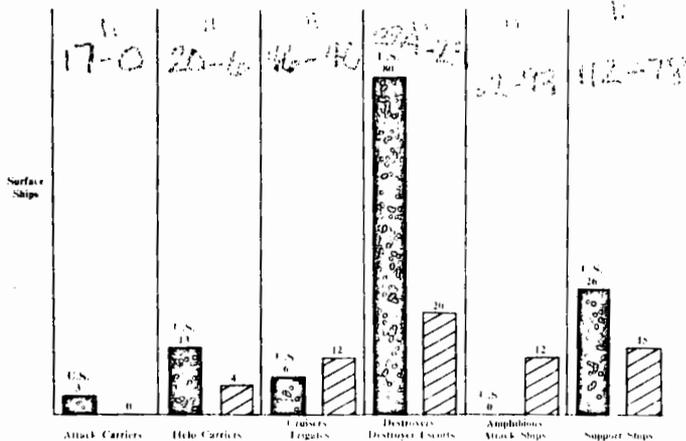
Surface Ships in Operation 1974



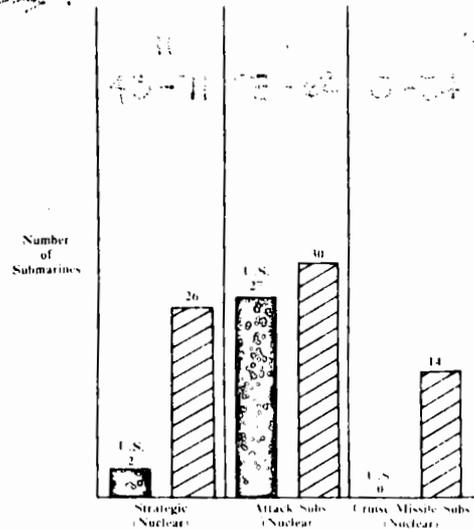
Submarines in Operation 1974



Surface Ships to be Built 1974 - 1980



Submarines to be Built 1974 - 1980



## Possible Naval Limits

There are many approaches to naval arms limitations: (1) geographical limitations; (2) limits of certain categories of ships and aircraft levels; and (3) limitations on the kinds of weapons permitted.

*"It is not too late . . . to propose and negotiate the demilitarization of the Canal. I believe the Administration should now insist that the Suez Canal be closed to the warships of all outside powers including the naval vessels of the United States and the Soviet Union."*

*Senator Henry Jackson  
March 7, 1974*

**Geographical limitations** could take several forms and there are ample precedents. Certain types of warships could be banned from a sea such as the Mediterranean or the Indian Ocean. In 1937 a treaty between France, United Kingdom and Italy restricted the deployment of submarines in the Mediterranean. Recently, the U.N. voted approval of a proposal prohibiting foreign warships in the Indian Ocean. Rather than vote on the issue the U.S. abstained and continues to maintain warships in the Indian Ocean.

Another geographic limitation would be to "demilitarize" certain narrow straits or canals or restrict passage of certain classes of ships or limit the number of ships permitted to pass within a period of time. The Montreux Convention serves as an example as it establishes certain limitations on the passage of warships through the Dardanelles.

**The success and failure of the 1922 Washington and the 1930 London agreements provide valuable lessons on how and how not to establish effective naval arms limitations. Unlike the 1922-1930 period there are only two major naval powers today and it is in their interest to reach an agreement and adhere to it.**

Certain areas of the world could be proscribed for the construction or maintenance of foreign and military bases. Currently the U.S. has 22 major naval bases in areas outside the U.S. The Soviets have no naval bases outside the Soviet Union. Both the U.S. and Soviets are moving to build naval bases in the Indian Ocean. The U.S. is firmly committed to

the construction of a naval base in the Indian Ocean at Diego Garcia. If the U.S. does build a base in the Indian Ocean it will accelerate the naval race in that area and the Soviets will follow suit by construction of a Soviet naval base.

**Warship Limitations** have been successfully agreed to in the past. Nine categories of ships and aircraft shown in this Monitor could be examined for possible areas of agreement as to limits on numbers, size, firepower, etc.

Earlier in this century significant naval treaties effectively limited the naval race for at least a period of time. The success and failure of the 1922 Washington and the 1930 London agreements provide valuable lessons on how and how not to establish effective naval arms limitations. Unlike the 1922-1930 period there are only two major naval powers today and it is in their interest to reach an agreement and adhere to it.

New construction of ships and aircraft is extremely costly and it would be in the interest of the U.S. and the U.S.S.R. to limit the construction of new ships each year. Limitations on new construction could be agreed to on the basis of tonnage, firepower, purpose of the ship or aircraft, etc. Restraint based on the average age of comparable categories of warships is also possible. Satellite observation makes it impossible for either nation to construct any ship without the other nation's knowledge. There also could be a limitation agreed to on the number of officers and men in each navy and marine corps.

### **Nuclear Weapons Limitations: Ships, Weapons and Zones**

Nuclear weapons and missiles make naval forces far more potent than ever before. Limits could be placed on the types of weapons carried on warships and on the areas where the nuclear capable ships could operate. For example, a long standing treaty between the U.S. and U.S.S.R. strictly limits the types of weapons on board warships entering the Black Sea. In addition, Japan forbids the entrance into its harbors of any ships carrying nuclear weapons. There is some question whether the U.S. navy ships actually honor the Japanese proscription of nuclear weapons and missiles as subjects for limitation. Unlike conventional weapons, neither the U.S. nor the U.S.S.R. is likely to employ nuclear weapons against a third world country. Hence there is no requirement to keep them aboard at all times and in all areas of the world. Without reducing their capability for combat with third world countries, the U.S. and U.S.S.R. navies could eliminate most if not all nuclear weapons from surface ships.

## Possible NALT Agenda

### Possibilities for naval limitations

1. Establish a ceiling for certain categories of ships.
2. Establish a ceiling on the number of aircraft.
3. Establish a ceiling on the number of submarines.
4. Establish a ceiling on the number of officers and men.
5. Limit construction of new ships in any category to be built in a five year period.
6. Establish a ceiling on tonnage, firepower and number of men at sea.
7. Ban all ships carrying nuclear weapons from specific geographical areas, e.g., Mediterranean Sea.
8. Delineate warship free zones such as the Indian Ocean, Mediterranean Sea, etc., — a ban of all warship from certain geographical areas with the exception of port visits, humanitarian considerations and transits.
9. Limit construction of new naval bases in the Indian Ocean, Pacific Ocean, etc.
10. Limit number of anti-submarine warfare forces.

## In Summary

There are many geographical areas of the world which lend themselves to serious naval limitation.

There are 9 categories of warships and aircraft which lend themselves to serious naval limitation.

There are possibilities for limitation of nuclear weapons on surface warships. Limitations could be agreed to on number of officers and men assigned to each nation's navy.

Limitations on personnel would provide a welcome relief from the ever increasing cost of manpower.

Limitations have been made in the recent past on numbers and characteristics of strategic nuclear submarines and there is good reason to believe it would serve the interests of both the U.S. and the U.S.S.R. if talks were started to limit conventional naval forces along the lines described in this Defense Monitor.

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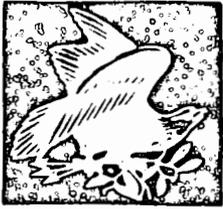
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# THE DEFENSE MONITOR

CENTER FOR DEFENSE INFORMATION

Volume Three    Number Three    April 1974

## THE INDIAN OCEAN: A NEW NAVAL ARMS RACE?

### DEFENSE MONITOR IN BRIEF

- The United States is at a crucial turning point in policy toward the Indian Ocean region. Until very recently the U.S. followed a sound policy of low-profile and minimal military involvement. Now the U.S. Navy plans to establish a naval and air base on the island of Diego Garcia and increase the deployment of naval forces in the Indian Ocean. These plans require the most rigorous examination to insure that one-sided emphasis on short-term military goals does not result in hasty steps which would stimulate an arms race in the region, exacerbate tensions and undermine U.S. influence.

- The basic issue is: Should the U.S. Navy dominate U.S. foreign policy in the Indian Ocean area, or should the Navy support the traditional restrained U.S. foreign policy in the region?

- The U.S. has not exerted strong efforts to reach agreements with the Soviet Union and other interested countries such as Britain and France to exercise mutual restraint on deployments and bases in the Indian Ocean. Nearly all the countries on the Indian Ocean have supported efforts within the United Nations to have "a zone of peace" in the Indian Ocean. Even U.S. allies such as Australia and New Zealand take a critical view of expansion of U.S. military presence.

- There is no military threat to the United States in the Indian Ocean. The U.S. today has naval superiority in the region. Soviet naval forces in the Indian Ocean have important limitations and weaknesses. Most Soviet ships there are non-combatants. The Soviet Union, as does the U.S., has access to ports in countries on the Indian Ocean, but it does not have any real naval bases of its own. The U.S. is building its own base at Diego Garcia, an escalation of outside military presence in the area.

- U.S. military build-up in the Indian Ocean does not contribute to solution of the U.S. or world energy problems or insure a flow of oil. Oil is much more likely to be turned off "at the wellhead" than blockaded by the Soviet Navy. The Soviet Union, with extensive economic and political interests, has little to gain by attacks on Western oil tankers.

- The expected reopening of the Suez Canal, a symbol of returning stability in the Middle East, has been seized upon by some in the U.S. as an excuse for the U.S. Navy to rush into the Indian Ocean in fulfillment of long-standing ambitions. A much better step would be to seek limitation on military traffic through the Canal. In any case, the Canal could very easily be closed in a crisis.

#### U.S. INDIAN OCEAN POLICY 1973

"The subcontinent is very far away. I think our interests are marginal. I think the Nixon doctrine is quite applicable—namely, we ourselves don't want to become involved."

*Joseph J. Sisco*  
Assistant Secretary  
Bureau of Near Eastern and South Asian Affairs  
U.S. Department of State, May 1, 1973

#### U.S. INDIAN OCEAN POLICY 1974

"The Indians primarily, but other nations in the area, too, have talked about having a zone of peace in the area. We think this is a very dangerous concept."

*Admiral Elmo R. Zumwalt, Jr.*  
Chief of Naval Operations  
April 1, 1974

#### THE INDIAN OCEAN BUILD-UP

"We do not believe it helps the Indian Ocean littoral states for there to be a great power rivalry in the Indian Ocean. We would hope there would be agreement between the United States and the Soviet Union to restrict their buildup."

*Gough Whitlam, Prime Minister of Australia  
March 19, 1974*

"If we are going to have a big buildup over there that would call for another fleet, a great augmentation, at least, of what we have, why couldn't that area be the subject of negotiations or agreements of some kind?"

*Senator John Stennis, Chairman,  
Senate Armed Services Committee  
February 5, 1974*

"From time to time opportunities for regional restraint present themselves; and in my judgement the region is the Indian Ocean and the opportunity is now."

*Senator Henry Jackson  
March 7, 1974*

#### Departure from Sound U.S. Policy

Until very recently, U.S. policy toward the Indian Ocean, with some exceptions such as the dangerous "tilling" exercise in gunboat diplomacy during the India-Pakistan war in 1971, was sound and reasonable, one of restraint and constrained military presence. This was in recognition of the fact that the U.S. has no vital interests at stake in the region and that U.S. security interests there are comparatively limited. Overall U.S. objectives and the well-being and security of the countries of the region was best achieved through non-military, economic and diplomatic means.

The Pacific, Atlantic, and Mediterranean were perceived as areas of much higher priority. U.S. policy makers acknowledged that in the highly improbable event of a conventional conflict between the U.S. and the Soviet Union, the Indian Ocean was a most unlikely area for confrontation. The State Department and the White House did not believe that a major U.S. security interest would be served by an expansion of U.S. naval presence in the region. In general, the U.S. actions proceeded in a careful and cautious manner, aware that overreaction could be as damaging as underreaction. Congressman Fraser well capitalized the government consensus in rejecting escalation when he observed in March 1972 that "an approach that defines the Indian Ocean as vital to the security of the United States leaves little room for reasonable dialog."

The position of the State Department was stated in 1971 by David Abshire, Assistant Secretary for Congressional Relations: "U.S. security interests in the Indian Ocean region are quite limited and primarily involve Iran, Ethiopia, and Saudi Arabia. Our interests in Australia can better be viewed in the Pacific context, and those involving Israel and Jordan relate to the Mediterranean Sea." In May 1973, Joseph Sisco, Assistant Secretary of State, Bureau of Near East and South Asian Affairs, observed that "the subcontinent is very far away. I think our interests are marginal. I think the Nixon doctrine is quite applicable—namely, we ourselves don't want to become involved." Mr. Sisco further stated that "in accordance with

the Nixon doctrine we think the search for stability in South Asia is primarily a task for the nations of the region."

Officials of the Defense Department also at one time seemed to agree with the low-profile policy consensus. Former Defense Secretary Melvin Laird said in 1972 that "our strength in the Indian Ocean lies not so much in maintaining a large standing force... but rather in our ability to move freely in and out of the Ocean as the occasion and our interests dictate." Former Navy Secretary John Chafee stressed in 1972 his view that "we ought to go slowly here and not escalate the thing and see what happens."

#### CONGRESSIONAL REJECTION OF DIEGO GARCIA IN 1969

"When presented to the Senate, there was strong opposition from within the Senate Appropriations Committee to the United States becoming committed to another naval base in the Indian Ocean... The Military Construction Subcommittee and the full committee deleted the Diego Garcia Project completely from the fiscal 1970 Military Construction Appropriation Bill. This matter was taken to conference with the House and the Senate's position prevailed and the project was stricken from the bill. Finally, an oral agreement was reached wherein the Navy was instructed to come back in fiscal year 1971 for a new appropriation which would support only a communications station."

*Senator Mike Mansfield, Chairman,  
Senate Appropriations Military Construction Subcommittee  
April 1, 1974*

#### U.S. Navy and the Diego Garcia Base

The construction of an austere communications facility at Diego Garcia was approved by Congress because of constant Administration reassurances that only a communications facility, in part as a replacement for one in Ethiopia, and nothing else was intended. In 1973, James Noyes of the Defense Department assured Congress that "there are no plans to transform this facility into something from which forces could be projected, or that would provide a location for the basing of ships and aircraft."

The U.S. Navy, however, has long had different ideas. The Navy dream has been to inherit the British Imperial legacy "East of Suez." Plans for moving into the Indian Ocean date back to the early 1960's and even before. Quiet efforts were undertaken to search for new bases in the Indian Ocean and other areas. Navy plans to establish several new overseas naval bases were kept highly secret in order not to alarm foreign countries or the American people and Congress. Diego Garcia emerged as the ideal location for coverage of the Indian Ocean. Diego Garcia was selected because of its central location and potential for a major naval base rather than simply because it could serve as a site for a communications facility. Admiral John McCain, past Pacific Commander-in-Chief, said that "as Malta is to the Mediterranean, Diego Garcia is to the Indian Ocean."

Negotiations between the United States and Great Britain led to the creation of the British Indian Ocean Territory (BIOT) and the December 1966 agreement to make the islands comprising the BIOT available to both countries for military purposes for a period of 50 years. The British lent their name to the project as a cover for actual U.S. control and dominance. This was perhaps due to bashfulness on the part of the U.S. about hanging on to some remnants of the crumbled British colonial empire.

Ship-day comparisons also ignore the actual nature of the kinds of ships in the Indian Ocean and their combat capabilities. Minesweepers are equated with aircraft carriers. (The figures also ignore submarines and the contribution that Polaris/Poseidon patrols would make to U.S. totals.) Most of the Soviet naval ships in the Indian Ocean are non-combatants, support ships and auxiliaries: oilers, repair ships, distiller ships, space support ships, minesweepers, oceanographic ships, tenders, etc. In general, the most common Soviet combat presence in the Indian Ocean since 1968 has been in the range of three or four surface combatants. In January 1974, the Soviets had five surface combatants and four submarines in the Indian Ocean. The fact that in winter months some Soviet home ports are frozen may encourage the Soviet Navy to send ships to the Indian Ocean to keep crews active and proficient.

### Maritime Interests

The Soviet Union has important non-military maritime interests in the Indian Ocean. Several years ago some 12% of the merchant ships transiting the Indian Ocean were Soviet. With the continued expansion of its merchant fleet, it is likely that the level of Soviet merchant activity in the Indian Ocean has increased. The Soviet Union also has a growing Indian Ocean fishing fleet, which several years ago accounted for almost one-third of the Soviet total annual catch. The Soviets have numerous civilian oceanographic, hydrographic, and space and missile test support ships in the Indian Ocean. In addition to trade with and aid to many of the countries along the Indian Ocean, Soviet merchant ships passing between the eastern and western parts of the Soviet Union frequently transit through the Indian Ocean. The Indian Ocean is a sea lane connecting the vast expanses of eastern Russia with western Russia. From the Soviet point of view, the presence of Soviet naval ships in the Indian Ocean probably has some relationship to the Soviet commercial shipping in the area.

#### United States, British, French and Soviet Naval Forces in the Indian Ocean (March 1974)

|                      |  |
|----------------------|--|
| <b>UNITED STATES</b> | <ul style="list-style-type: none"> <li>1 aircraft carrier (90 aircraft)</li> <li>6 destroyers and destroyer escorts</li> <li>1 oiler</li> <li>1 amphibious assault ship converted to command ship for U.S. Mid-East Force (at Bahrain)</li> <li>1 nuclear attack submarine probably accompanies carrier</li> </ul> <p>Naval patrol aircraft operate from Diego Garcia and U Tapao (Thailand)</p> |
| <b>GREAT BRITAIN</b> | <ul style="list-style-type: none"> <li>1 guided missile destroyer</li> <li>5 destroyer escorts</li> <li>6 support ships (primarily oilers)</li> </ul> <p>Naval patrol aircraft operate from Singapore and Gan in the Maldiv Islands</p>  |
| <b>FRANCE</b>        | <ul style="list-style-type: none"> <li>1 guided missile patrol ship</li> <li>2 destroyer escorts</li> <li>4 coastal patrol ships</li> <li>1 oiler converted to armed command headquarters</li> <li>1 landing craft</li> <li>1 net layer</li> </ul> <p>Naval patrol aircraft operate from Djibouti at the mouth of the Red Sea</p>  |
| <b>SOVIET UNION</b>  | <ul style="list-style-type: none"> <li>1 cruiser</li> <li>7 other combatants (destroyers, destroyer escorts, submarines)</li> <li>3 minesweepers</li> <li>1 amphibious ship</li> <li>17 non-combatant support ships (oilers, supply ships, water carriers, barrack ship, dredgers, tenders, etc.)</li> </ul>   |

*Within the past five months the U.S. has had two other carriers and a nuclear-powered frigate also in the Indian Ocean. The U.S. also operates Polaris/Poseidon submarines occasionally in the area. There may be additional attack submarines.*

*In September 1973 France created a new Indian Ocean naval command. In March 1974 a small task group, including a helicopter carrier, cruised in the Indian Ocean. There are reports of a French strategic submarine occasionally in the Indian Ocean.*

*In January 1974 there were 5 surface combatants (1 CLCP, 1 DLG, 1 DD, 2 DE) and 4 submarines. Within the U.S. government there are conflicting assessments of Soviet forces. Minesweepers and other ships (about 8) have been involved in harbor clearing in Bangladesh.*

### Soviet Naval Weaknesses

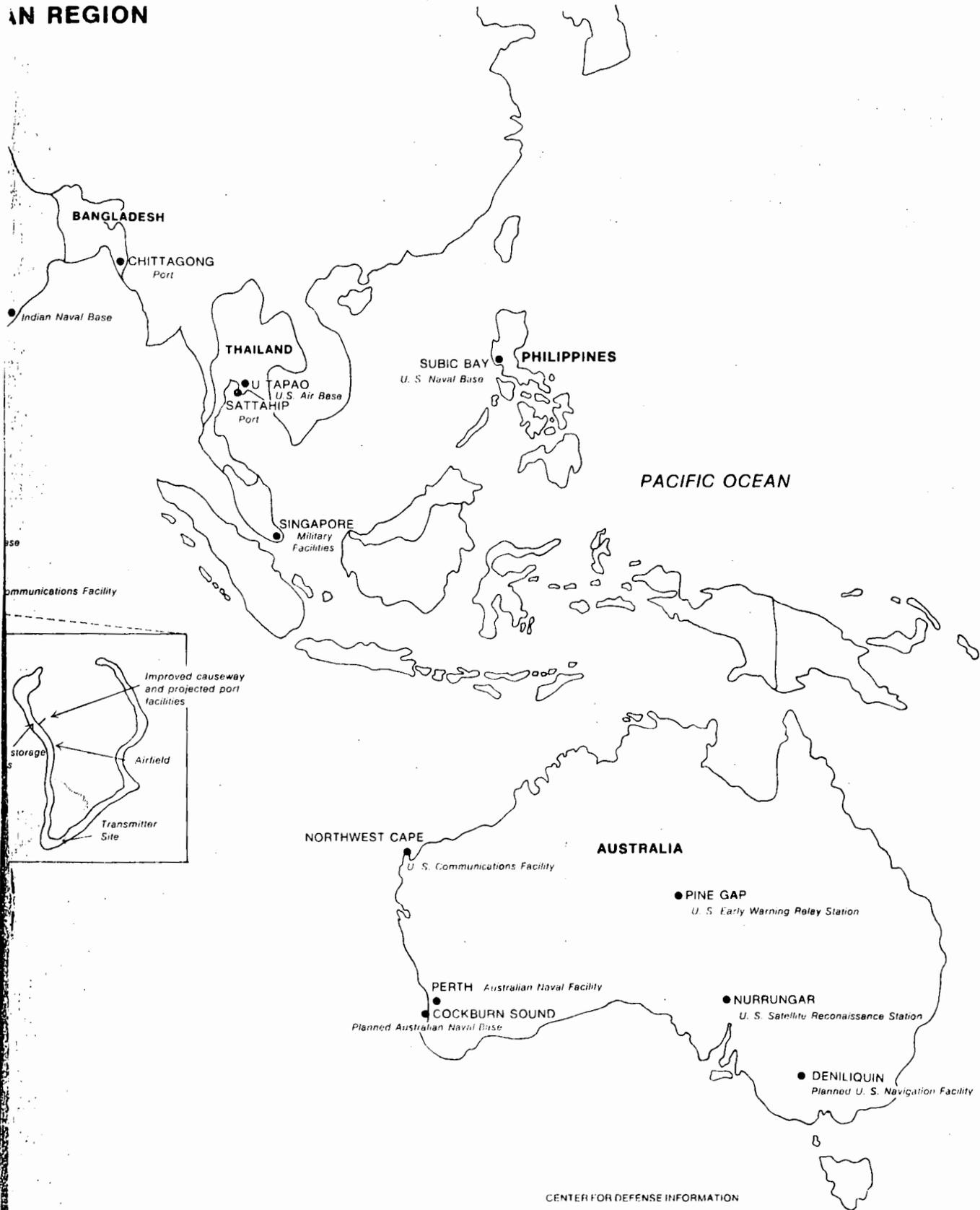
*"In time of war Soviet ships would be isolated from their bases by U.S. and NATO forces and probably quickly sunk."*

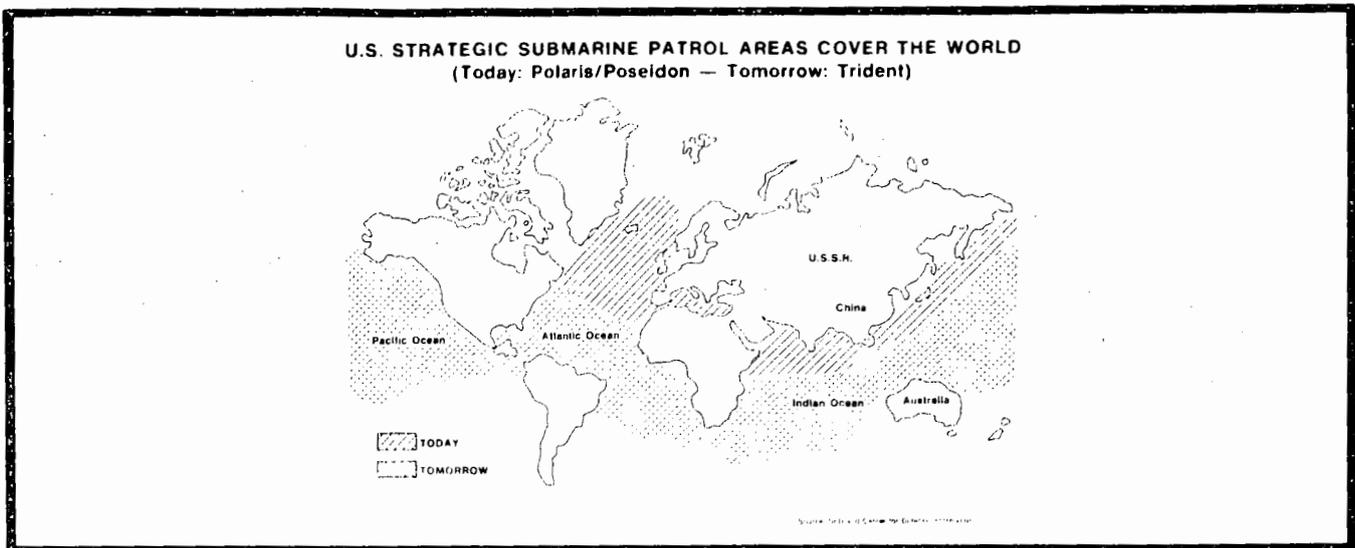
The Soviet Navy has a number of weaknesses and vulnerabilities that have particular significance in the Indian Ocean. The lack of seaborne fixed-wing aircraft to provide protection and the lack of aircraft for reconnaissance severely constrains the flexibility of Soviet naval forces in the Indian Ocean. The Soviet Navy does not have a significant seabased intervention capability. The Soviets must support four major fleets in widely separated areas (the Black Sea-Mediterranean fleets, the Baltic fleet, the Northern

fleet, and the Pacific fleet.) With Soviet naval resources dispersed over such distant areas, the Indian Ocean is a particularly remote and vulnerable place for Soviet naval ships to be. Western powers control most of the egress and ingress points to the Indian Ocean, and the possibility of wartime reinforcement for Soviet ships in the Indian Ocean seems virtually ruled out. The U.S. 7th fleet dominates the Western Pacific and western approaches to the Indian Ocean and, as Admiral Moorer recently pointed out, "in time of conflict, any waterway such as the Suez Canal is highly vulnerable. Consequently, it would be highly likely that it would be closed by one side or the other." In time of war Soviet ships would be isolated from their bases by U.S. and NATO forces and probably quickly sunk.

*(continued on page 8)*

# ILITIES IN THE IN REGION





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In terms of capability to support and deploy naval forces overseas without extensive base support, the United States today has a substantial advantage over the Soviet Union. Nuclear-powered naval surface ships are especially useful for extended distant deployments. The Soviet Navy has no nuclear-powered combat surface ships. The United States has in operation or funded a total of 14 nuclear-powered surface combatants, including 4 nuclear-powered aircraft carriers. The United States also has more oilers, repair ships, and underway replenishment ships and can sustain a fleet at sea without shore facilities better than the Soviet Union. As Secretary Schlesinger recently said, "the ability of the United States fleet to operate at long distances is greater than that of the Soviet Navy."

**U.S. Has Much Greater Capability for Extended Distant Naval Deployments**

|   | United States                                   | Soviet Union       |
|---|---|--------------------|
| Aircraft carriers                                       | 15  | 0                  |
| Nuclear-powered surface ships                           | 14 operational or funded (including 4 carriers) | 0                  |
| Underway replenishment ships (for fuel, supplies, etc.) | 51 over 10,000 tons                             | 9 over 10,000 tons |
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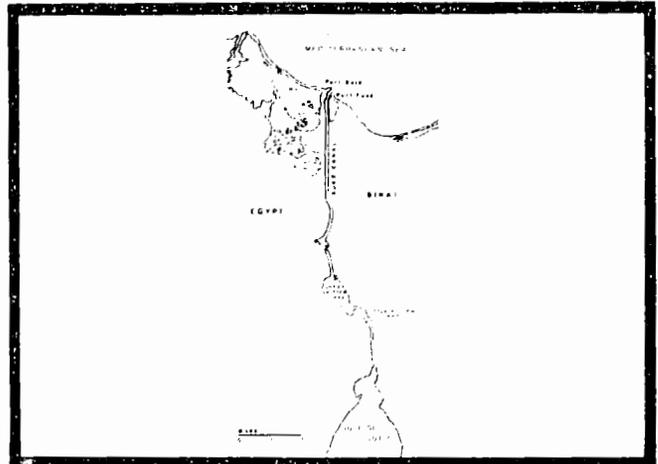
**Threats to Oil Shipments**

By way of explanation for an expanded U.S. naval presence in the Indian Ocean, one of the more prominent fears suggested by proponents is that the Soviet Union would attack U.S. and allied merchant ships and oil tankers in the area. This does not appear to be a plausible action on the part of the Soviet Union when one takes into account such important factors as relative military power, time and distance factors, and the alternative means of exerting influence and power at the disposal of the Soviet Union. The Soviet Navy is ill-prepared to engage the Western powers in a long-range conventional war. The United States has demonstrated it can survive for a long period without Middle East oil. If the Soviets were to seriously attempt to cut off oil shipments to Japan and Western Europe there are areas outside of the Indian Ocean, closer to Soviet home bases, which would be more suitable for that type of warfare. This is especially true with respect to the use of Soviet submarines. Because of its extensive commercial and shipping interests in the Indian Ocean, the Soviet Union itself would have much to lose in a war at sea or a disruption of shipping. In many ways, the Soviet merchant marine itself serves as a growing hostage to Western military power in the event of a crisis.

There apparently are conflicting assessments within the U.S. government about the ease with which a blockage of oil shipments could be carried out through military means and the probability of that occurring. For example, Admiral Zumwalt and others allege that such so-called choke points as the Strait of Hormuz at the mouth of the Persian Gulf could be blocked with ease. The Central Intelligence Agency, however, in 1973 expressed a different point of view: "It (the Strait of Hormuz) is too deep and wide to be blocked by sunken ships and too wide to be effectively controlled by coast artillery. Naval and air power would be required to close the strait, a serious step since it is considered international waters by the world community."

In general, the Soviet Union has not played a disruptive and threatening role in the Indian Ocean region. One example of a positive Soviet influence is the Soviet effort to bring about an end to the India-Pakistan war in 1965 through the Tashkent Agreement. Those who are prone to believe that

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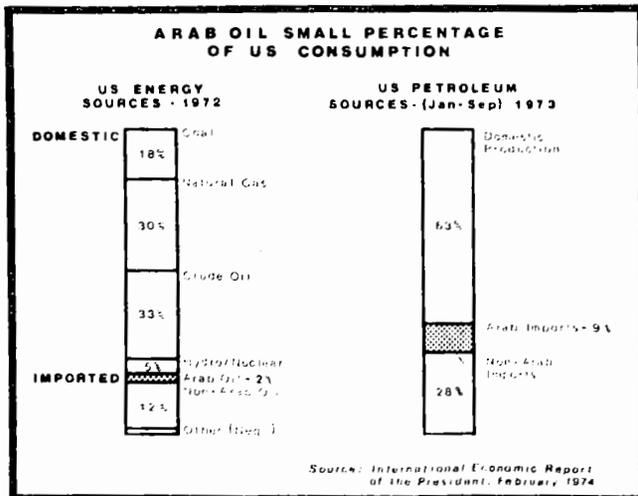
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March 7, 1974

**Reopening of the Suez Canal**

The probable reopening of the Suez Canal in the relatively near future has been another stimulus to arguments for a U.S. naval build-up in the Indian Ocean to counter predicted increased Soviet deployments. It remains to be seen whether in fact the Soviets do intend to utilize the Suez Canal to increase significantly the number of naval combatants they have in the Indian Ocean. Because of Soviet needs for naval forces in other higher priority regions, there may be grounds for skepticism that the Soviets have many surplus naval ships lying around that they can spare for the less important Indian Ocean. In any case, efforts should be made to see if agreements or understandings can be reached about controlling military traffic through the Suez Canal. Before setting firmly on the path toward a naval arms race in the region, the U.S. should exhaustively explore alternative methods of coping with possible difficulties.

Too much stress has been put on alleged benefits that the Soviet Union will gain from the reopening of the Suez Canal. It should be obvious that in terms of the stability and economic progress of the Middle East and the Indian Ocean region, the restoration of the Suez link with Europe will be a most beneficial development from the point of view of the West. It is also probable that there will be an increase in Western trade with and influence in countries such as Somalia and Yemen where the Soviets have made gains while the Canal was closed and Israel and the Arabs were so bitterly divided.



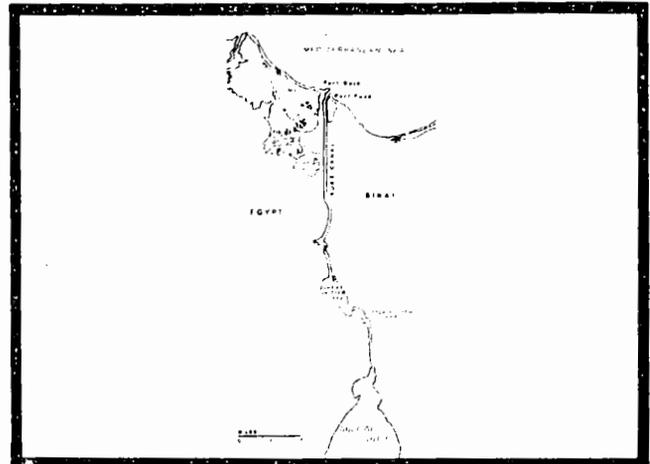
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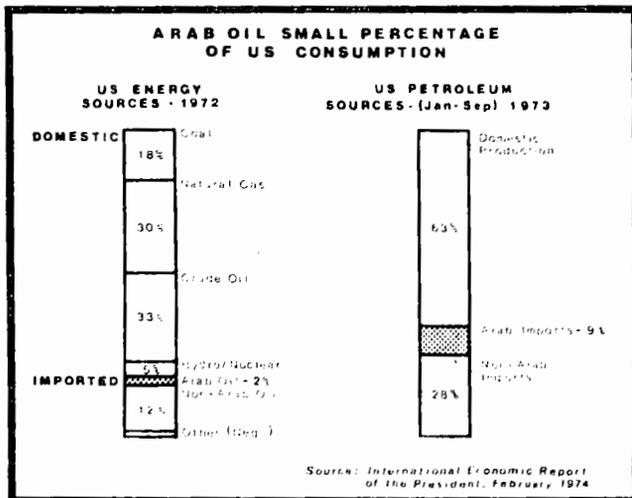
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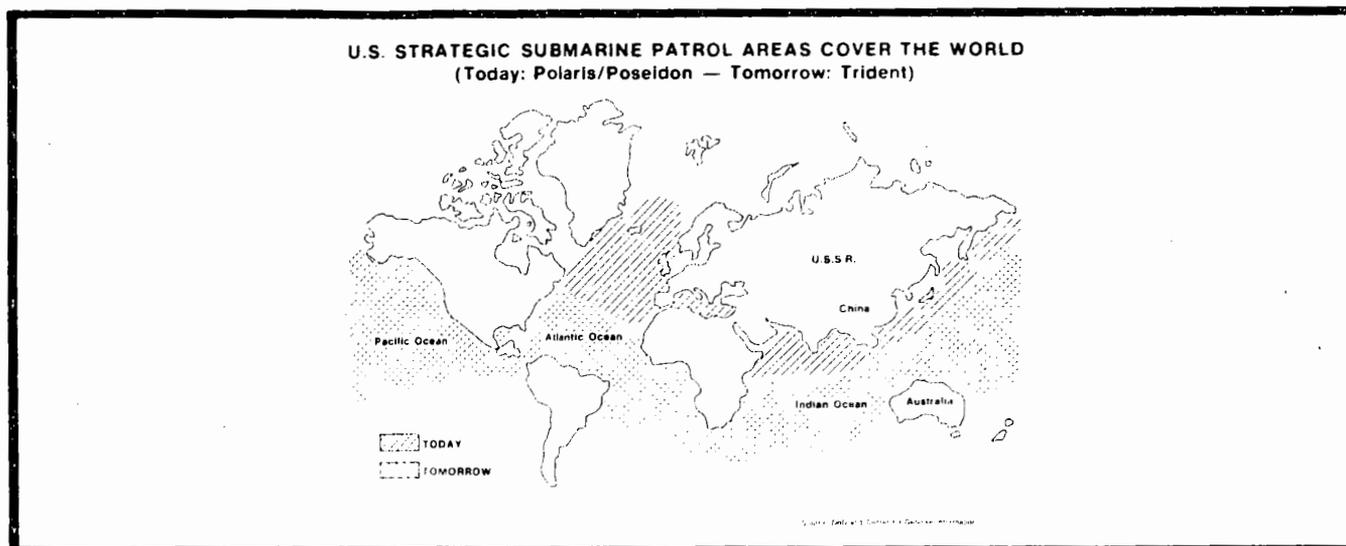
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*5 years*

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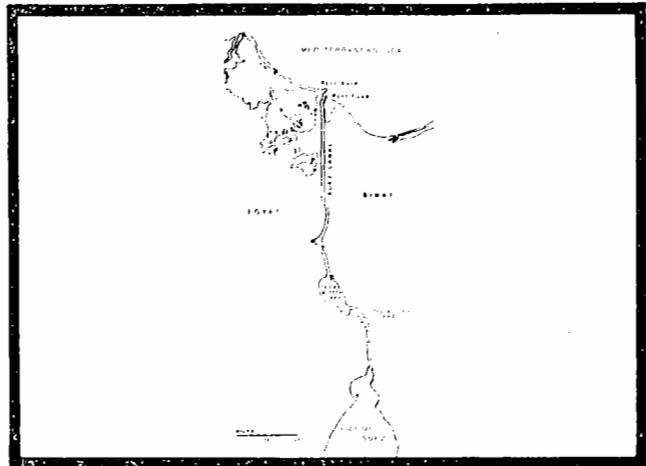
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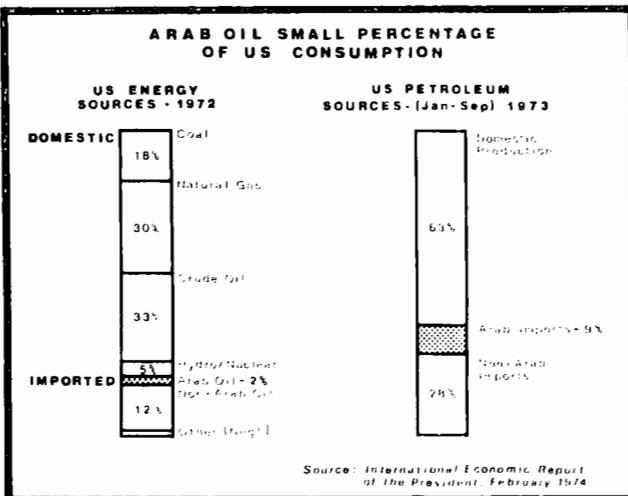
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**Potential Superpower Conflict**

In any case, the U.S. Navy has the capability to move into the Indian Ocean in force from the Pacific and Atlantic on any necessary occasion. The fact that there have been three different U.S. aircraft carriers in the Indian Ocean in the past five months demonstrates this. A support base at Diego Garcia in the Western Indian Ocean makes reasonable sense only if significantly *increased* on-station deployments in the Indian Ocean are planned. The need for expanded U.S. naval forces in the Indian Ocean at this time is very doubtful. The marginal benefits in efficiency that a support base would provide do not compensate for the problems created.

One reason for caution is the risk of a local conflict turning into a confrontation between the two superpowers. Examples would be hostility between India and Pakistan, or between Iran and some of its neighbors such as Iraq and Saudi Arabia. An escalation of naval forces would make great power involvement more likely. Some local countries fear that they will be dragged into superpower conflicts.

There will also be temptations for friends of the U.S. in the region to try to immerse the U.S. in their local squabbles. The dangers inherent in an abandonment of the low-profile policy by the U.S. in the Indian Ocean are increased because the search for influence can quickly become a matter of defending established positions and privileges, which soon become national security imperatives as commitment and involvement grow.

In 1971, Ronald Spiers, Director of the State Department's Bureau of Politico-Military Affairs, cogently summed up a restrained U.S. policy toward the Indian Ocean which is just as sound today as it was then:

"There appears to be no requirement at this time for us to feel impelled to control, or even decisively influence, any part of the Indian Ocean or its littoral given the nature of our interests there and the current level of Soviet and Chinese involvement. We consider, on balance, that our present interests are served by normal commercial, political, and military access."

## Senate Resolution Seeks Arms Limitation In Indian Ocean

96th CONGRESS  
2d Session

### S. CON. RES. 76

IN THE SENATE OF THE UNITED STATES

MARCH 10, 1978

Mr. KENNEDY (for himself, Mr. CURTIS, Mr. CLARK, Mr. CHAMBERLAIN, Mr. HOLLANDER, Mr. PELL, Mr. STEVENS, and Mr. TRENTER) submitted the following concurrent resolution, which was referred to the Committee on Foreign Relations.

#### CONCURRENT RESOLUTION

Expressing the sense of Congress that negotiations be sought with the Union of Soviet Socialist Republics relative to naval and military strength in the Indian Ocean and littoral states;

Whereas the Indian Ocean basin is not yet an arena of serious military or naval competition among the great powers;

Whereas it is in the mutual interest of both the United States and the Union of Soviet Socialist Republics to avoid a competition between themselves in naval and other military forces deployed in the Indian Ocean or littoral states, since such competition would pose high economic costs, political uncertainties, and grave risks of conflict;

Whereas the prospective reopening of the Suez Canal has increased concern in the United States that the Union of Soviet

2

Republics will subsequently increase its naval and other military forces deployed in the Indian Ocean;

Whereas prospects for peace in the Middle East could be imperiled by the beginning of an arms race in a contiguous area like the Indian Ocean basin;

Whereas in December 1971 and 1973 the United Nations General Assembly passed resolutions calling for the establishment of the Indian Ocean as a "zone of peace", and has created an *ad hoc* committee to implement those resolutions;

Whereas the United States and the Union of Soviet Socialist Republics have reached agreement on limiting other military weapons and practices, notably the Limited Test-Ban Treaty and the Strategic Arms Treaty and Interim Agreement of May 26, 1972; and

Whereas it may be far more difficult to limit naval forces deployed by outside powers in the Indian Ocean or littoral states once an arms race in the Indian Ocean has begun; Now, therefore, be it

1 Resolved by the Senate, the House of Representatives  
2 concurring), That it is hereby declared to be the sense of  
3 Congress that—

4 (1) the President of the United States should seek  
5 direct negotiations with the Union of Soviet Socialist  
6 Republics, designed to achieve agreement on limiting  
7 deployment of their respective naval and other military  
8 forces in the Indian Ocean and littoral states;

9 (2) these negotiations should be convened, as  
10 rapidly as possible, either in a bilateral form, or with-

3

1 in the United Nations Ad Hoc Committee on the Indian  
2 Ocean, augmented to include the United States and  
3 the Union of Soviet Socialist Republics;

4 (3) these negotiations should consider, among  
5 other topics, agreed limitations by the two powers on  
6 (A) establishment or use of naval and other military  
7 facilities in the Indian Ocean and littoral states, (B)  
8 numbers of warships (or ship-days) deployed in the  
9 Indian Ocean basin, and (C) the size and characteristics  
10 of warships and other military forces deployed there;

11 (4) during these negotiations, the President should  
12 (A) reaffirm the principle of freedom of the seas, in  
13 regard to the Indian Ocean, and (B) bear in mind  
14 the deliberations of the United Nations Ad Hoc Com-  
15 mittee on the Indian Ocean regarding relevant issues;  
16 and

17 (5) the President should report to the Congress  
18 at regular intervals, not less frequently than every six  
19 months, on progress made pursuant to this concurrent  
20 resolution.

21 SEC. 2. The Secretary of the Senate shall transmit a  
22 copy of this resolution to the President of the United States.

## Conclusions

### DIEGO GARCIA

The present use of the island of Diego Garcia for a communications station is reasonable at this time, but U.S. facilities and usage of the island need *not* be expanded beyond that which exist today. Careful oversight should be exercised to ensure that the Navy does not surreptitiously upgrade its facilities on Diego Garcia. Even the communications role may become obsolete because of the use of satellites for communications and the improvement of U.S. facilities on the west coast of Australia.

### TREATY

The new agreement on expansion of the U.S. military base at Diego Garcia now being negotiated between the U.S. and Great Britain is of sufficient importance to be a formal treaty rather than a simple executive agreement.

### INDIAN OCEAN ARMS LIMITATION

The U.S. government has not exhausted the possibilities for reaching agreements or understandings with the Soviet Union and other involved countries to prevent a naval arms race in the Indian Ocean. Such efforts should be made, perhaps including calling for a special international conference to discuss naval deployments and bases in the Indian Ocean. In addition to the United States and the Soviet Union, Britain and France also have naval forces in the Indian Ocean and could take part in such a conference. There are precedents in the SALT I agreement and the 1972 U.S.-Soviet agreement on preventing incidents at sea for entering into limitations on naval forces and use of naval forces. Possible avenues of limitation include limits on total tonnage, limits on the size of ships, limits on sea-based aircraft, limits on numbers of surface-to-surface missiles on ships, prohibition of bases under the control of outside powers, and prohibition of nuclear weapons in the Indian Ocean.

### NALT TALKS

There is an urgent requirement for the United States and the Soviet Union to have overall discussions about the general

naval arms race between them (NALT talks). This ongoing naval arms race may be more expensive than the strategic arms race. It is certainly more likely to lead to wars. This year the U.S. Navy budget exceeds that of the other two services for the third straight year and Admiral Zumwalt and other naval leaders have very ambitious plans for the future. The Soviets, of course, have also been building up their naval forces but have on occasion expressed interest in exploring the possibilities of naval arms limitation.

### SUEZ CANAL

Consideration should be given to exploring how utilization of the Suez Canal could be regulated to control military traffic through it. The nature of controls could be as complete as neutralization or demilitarization. Senators Stennis and Jackson have expressed interest in the U.S. seeking such limitations with the Soviet Union.

### OIL

A U.S. military build-up in the Indian Ocean does not contribute to an alleviation or solution to the world energy shortage. Military power does not ensure a supply of oil, as recent events demonstrate. U.S. resources and attention should be concentrated on non-military, more productive means of solving long-term energy needs. Visions of gunboats and convoys should not distract us from more serious, long-term approaches. In terms of the stability and progress of the region, the U.S. money to be spent on a big U.S. naval establishment in the Indian Ocean could perhaps better be spent on assisting in economic development of countries in the area; both the U.S. and they would benefit.

### DEPLOYMENTS

In general, occasional patrols from the Atlantic and Mediterranean 6th Fleets and from the Pacific 7th Fleet into the Indian Ocean would suffice to show the U.S. flag and military presence on those relatively rare occasions when that is warranted. The opening of the Suez Canal, depending on what controls are placed on military traffic, will facilitate deployments of ships from the 6th Fleet to the Indian Ocean and Persian Gulf. The opening of the Canal will also put U.S. naval bases in the Mediterranean closer to the Indian Ocean than are Soviet bases in the Black Sea.

#### DO THE RUSSIANS HAVE BASES IN THE INDIAN OCEAN?

"We have to sort of watch the word 'bases' here because the Russians do not have bases per se."

*Rear Admiral Charles D. Grojean, Director,  
Politico-Military Policy Division,  
Deputy Chief of Naval Operations (Plans and Policy)*

*March 8, 1974*

**CONGRESSMAN HAMILTON OPPOSES DIEGO GARCIA BASE EXPANSION**

**HON. LEE H. HAMILTON**

OF INDIANA  
IN THE HOUSE OF REPRESENTATIVES  
Thursday, April 4, 1974

*Rep. Hamilton is Chairman of the House Foreign Affairs Subcommittee on Near East and South Asia, the only Congressional Committee set to hold in-depth hearings in 1974 on the Indian Ocean and Diego Garcia.*

... the significance of this request far outweighs the \$29 million in the supplemental bill. If passed, we would be establishing a major military presence in a remote area where heretofore our presence was minimal and our profile low. To seek facilities to support the regular deployment of a carrier in the Indian Ocean would represent an important new type of presence and would give the United States new capabilities in a region half way around the world where every Soviet military move to date has been in direct response to something we have done previously.

... Almost overnight our military involvement in the Indian Ocean area and the Persian Gulf seems to be escalating unchecked. On the one hand, we are seeking a permanent base in the Indian Ocean and on the other, we continue to promote the seemingly unrestricted flow of arms to states in the Persian Gulf where last year perhaps upward of 5 billion worth of arms were sold to Iran and Saudi Arabia. Congress urgently needs to consider the implications of the course of action our Government is taking in the Indian Ocean and Persian Gulf areas....

I see no need to hurry because:

First, we have no known commitment in the area that warrants prompt action.

Second, the Navy admits that there is no relationship for the foreseeable future of facilities on Diego Garcia and the need to get supplies to countries in the Middle East should any hostilities warrant airlifts.

Third, the Navy plans for Diego Garcia are old ones, designed in the 1960s and defeated repeatedly within the Defense Department. The 1974 rationale for these old plans therefore deserves extra close attention.

Fourth, to delete this request and wait until the regular fiscal year 1975 Defense bill is considered would mean a delay of only 6 to 8 months in construction on the island.

Fifth, we now have naval superiority in the Indian Ocean and will have greater naval capabilities for the immediate future, and

Sixth, the new British Government is presently considering the issue of whether to allow changes in the British-United States agreement over the use of the island in order to permit new facilities. It would be premature for this body to act before the negotiations with England are finalized....

... Since 1968, the Soviet Union has been developing a military capability in the Indian Ocean region and it now has a permanent presence, but it is unclear what difference this presence makes and what threats it poses to our interests and to our access to Persian Gulf oil. The Soviet Union, like the United States, has a permanent presence in the area and both navies make port calls to many countries on the littoral. The Soviets have a numerically larger number of ships there, but with even the availability of a carrier from our Pacific fleet, we have definite naval firepower superiority.

The Defense Department offers a litany on places where the Soviet Union is doing things or has facilities. But we must look behind what the Soviets are doing in Somalia, Socotra, Aden, Iraq, Mauritius and Bangladesh. I would submit that the Soviets' naval involvement in and around the ports of these states is related directly to protecting and promoting their political interests in those countries where they have close ties. Presently, the Soviet Union does not, to my knowledge, have any base in the Indian Ocean.

*Congressional Record*

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commentary

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## Superpower naval rivalry

By J. Snouck-Hurgronje

Washington has been forced to rethink its military strategy as Soviet seapower has grown steadily in the last decade. American statesmen are turning away from distant Asia to look to their lines of communication to Western Europe.

A hundred years ago Britain went through a similar reappraisal of its imperial commitments to a challenge of similar proportions in Central Europe — from Bismarck's Germany. A brief glance back will help to understand Washington's problem of today.

In the 1870's, Britain was at the height of its power. Benjamin Disraeli was Prime Minister. He preached Britain's world responsibilities and opportunities.

But Disraeli was challenged, and brought down, by Gladstone and his "little Englanders" who were not isolationist, but who were reacting to France's sudden defeat by Germany. As liberal cabinets succeeded each other, Britain cut down on far-off commitments to better balance Germany's rising power. As the wiser hand of Bismarck was removed from the helm of German foreign policy, in 1890, England increasingly worked to focus its power in the North Sea. The volatile Kaiser's decision to expand his small navy into a first-rate fleet caused Britain to form an alliance with Japan in 1902, to write a naval agreement with France in 1905, and to concentrate the Royal Navy in home waters.

The Soviet Union enjoys a natural geographic advantage in Eurasia, and has been adding to it a first-rate fleet of submarines and surface ships, which could hope to accomplish the isolation of the European subcontinent from North American assistance long enough for the Warsaw Pact forces to make their superior weight felt from their superior position.

The principal way for the U.S. to break loose from the geographical constriction threatened by the Soviet superiority in naval ships is to build new ships that can compete at an equal level with ships in the Soviet fleet.

As it stands the Soviets have taken the lead in introducing many classes of submarines and surface ships which far outstrip most U.S. ships on the ways in weaponry (combat capability), not to speak of out-performing the designs of other NATO nations. An example of this momentum may be seen in the new Krivak class of destroyer which crams more kinds of air, surface and subsurface weaponry into a 3,400-ton hull driven with modern gas turbines than the U.S. has been able to plan for its unfinished 7,100-ton Spruance class equivalent. Similarly the Kresta and Kara class cruisers make America's DLG counterparts look conspicuously insipid.

In submarines, the Soviets have designed and put to sea five new classes of nuclear-powered attack boats to one American, and in num-

...expand  
...navy into a first-rate fleet  
caused Britain to form an alliance  
with Japan in 1902, to strike a naval  
agreement with France in 1905, and to  
concentrate the Royal Navy in home  
waters.

Today, behind the current SALT  
and force reduction negotiations in  
Vienna, as in the historic evolution of  
the triple entente, there looms a  
backdrop of great fleets trying to  
reform on the one hand, and new  
fleets strongly contesting their pre-  
eminence on the other. The raising of  
armies on the continent has never  
alone been sufficient to endanger  
successive Atlantic alliances. It has  
been the combination of a big army in  
Europe and a powerful navy based on  
the continent which has threatened  
such maritime coalitions as the triple  
entente and the North Atlantic Treaty  
Organization.

In domestic politics, the similarity  
of the two eras can be seen in the  
debate between the supporters of Sen.  
Mike Mansfield, who wish to extricate  
the United States from foreign obliga-  
tions, and the internationalists of both  
parties. The supporters of a one-sided  
cut in American forces in Europe  
represent the same stream in Amer-  
ican history evident in Liberal pol-  
icies from Gladstone to Asquith in  
British history. However, there is one  
difference. The Liberal Party did not  
add to their view of British foreign  
and defense policy a disregard for the  
challenge of Germany expressed in  
the building of a large fleet.

...class equivalent  
similarly the Kresta and Kara class  
cruisers make America's DLG coun-  
terparts look conspicuously insipid.

In submarines, the Soviets have  
designed and put to sea five new  
classes of nuclear-powered attack  
boats to one American, and in num-  
bers they outbuild the U.S. approx-  
imately three-to-one.

It will be necessary to exploit the  
opportunities offered by detente gen-  
erally, and the arms control talks  
specifically, to ensure that con-  
ventional, limited attacks on NATO  
territory do not become plausible or  
desirable alternatives to nuclear war.  
For it is the Soviet naval expansion  
and not nuclear numerology which  
has caused the instability in Europe.  
U.S. arms control representatives  
should fasten their attention on this  
issue.

The U.S. should also take steps to  
smooth differences in the NATO al-  
liance rather than inflame them. As  
wisdom prevailed in Britain over im-  
perial pride at the turn of the century,  
an American effort should be made to  
secure the friendship of the nations it  
needs to help conduct its own defense.  
Canada, Iceland, and France should  
appear at the top of the U.S. list for  
diplomatic initiative, while secondary  
considerations such as those of the  
Indian Ocean should be assigned their  
proper place.

*Mr. Snouck-Hurgronje is editor,  
U.S. Naval Institute, Annapolis,  
Maryland.*

41

Recommended... The Galbraith Book - also recommended contact w/ Galbraith -

## BOOKS



Gwendolyn Stewart

Galbraith: Style, wit and sensible radicalism

### The Public Interest

**ECONOMICS AND THE PUBLIC PURPOSE.** By John Kenneth Galbraith. 334 pages. Houghton Mifflin. \$10.

There seem to be at least three John Kenneth Galbraiths: Galbraith the statesman (former ambassador to India), Galbraith the satirist ("The Maclandress Dimension," written under the nom de plume Mark Epernay) and of course Galbraith the economist ("The Affluent Society," "The New Industrial State"). When Galbraith employs his mordant wit and elegantly trenchant style in the service of economics, his more conservative colleagues react as if he were indeed an unholy trinity.

Galbraith knows that economic systems are supposed to reflect reality; he also knows that ours does not. His books have been searching efforts to separate economic fact from theory. In his new book he has found what he has been looking for—and he has left the economic landscape littered with myths, especially the "neoclassical" theory of the open, competitive market.

Basic to Galbraith's new economic system is the recognition that power resides more and more with the "planning system" (the 1,000 or so large corporations that account for more than half of the gross national product) and less and less with the "market system" (farmers, retailers, the small-business men who operate the nation's service industries). The powerful planning-system bureaucracy both complements and influences the governmental bureaucracy. What Galbraith calls "bureaucratic symbiosis" has developed between the huge corporations and government agencies. And by

manipulation and persuasion, the "technostructure"—the scientists, engineers, lawyers and lobbyists who run the corporations—convinces the supposedly "sovereign" consumer that corporate and public policy are one and the same.

The result of this blurring of public and corporate interests, argues Galbraith, is that we have missiles and moon shots but too little housing and too much dirty air. And all of the exploitation of the market system by the planning system, all of the fancy technology is not employed merely to "maximize" corporate profits. "The primary affirmative purpose of the technostructure," Galbraith writes, "is the growth of the firm." That steady economic growth has been accepted as a "convenient social virtue" is undeniable. That it is also responsible for pollution, environmental assault and inflation becomes clearer with each smoggy day.

Nor does Galbraith overlook the role of the housewife in the planning system's scheme. A wife in the U.S. economy, he says, is converted into a "crypto-servant" who administers the consumption of endless artifacts she is persuaded she cannot live without. But the current reality of women's lib reflects a growing awareness of the predicament.

If Galbraith is certain that the people are being exploited by a planning system whose interests run increasingly counter to their best interests, he is just as blunt about what is required to rectify the situation—"a new socialism." This socialism demands various actions:

- Set up "full organization under public ownership" of the weak parts of the market system—housing, medical care and transportation.
- Encourage small-business men and firms in the market system to form trade

associations, with governmental regulation of prices and extended coverage of the minimum wage as well as a major increase in the amount.

- Abandon the unrealistic goal of full employment and institute instead a guaranteed or alternative income for those who cannot find satisfactory work.

- Convert "fully mature corporations" into fully public corporations. This would mean public purchase of stock for fixed-interest-bearing securities so that capital gains would accrue to the public treasury. Such public corporations as Renault and the Tennessee Valley Authority are run this way now.

- Also convert large specialized weapons firms doing more than half their business with the government into full public corporations. "The large weapons firms are already socialized except in name"—e.g., Lockheed and General Dynamics.

- Impose a public authority to coordinate different areas of the planning system. Thus the promotion of electrical use by appliance firms will not run absurdly ahead of the utilities' ability to supply electricity.

- Establish "a special presumption" in favor of public support of the arts.

Admittedly not a "revolutionary," Galbraith allows that all this will come about only through political processes—once politics itself is emancipated from the grip of the planning system. Since he believes the Republican Party is "the instrument of the planning system," Galbraith's hopes repose in the McGovern wing of the Democratic Party. Will Galbraith's ideas, which may be "radical" but certainly sound sensible, work? Maybe time will tell. But John Galbraith sounds like an idea whose time has come.

—ARTHUR COOPER

### Dead or Alive?

**ART AND THE FUTURE.** By Douglas Davis. 208 pages. Praeger. \$20.

"Art is dead," proclaimed the poster at the International Dada Fair in 1920. "Long live Tatlin's machine art." Nowadays the cry that art is dead is much more likely to come from the proponents of traditional art, a dwindling bastion surrounded by the ever-spawning successors of Tatlin and other innovators of twentieth-century art. Despite today's near-instant communication, most of the "public," at least in the U.S., is really unaware that what they still think of as "art" is a minority activity. Painting and sculpture, in the sense that most reasonably cultivated people think of them, are indeed, for all practical purposes, dead, replaced among young artists all over the world by myriad activities closely involved with new science, technology and philosophy.

This state of affairs has given rise to increasingly acrimonious debate among critics, a debate that Douglas Davis is not too far out in characterizing as largely "generational." As NEWSWEEK'S

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## MEMORANDUM

TO: Members of the Trilateral Commission

Enclosed for your information is a copy of the joint statement adopted at the Commission's meeting on May 11 in Ottawa.

THE TRILATERAL COMMISSION

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MEETING OF NORTH AMERICAN COMMISSIONERS

New York City, 16-17 October, 1975

PROGRAM

Thursday, October 16th

6:30 to 9:15 Dinner meeting at the River Club, 447 East 52nd Street, at which Edwin H. Yeo, Under Secretary of the Treasury for Monetary Affairs, will lead a discussion on International Economic and Monetary Relations

Friday, October 17th

(Note: meetings and luncheon will take place in the Louis XVI Suite on the 4th Floor of the Waldorf Astoria Hotel, at Park Avenue and 50th Street)

9:00 to 11:15 Management of Global Resources, including discussion of the Trilateral report on a New Accommodation in World Commodity Markets, led by the North American Rapporteur, Carl Beigie, Executive Director, C.D. Howe Research Institute, Montreal, and discussion of the Trilateral report on the Future of the Oceans, led by one of the North American Rapporteurs, Douglas Johnston, Professor of Law, Dalhousie University, Halifax

11:30 to 12:30 Discussion of an interim oral report on the work of the Trilateral Task Force on International Institutions, led by the North American Rapporteur, C. Fred Bergsten, Senior Fellow, Brookings Institution

12:40 to 2:15 Lunch, at which Daniel P. Moynihan, U.S. Permanent Representative to the United Nations, will comment on the "New International Economic Order," in the light of discussions at the Seventh Special Session of the U.N. General Assembly

2:30 to 4:30 Discussion of the Future of the Commission, led by Gerard Smith and Zbigniew Brzezinski

Steve  
J

SEEKING A NEW ACCOMMODATION IN WORLD COMMODITY MARKETS

Draft Report of the  
Trilateral Task Force on  
Access to Supplies

Rapporteurs

Carl E. Beigie  
Wolfgang Hager  
Sueo Sekiguchi

THE TRILATERAL COMMISSION  
August 1975

NOTE: This draft is still in rough form and should not be regarded as the final position of the Task Force. It does represent basic agreement among the rapporteurs on most major points. A meeting of the Task Force was held in Japan on September 5-6, with several consultants, to discuss some of these points in more detail and to clarify wording. The discussion of the draft at the North American meeting on October 17 will also provide valuable input into preparation of the Final Report, to be completed in late October.

## THE RAPPORTEURS

CARL E. BEIGIE is Executive Director of the C.D. Howe Research Institute in Montreal, and Director of Research for the Canadian-American Committee, positions he has held since 1971. Born in 1940 and educated at Muskingum College and the Massachusetts Institute of Technology, Mr. Beigie was a Lecturer in the Department of Economics of the University of Western Ontario in 1966-68. From 1968 to 1971, he was an International Economist and Assistant Vice President at the Irving Trust Company in New York City. Mr. Beigie is the author of several articles and books, including an annual Policy Review and Outlook published by the C.D. Howe Research Institute.

WOLFGANG HAGER is with the Research Institute of the German Society for Foreign Policy, in Bonn. Educated at the Universities of Stockholm, Uppsala, Gothenburg and Pennsylvania, he was Director of Studies at the European Community Institute for University Studies, in Brussels, before moving to his current position in Bonn. Among Mr. Hager's publications is A Nation Writ Large?: Foreign-Policy Problems before the European Community, which he edited along with Max Kohnstamm.

SUEO SEKIGUCHI is a Senior Staff Economist at the Japan Economic Research Center, a position he has held since 1968. From 1972 to 1974, he also served as Associate Professor of International Economics at the Social and Economic Research Institute of Osaka University. Born in 1936, Mr. Sekiguchi graduated from Yokohama National University in 1959 and entered the Hokkaido Takushoku Bank. On leave from the Bank during 1964-66, he studied advanced economics at the Japan Economic Research Center and also at the National Planning Association in Washington, D.C. Mr. Sekiguchi is the author of Keizai Hatten No Mekanizumu (The Mechanism of Economic Development, 1972), Nihon No Chokusetsu Toshi (Direct Investment From and Into Japan, 1974) and many articles on international economics.

## THE TRILATERAL PROCESS

The report which follows is a draft of the final report of the Trilateral Task Force on Access to Supplies. Carl Beigie has served as principal drafter. The rapporteurs have been aided in their work by extensive consultations. In each case, the consultants spoke for themselves as individuals and not as the representatives of any institutions with which they are associated. Those consulted included the following:

C. Fred Bergsten, Senior Fellow, The Brookings Institution  
Robert R. Bowie, Professor of International Affairs, Harvard University  
Zbigniew Brzezinski, Director, the Trilateral Commission  
F. Callot, Editor-in-chief, Annales des Mines, Paris  
Richard N. Cooper, Professor of International Economics, Yale University  
William Diebold, Senior Research Fellow, Council on Foreign Relations  
Donald J. Donahue, President, American Metal Climax, Inc.  
Albrecht Dürren, former President of the German Chamber of Commerce, Consultant on commodities to the Treasury  
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Hajo Hasenpflug, World Economics Institute, Hamburg  
Kenzo Henmi, Professor of Agricultural Economics, Tokyo University  
Karl Kaiser, Director, Research Institute of the German Society for Foreign Policy  
Michael Klass, Charles River Associates, Cambridge  
Shinichi Kondo, Former Ambassador of Japan to Canada  
George Miller, Executive Director, Center for Resource Studies, Queens University, Kingston, Ontario  
Masaya Miyoshi, Director, International Economic Affairs, Japan Federation of Economic Organizations (Keidanren)  
Robert Perlman, Director, Commodities Research Unit, London  
Alfred Powis, President, Noranda Mines Ltd., Toronto  
A.E. Safarian, Dean, School of Graduate Studies, University of Toronto  
Nathaniel Samuels, Chairman of the Board, Louis Dreyfus; former U.S. Undersecretary of State for Economic Affairs  
John Schnittker, Schnittker Associates, Washington; former U.S. Undersecretary of Agriculture  
Toshiro Shimanouchi, Counsellor, Japan Federation of Economic Organizations (Keidanren); former Ambassador to Norway  
Andrew Shonfield, Director, Royal Institute of International Affairs  
Gerard C. Smith, North American Chairman, The Trilateral Commission  
Stephan Stamas, Vice President for Public Affairs, The Exxon Corporation  
Susan Strange, Royal Institute of International Affairs, London  
Tetsutaro Suzuki, Vice-President, Nat'l Institute for Research Advancement, Tokyo  
John Tilton, Professor of Economics, Pennsylvania State University  
Carroll L. Wilson, Professor of Management, Alfred P. Sloan School of Management, MIT  
Tadashi Yamamoto, Japanese Secretary, The Trilateral Commission

SCHEDULE OF TASK FORCE ACTIVITIES:

- December 7, 1974 -- Preliminary discussion of task force concerns in trilateral "brainstorming" session in Washington, D.C., including Beigie, Hager, Brzezinski and twenty-three others.
- February 22-23, 1975 -- Beigie, Hager, and Brzezinski meet with a few others in New York City to develop task force concerns.
- Early April -- Beigie circulates preliminary outline to other rapporteurs.
- April 15 -- Beigie completes first draft of interim report and circulates to other rapporteurs and to consultants.
- Late April, Early May -- Hager meets with European consultants on first draft.
- May 2-3 -- North American side of task force meets in New York City to consider first draft.
- May 2 -- Japanese side of task force meets in Tokyo to consider first draft.
- Mid-May -- Beigie completes second draft of interim report, which is then circulated to all Commissioners.
- May 30 -- Discussion of interim report at Trilateral Commission plenary meeting in Kyoto.
- June, July -- Rapporteurs prepare inputs into final report.
- July 29, August 2 -- Beigie and Sekiguchi meet with a few others in Aspen, Colorado, to outline final report.
- Late August -- Beigie completes first draft of final report.
- September 4 -- Rapporteurs and several consultants meet in Tokyo with Commissioners and with some government officials.
- September 5-6 -- Rapporteurs and nine consultants meet in Shimoda to consider first draft of final report.
- October 17 -- Beigie meets with North American Commissioners in New York City to discuss first draft of final report.

## Table of Contents

|      |  |    |
|------|--|----|
| I.   | Introduction   | 1  |
| II.  | The Roots of A Supplies Problem  | 5  |
| III. | Alternative Policy Approaches and Consequences   | 15 |
| IV.  | Towards A New Balance of Responsibilities  | 19 |
| V.   | Summary of Conclusions and Recommendations<br>(To be included in the final report, but<br>omitted from this draft) |    |

## SEEKING A NEW ACCOMMODATION IN WORLD COMMODITY MARKETS

### I. INTRODUCTION

The subject of this report is access to supplies of commodities as a policy issue in international economic and political relations. In contrast to many of the issues that now preoccupy the international community, recognition of access to supplies as a distinct problem area has arisen with dramatic suddenness. Heightened awareness of, and concern over, this problem accompanied the sharp increase in the world oil price brought about by the actions of the OPEC cartel and the worldwide emergence of general inflation rates that are unprecedented in modern peacetime experience.

Historically, policy issues that arise quickly and dramatically tend to lack permanence and some commentators have argued that this is likely to be the case with access to supplies. It is true that earlier this year there were signs of some relaxation of concern over this issue as widespread commodity shortages gave way to excess supplies in the face of the most serious economic recession of the past forty years. The prices of many commodities had declined significantly from the peaks achieved last year or early this year, and further downward pressure on prices was being exerted by depressed demand conditions.

It now appears that the low point of the current recession has passed, with positive rates of growth slowly being restored in several key countries. Yet, even while the world economy struggles along in the early stages of recovery, a resurgence of price pressures for certain products and the threat of another round of oil price increases are contributing to fears that economic expansion will be cut short by an early re-emergence of commodity supply problems.

It is argued in this report that it would be a mistake to focus excessively on the access to supplies issue as a short-term, cyclical phenomenon, even though cyclical fluctuations have magnified, and probably exaggerated, the problem.

The full dimensions of the problem are still unclear, but the task facing the international community in general, and the Trilateral countries in particular, if they are to respond constructively and intelligently to this issue, is as complex and demanding as any now being confronted. In fact, access to supplies is not an issue that should be isolated from others now facing the international community; it reflects, in large measure, the failure to achieve within national policies and international organizations the kinds of attitudes and mechanisms that are essential to achieving and maintaining stability in a highly integrated world economy.

As an introduction to this report, it is important to define carefully two terms that will appear frequently -- commodities and access to supplies.

Commodities. The term "commodity" will refer to all primary products that enter, or that could enter, into trade among nations. Commodities are often subdivided according to a variety of criteria, but no single set of conventional criteria has proven fully satisfactory in a policy context. For example, the distinction between products that are based on "renewable" or "non-renewable" resources may give the impression that renewable resources are infinite while non-renewable resources are close to being exhausted. In fact, at current prices many non-renewable resources (e.g. iron ore and bauxite) are in great abundance in relation to anticipated demand during the foreseeable future, whereas other resources in this category that are in potentially tighter supply can be "recycled" for additional use or can be substituted for by using alternatives in the production process. In contrast, some renewable resources (e.g., arable land and fresh water) are being exploited so intensively in certain regions of the world that they can be said to be in short supply in relation to demand.

What ultimately differentiates primary products from other products in the international economy is that: primary products require resources for which there are natural limits on the total quantity available, although output from these finite resources can be expanded by increased use of labour, capital, and

technology; and the distribution of these natural resources among nations is very uneven, although trade in the primary products produced from these resources can overcome imbalances between domestic demand and supply. But commodities differ in terms of potential supply, the cost and time involved in expanding supply, and opportunities for substitution in consumption and production. It is therefore important, from a policy standpoint, to bear these differences in mind and to treat each commodity on a case-by-case basis. Furthermore, any general framework for dealing with commodity policy issues must be sufficiently flexible to allow for these differences.

Access to Supplies. The term "access" will refer to the conditions that determine the volume of, and the price for, commodities that are available for trade in international markets. Access issues arise in the context of restraints on the development of new supplies, discriminatory treatment among nations in the marketing of available supplies, and artificial determinants of the form in which resources are exported (i.e., the stage to which they are processed prior to shipment), as well as with reference to the more traditional forms of general supply restraints such as export quotas and levies.

Unrestricted access to supplies would mean that the price for a commodity would be the same in all countries, except for transport costs, and that this price would be determined, over time, by the cost of bringing additional sources of supply onto the market.

Access to markets is as important from the standpoint of producers as access to supplies is from the standpoint of consumers. In the case of the former, unrestricted access would mean an absence of artificial barriers to the sale of commodities at the prevailing world price and to the processing of the primary products involved into more sophisticated, and valuable, forms prior to export.

This report will be divided into three main sections. The first outlines the various factors that have created, or that may create, access to supplies problems in international economic and political relations. The second section considers the alternative approaches that might be adopted by nations, either individually or collectively in response to these problems and evaluates the probable consequences of these approaches. In the third section, recommendations are made for policy initiatives that would represent a constructive international response to access to supplies problems. In keeping with the perception that this issue has a number of dimensions that must be related to the broader challenges facing the international community, these recommendations are fairly wide-ranging, covering the topics of commodity price stabilization, international trade and investment reform, aid to less-developed countries, and the systematic collection of information concerning world commodity developments. A final section summarizes the conclusions and recommendations of the report.

The basic theme of this report is that there must be a new balance of responsibilities in the international economic and political system and that this new balance will require changed perceptions and attitudes as individual countries seek to accommodate national objectives within an increasingly integrated world economy and a natural environment that is creating more demanding challenges and constraints. On the one hand, the developed countries, especially those represented in the Trilateral regions, must adopt a more conciliatory and enlightened approach to the needs and aspirations of the less-developed world if conditions for stable and sustainable economic growth are to be achieved. On the other hand, the less-developed countries, and particularly those that are commodity producers, have a responsibility to respond cooperatively to the initiatives of the developed nations to create the kind of stable trade and investment environment needed to promote global expansion and prosperity. And all nations have a responsibility to ensure

that the world's finite resources are utilized more efficiently so that prosperity today is not achieved at the sacrifice of the well-being of future generations.

This is not a report of pessimists. It looks to the future as a challenging but potentially exciting period in which new opportunities will arise for the efficient use of the world's natural endowment of resources in ways that are consistent with greater equity in the distribution of the benefits from this endowment. At the same time, this report does not reflect unguarded optimism about the political will of nations to respond affirmatively to these new opportunities. If the international community waits to act until the full dimensions of the challenges it faces are clearly visible, it will be too late to avoid the harsh consequences of allowing these challenges to remain unmet.

## II. THE ROOTS OF A SUPPLIES PROBLEM

The purpose of this section of the report is to provide a precise framework within which to discuss the various dimensions of the access to supplies problem. This framework is essential for purposes of evaluating concrete policy issues and alternatives. The discussion is cast in terms of different types of shortages, since it is only in the context of a shortage that an issue can be described as involving an access to supplies problem as such. At the same time, it is recognized that shortages represent a problem from the perspective of consumers. To balance the discussion, each of the types of shortages will also be examined in terms of the issues they present from a producers' standpoint.

The term "shortage" has been used in a variety of contexts. Depending upon the specific context, a shortage may mean supplies are unavailable at any price, or that prices have increased sharply in relation to what they had been in the past, or simply that prices are rising gradually over time in real terms (i.e., that they are increasing more rapidly than the general rate of inflation). For the purposes of this report, attention is focused on the causes of shortages and these causes have been divided into four general categories, each of which will be described in

turn -- natural, cyclical (or temporary), structural, and contrived.

1. Natural shortages are observed when the costs of obtaining additional supplies of a commodity are rising persistently over time in real terms (i.e., in terms of the units of other resources required to produce a unit of the commodity). Any finite resource is a potential candidate for natural shortages, but such shortages only emerge in fact when demand can no longer be supplied except at rising real costs, taking into account opportunities for substitution of alternative resources to meet this demand.

There has been, in recent years, a renewal of interest in the issue of natural shortages, based on highly publicized forecasts that the world is "running out" of essential resources. This issue has been the most difficult faced in preparing this report. On the one hand, forecasts of the imminent exhaustion of critical raw materials have been made throughout history yet the discovery of new sources of supply and improvements in technology, combined with the process of resource substitution, have thus far enabled economic growth to proceed without serious constraints being imposed by the ultimate finiteness of the world's resource base. In fact, the "resources problem" has traditionally been perceived as one of deteriorating terms of trade for raw materials, creating a "vicious circle" in the economic development of nations heavily reliant on raw material exports for their foreign exchange earnings.

On the other hand, there are considerable risks to simple extrapolation of past trends indefinitely into the future. Exponential rates of growth in population and economic activity have created massive demands on the world's supply of natural resources. Technological advances, discoveries of new supplies, and the substitution process continue, but in discrete jumps that are not always well-timed in terms of the needs of the highly complex, and fragile, modern world economy. And nations have been severely penalized for assuming that resource supplies can always be expanded indefinitely at a constant cost (e.g., the case of natural gas

in the United States).

To economists, the issue of natural shortages can be analyzed through careful empirical research, although any forecast based on such research will be subject to challenge on the grounds of the assumptions made. To the policy-maker, however, the perception that a problem exists is at least as important as the facts of the case. There can be little doubt that there is a widespread uneasiness about the future adequacy of resources, particularly in the advanced countries of the world, which are consuming resources at a prodigious rate.

This uneasiness could lead to a struggle to secure, or to preserve, available supplies of resources. Nations with indigenous supplies would be tempted to hoard them for their own future use; and nations without these supplies might be forced to conclude whatever arrangements they could to secure them, whether or not these arrangements were compatible with existing international rules and obligations. Furthermore, a perception that widespread natural shortages exist or are on the near horizon would give producer nations exceptional leverage in the international economy, a leverage that could be used constructively or destructively depending on the goals pursued.

There is inadequate information at present to determine the extent to which natural shortages in fact present a problem in international relations. Sharply higher prices for a variety of raw materials do not provide satisfactory evidence of natural shortages, since other factors discussed below may be the cause. Indeed, one would tend to expect natural shortages to produce gradual increases in prices over time rather than the kind of dramatic, and erratic, increases observed in recent years.

Most of the research that has been done on this area suggests that there is little imminent danger of exhaustion of the world's resources, although the problem appears to be more serious the further out in time one looks. This research

is not totally convincing, however, since it has proven difficult to attach reliable cost estimates to finding and/or developing additional sources of supply that are thought to exist in relative abundance. Furthermore, our knowledge is inadequate concerning the possibilities for, and the consequences of, substituting other resources for those in short supply and the feasibility of future technological advances.

Even if natural shortages should prove to be a near-term problem, this problem need not confront the international community with insurmountable difficulties. For example, the strategy of keeping resources "in the ground" in anticipation of higher prices in the future becomes a rational decision only if it is assumed that there are no opportunities for employing the revenues generated from the sale of these resources at a higher rate of return. Such an assumption, however, involves a logical contradiction to the extent that, for example, opportunities exist for developing lower-cost substitutes for those resources for which there are natural shortages. The issue then becomes whether producer nations are able to participate equitably in those activities generating the higher returns.

Having said this much, it should be recognized that not all aspects of the natural shortages issue can be argued away so easily. Two examples will illustrate the point.

First, it is by no means clear that current market prices provide a completely accurate reflection of the future scarcity value of resources. It is quite possible that a bias exists in favour of rapid development of natural resources for the current generation at the expense of future generations. The kind of policy issue to which this situation might give rise would be illustrated by a producer nation choosing a slower rate of resource development because it felt that a greater preference should be given to the needs of future generations of its citizens than that indicated by current international market conditions. (Technically, this would imply that the country was discounting the future at a lower rate than that used by

other countries.)

Second, an individual producer nation will perceive the exhaustion issue quite differently from the international community as a whole. Once that nation's resources have been fully exploited, it has to rely on other means of providing for its economic needs, even though additional sources for supplying these resources may be readily available to the international community. Arguments to the effect that natural shortages are not a very serious issue will carry little weight with that nation unless it is able to use the revenues from the sales of its resources to develop a viable economic base for the time when those resources have been exhausted (or, in the case of "renewable" resources, exploited to their physical limit).

In short, while it may be appropriate to treat concerns about natural shortages somewhat skeptically, at least in a current policy context, these concerns represent widely held perceptions and potentially serious problems for individual producing nations with an excessive concentration on resource exports and the future generations whose needs are not directly represented in the marketplace.

2. Cyclical (or temporary) shortages involve imbalances between supply and demand that can be expected to reverse themselves with the passage of time. Commodity markets have historically been subject to pronounced fluctuations. In recent years, however, these fluctuations have raised increasingly important international policy concerns for at least three reasons.

First, the major national economies of the world have been experiencing a greater similarity in the timing of their business cycles than in the past. As a result, commodity producers have found it more difficult to balance the impact of declining sales in some markets with rising sales in others, so that price fluctuations have been magnified.

Second, the incidence of "temporary" factors affecting commodity supplies appears to have been increasing. Adverse weather conditions, for example, have

plagued agricultural output in different parts of the world with disturbing regularity, and work stoppages have become a prevalent factor affecting supply conditions. Because of the increased integration of the world economy through trade, the vulnerability of all nations to the impact of these localized temporary phenomena has grown.

Third, institutional changes have tended to produce a situation in which it is much easier to reverse the impact of cyclical (or temporary) shortages on quantities supplied than on prices. The trend toward the incorporation of cost-of-living clauses in wages and other forms of income, for example, means that higher prices arising from short-term shortages tend to become imbedded into permanently higher costs of production. A related problem is that these shortages give rise to temporary "windfall gains" as higher prices ration available supplies. There is a tendency for governments to perceive these windfalls as being more long term than they are, and efforts to capture these windfalls (e.g., through higher royalties, and again have the effect of making production costs permanently higher).

Shortages in this category have raised a number of international policy issues. Producing nations, especially those in the developed world, have placed various forms of restraints on exports in an attempt to shield domestic consumers from the full brunt of the reduced supplies and higher prices caused by these shortages. Consuming nations, again especially those in the developed world, have sought to minimize the impact of these shortages on their current consumption patterns by bidding up prices and even, on occasion, to accumulate inventories in anticipation of future shortages, thereby adding to the instability of commodity markets.

The impact of these shortages has been particularly adverse to the less-developed nations. As consumers, they have been unable to obtain adequate means of financing to bid against the developed nations for the scarce supplies that to them often represent subsistence. As producers, they find that periods of shortages,

during which they usually get only a portion of the windfall gains from the high prices, are almost inevitably followed by periods of glut and low prices, and these sharp fluctuations play havoc with their export earnings and their development plans.

3. Structural shortages reflect a variety of factors that frustrate the expansion of supplies that would otherwise be possible. Once the types of problems outlined here are recognized as having a significant effect on the availability and price of important commodities, policy initiatives to correct them can be anticipated, but these initiatives are likely to take a fairly long time to produce concrete results. Therefore, shortages in this category will be of longer duration than cyclical shortages, but not as permanent as natural shortages.

One of the major causes of structural shortages in the extractive industries is an unattractive investment environment. On the one hand, the financial resources that must be committed to finding, developing, and delivering new supplies of these products have risen dramatically as low-cost sources close to markets have been depleted and as inflation has borne particularly heavily on the inputs required for these projects. Moreover, a characteristic of many of the new technologies for expanding resource supplies is that the period between the time large expenditures are made and the time that earnings start to flow has been extended considerably. This problem is compounded when new transportation facilities must be provided to bring the output of these projects to market, as in the case of the Alaskan oil and gas undertakings.

On the other hand, the risks associated with these investment projects have also increased. The chances of these projects being expropriated has risen in the current world political environment, but there are more subtle risks with which companies must be concerned. For example, the high profits that are the reward for success in the development of new supplies are increasingly vulnerable to

higher taxes and royalties while, at the same time, companies are still expected to bear the costs of unsuccessful exploratory activities. These exploratory activities, in turn, have increased massively in cost since the days of the lone prospector and the independent "wildcatter." Another type of risk involves the problem of projecting prices (and costs) that can be anticipated over the life of a project in the current unstable market environment. A key dimension of this problem, which is seen most clearly in the case of petroleum, is that a growing spread between production costs and price gives rise to the possibility that prices will be undercut, thereby placing a project that had appeared profitable in jeopardy.

Another cause of structural shortages is delays in the policy decision-making process. Environmental concerns, even though often quite legitimate, fears about the broader economic effects of a major resource project (e.g., in terms of its demands on regional labour markets or its effects on the exchange rate), and bureaucratic inertia have combined to retard the investment process.

In the same vein, jurisdictional disputes and uncertainties are responsible for additional delays. Companies seeking offshore drilling licenses often confront two or even three jurisdictions claiming authority in the area (e.g., on the continental shelf off the east coast of North America). And in the case of the deep sea bed of the oceans, where massive quantities of certain minerals are located, companies as yet have no one to go to for licensing authority.

This list of the causes of structural shortages could be expanded considerably to include factors such as controls on prices that yield returns that are too low to attract financing for a new investment, inadequate flows of savings into resource projects because, say, of preferential lending rates for competing uses of funds, income support programs that provide disincentives for workers to seek employment in the remote areas where resources are to be found, a failure to provide the transportation and related infrastructure required to open up new regions for

development, etc.

While the nature of the causes of structural shortages varies, both in kind and in degree, among commodities, the most general causes are major changes in the complexity of the investment decision process and an environment for resource investment decisions that fails to reflect adequate concern for supply problems.

4. Contrived shortages result from systematic efforts aimed directly at increasing the margin between price and production costs. Such efforts may be initiated by governments in producer nations or by private firms with sufficient market power to control supplies. Although it is recognized that the market power of private firms must be treated as an important policy issue, especially from the perspective of producer nations, it is unlikely that the exercise of this power would lead to the kind of sudden, sharp increases in price that have caused concern in recent years. Increases of this sort are more characteristic of the exercise of "commodity power" by producer nations (e.g., the case of OPEC), and it is this issue that will be examined here.

The success of the OPEC cartel in enforcing a dramatic increase in the world oil price has led to similar efforts in other commodities and will undoubtedly lead to more, particularly in the absence of constructive international responses to the needs and aspirations of commodity producing nations. At the same time, there are limits on the power of producers to restrict supplies and raise prices artificially. These limits are determined by the cost of bringing new sources of supply into production, by substitution of alternative means to satisfy resource needs, and by the ability of consumers to moderate their demands in response to higher prices. As a practical matter, these limits place fairly narrow restrictions on the actions of producers of most commodities; the OPEC experience should be regarded as a unique situation rather than as a general rule.

Contrived shortages may, however, work for a period of time, during which considerable disruption may be caused in consuming nations. But after that period of time, when effective response becomes possible, producers are likely to find that they have achieved short-term gains at the expense of long-term sacrifices.

Why, then, are attempts aimed at bringing about contrived shortages being pursued? A narrow economic interpretation of this issue would relate it to the perception that natural shortages are in fact a near-term, and widespread, problem. If this were the case, although the position of this report on the question is one of skepticism, resource supplies withheld from markets today could find a ready market, at even higher prices, in the future. This line of reasoning is likely to be especially persuasive to those less-developed countries that are heavily reliant for their export earnings on a narrow, and dwindling, resource base.

In order to appreciate fully the nature of the contrived scarcities issue, though, it is essential to consider it from a broader political context. On the one hand, the resource-producing nations of the less-developed world can point with frustration and anger to the fact that the disparities between the living standards of the rich and the poor have been expanding even while these producers are selling off the resource that constitutes their main source of export earnings.

On the other hand, the less-developed world finds that it has new sources of power to disrupt the increasingly fragile world economic and political environment. One of these new sources of power, no matter how limited it may be in the long run, is the ability to undermine, at least temporarily, the delicate balance that exists between surplus and shortage in the high-consumption nations of the world. It is unrealistic to suppose that these new powers will not be used if that appears to be the only option for achieving progress in reducing disparities in income and opportunities.

### III. ALTERNATIVE POLICY APPROACHES AND CONSEQUENCES

Although an effective policy response to the access to supplies issue must address all of the problems reviewed in this section of the report, the need to find a new accommodation between the less-developed and the developed worlds lies at the heart of this and other current issues in the international system.

Consider first the nations comprising the Trilateral Group. Canada, a major net exporter of a variety of primary products, will clearly tend to view access to supplies issues differently than Japan, which relies on imports to meet the vast majority of its primary product needs. While the United States must depend increasingly on imports to satisfy its requirements for certain primary products, it still possesses ample supplies of many resources and is a major exporter of certain important commodities such as grains. Europe is more reliant, in relative terms, on primary product imports from the United States, but the European Community has established reasonably constructive arrangements with former colonies, including a number of important producer nations.

While there are these significant differences among the Trilateral nations in terms of resource vulnerabilities, similarities within this group should not be minimized. Existing trade patterns and links have brought about a substantial degree of integration of these economies, and the entire group would be affected adversely should any of them be subjected to protracted dislocations because of an inability to obtain essential commodity supplies.

Among the developing nations outside the Communist Bloc with significant export potential in primary products, emphasis will be placed on obtaining the most favourable terms for their resources. This objective need not involve irreconcilable conflicts with consumer nations regarding access to supplies issues, as long as there is progress in providing these countries with greater opportunities to diversify their economic activities and to improve, or at least to stabilize, their terms of trade. If appropriate initiatives are not forthcoming, however, nations in this group can be expected to try to use whatever power they can generate, including

that of coordinated action, to force these initiatives.

Net commodity importers among the less-developed nations are particularly vulnerable with respect to restrictions on access to supplies. They require primary product imports for subsistence, as well as for development purposes. As a result, these nations are likely to be susceptible to bids to join in efforts to restrict the supply of any product to exports they may have or to otherwise secure the means of payment for their import needs.

The perspective of the Communist Bloc nations on access to supplies issues has two basic dimensions. First, the former isolation of these nations, arising from the goal of sustaining the maximum possible degree of self-sufficiency, is giving way to a greater degree of integration with the broader world economy. Second, instability in world commodity markets provides the kind of environment within which the political objectives of the Communist Bloc can be advanced. It is difficult to know how this bloc will ultimately balance its economic and political interests, but efforts must be made to bring these nations into the process whereby a new accommodation in world commodity markets is sought, given their increasing involvement in these markets.

There are essentially two main paths that might be followed regarding access to supplies issues -- conflict or cooperation. The potential consequences of conflict are so serious that some form of cooperation will almost certainly be worked out, and this is the spirit in which these issues are now being addressed in the international policy forum. The crucial question remains, however, of whether this cooperation will be based on a grudging acceptance of the inevitable or on a perception that the time is now appropriate for bold new departures in the way the international community approaches its economic relations and problems.

The costs of conflict are easily documented. Options for unilateral action by commodity importers would be limited and costly, but such options certainly exist. Stockpiles of materials might be accumulated in the hope of easing the burden of prospective shortages on the domestic economy, but only at the expense of placing further pressures on world commodity markets. Vigorous conservation measures might be adopted to restrict demand, but at the sacrifice of living standards and economic expansion. Domestic production of substitute sources of supply might be subsidized, but at the sacrifice of efficiency and thus real income levels. And efforts to retaliate against nations restricting supplies might be attempted, but such efforts would not be very successful, in most instances, unless retaliatory measures were to be adopted in common by a number of countries.

Concerted actions among importers would provide a wider and more effective range of options in terms of both a bargaining coalition and a fall-back position in the event that international cooperation among producers and consumers were to fail. Stockpiles could be accumulated and production potential expanded more efficiently within the group; counter measures to the actions of nations restricting supplies could be applied more effectively; and efforts to split producer cartels would have improved odds for success.

It would be a serious mistake for producer nations to underestimate the collective potential of the industrial nations to adjust to the consequences of restrictions on access to supplies. Already, these nations, as a group, account for about 60 percent of world exports of primary products (excluding petroleum), and the combination of their technical and financial resources could be applied with considerable effectiveness to the task of developing alternatives to restricted supplies. At the same time, these resources would have to be diverted from their most efficient employment, so serious costs would be involved. More importantly, it would be exceptionally difficult to reach agreement on concerted actions among the industrialized nations, given the differences noted earlier in this section.

The costs of conflict to the producer nations would be quite high, although it is understandable that they might be willing to bear these costs out of a sense of frustration with the lack of progress made in improving their long-term economic prospects. If conflict were to persist, the danger faced by these countries is that their access to markets, technology, management skills, and even certain primary products would be further restricted and that they would find that the development of substitutes and alternative sources of supply by importers would reduce their potential markets.

The most serious costs from conflict regarding access to supplies, however, are likely to be observed in terms of instability in the broader international economic and political spheres. Rather than producing well-defined "blocs" of consumer and producer nations, conflict here would be more likely to result in an acceleration of a trend away from multilateral approaches in international relations. Certain industrialized nations, either out of economic necessity or a particular sense of responsibility to the needs of less developed countries, could be expected to seek accommodation within discriminatory arrangements with these countries. Other nations would respond with their own special arrangements, which might take a variety of forms. The result could easily be a world of "economic warfare," with discriminatory and retaliatory measures proliferating, with efforts to insure domestic self-sufficiency diverting massive amounts of productive resources from their most efficient employment, and low rates of economic expansion and in all probability high rates of inflation.

While the high costs of conflict should be clear, the problems involved in seeking cooperative approaches, especially in the current economic environment, must also be recognized. Appeals to "striking new bargains" between consuming and producing nations sound logical and attractive, but the reasons these "new bargains" have not been struck in the past are deeply imbedded in the attitudes and the per-

ceptions of those to whom governments in the industrial nations must respond. New bargains require adjustments that are resisted in a comfortably affluent environment. When that affluence is threatened, initial reactions tend to be defensive rather than accommodating.

A new accommodation between consumer and producer nations will require some redistribution of income and employment opportunities internationally, and it is this redistribution that will lead to resistance. Evidence of this resistance can be found in the difficulty that industrial nations are having adjusting to changing economic conditions generated within their own economies, and this is an important factor in the high inflation rates being observed in these nations simultaneously with rising rates of unemployment. Thus, the search for this new accommodation must be conceived as offering an opportunity to return to a more stable economic environment both domestically and internationally, and in this sense all nations share responsibilities.

#### IV. TOWARDS A NEW BALANCE OF RESPONSIBILITIES

The purpose of this section is to put forward an integrated series of broad recommendations that would constitute a constructive response to the issue of access to supplies. Five points of reference have been considered in framing these recommendations:

1. What is regarded as necessary is an approach that goes beyond modest incremental changes in the current international system.
2. There is an emphasis upon consistency between the approaches suggested in the area of access to supplies and those that would be appropriate for other issues confronting the international system (many of which have been, or will be, the subject of other Trilateral Task Force Reports). The priorities implicit in these recommendations have been set with the specific context of access to supplies in mind, and these priorities might be re-ordered from a broader context for international reform.

3. It is felt that recommendations should, as a pragmatic matter, go beyond broad generalities without becoming excessively specific. Implementation of these recommendations will require painstaking negotiations on precise details and mechanics.

4. While efficiency and equity are regarded as equally important objectives, these recommendations seek to make a clear distinction between the two concepts.

5. It is regarded as important that there should be both the appearance and the reality of balance in the responsibilities of both consumer and producer nations in the area of access to supplies.

These recommendations are presented under six major headings: general principles, information collection and research, commodity price stabilization, trade reform, investment matters, and income redistribution. The order in which these recommendations are presented should not, in itself, be regarded as implying a ranking of priorities.

General Principles. The problems confronting the international economic community in assuring the adequacy of commodity supplies merit the incorporation of general principles in this area in such documents as the United Nations Charter and of meaningful codes or rules of conduct to implement these principles in such documents as the General Agreement On Tariffs And Trade. Specific principles in the form of codes or rules will be discussed under subsequent headings; here, some recommendations for general principles are put forward.

1. National sovereignty implies the rights of countries to control the rate of development of, and to collect a fair return for, resources located within their boundaries; resources located outside the national jurisdictions (e.g., those of the deep sea bed and in space) are the common property of all mankind.
2. In determining the pace at which their resources are to be utilized, nations have an international obligation to minimize hardships in other nations that might

result from discretionary actions to reduce the rate of utilization from what it had previously been.

3. There is a collective responsibility to weigh the needs and rights of future generations as being equal to those of the current generation. (This implies, for example, the possibility of establishing certain international minimum standards for efficiency in resource consumption.)

4. Access to supplies should be available to all on a non-discriminatory basis, subject to exceptions negotiated internationally in advance, which might include:

a. Provisions for preferential treatment of domestic customers in the event of temporary or natural shortages.

b. Provisions for preferential treatment of traditional foreign customers in the event of temporary or natural shortages, provided that the general terms of such arrangements were registered with an appropriate international institution in advance.

c. Provisions for discriminatory treatment as a method for penalizing participants in measures giving rise to contrived shortages.

5. Access to supplies should be taken to include all forms of inputs into the economic growth process, except for those determined through international agreement to be critical for the purposes of national security.

If general principles are to have any practical significance in the conduct of nations, appropriate institutional mechanisms to implement them must be put in place and a system of sanctions for penalizing violations must be worked out. Some suggestions in this regard are contained under later headings.

Information collection and research. Effective policy-making, particularly in an area as complex as commodity supplies, requires far better information than what is currently available. One of the major recommendations of this report is

that an international information and research center for commodities be established. The organization and functions of this center should be along the following lines:

1. Organization -- The center should be a non-national, non-political institution. It should be staffed and supervised by experts, and while the goal should be to achieve a balanced representation between producer and consumer, and industrial and other, countries in the nationalities of those employed by the center, there should be no rigid formula and all employees should be as independent as possible from political pressure. Decisions regarding the activities of the center should generally be taken without formal voting, with reliance instead on a process designed to maximize the role of professional analysis and judgment. Financing of the center's work should be on an automatic basis for periods of at least five years. Its day-to-day operations should be supervised by a director who would be appointed for at least a five-year term and who would be someone with a long-established reputation for independent, professional judgment. This director would report to an executive committee that would be representative of, but not representing in an official capacity, the nations sponsoring, and adhering to the rule of, the center. This center might be patterned after, and possibly even affiliated with, the World Bank or the GATT Secretariat, but some of the other recommendations in this report will bear on this decision.

2. Functions -- The center should serve first as an information clearing house. Participation in the center, which would entitle the participants to all information received, would require nations to submit regular reports, according to a prescribed format, covering such topics as commodity consumption; commodity production rates; capital spending on resource-related projects in place, under way, and planned; and inventories. The center would also serve a forecasting function and would undertake technological surveys, including in these surveys an analysis of the anticipated environmental consequences of technological alternatives and planned investments. The center would publish its reports and studies,

although the timing of publication releases would take into account their possible impact on commodity market behaviour. It is felt that the center should have the responsibility to investigate, and to report on, charges of contrived shortages and to make recommendations concerning instances it identifies of important examples of structural shortages. The center should not, however, be responsible for any enforcement activities concerning its recommendations.

Commodity price stabilization. It is possible to be very sympathetic with the objective of stabilizing commodity prices while at the same time being highly skeptical of the prospects for bringing about this objective. This describes the basic position of this report. For one thing, the history of commodity agreements does not lead to much optimism about the chances that they will prove very durable. For another, there is usually a confusion of the objectives of these agreements, and this confusion becomes a major factor in their poor performance record. Finally, there is reason to suspect that some of the support for these arrangements in current discussions stems from the belief that buffer stocks, which are a necessary feature of a workable agreement, would provide a form of hedge against the possibility of contrived shortages.

A fundamental question, which rarely receives the attention it deserves, concerns the reasons for thinking that short-term fluctuations in price should be dampened. These fluctuations, after all, provide valuable signals to both producers and consumers. A traditional argument for commodity agreements is that they help stabilize the revenue flow to producer nations that are heavily reliant on one or a few primary products for their export earnings. It is by no means clear, however, that stable prices will produce stable incomes. (They would not if there are major fluctuations in supplies.)

Having said this much, it is recommended that serious efforts be made to devise new approaches to the commodity price stabilization issue. The reasoning behind this recommendation is that it would be desirable to reduce the uncertainty

that exists in world commodity markets and the possibility of sudden sharp changes in commodity prices. Uncertainty and sudden changes create instability in the economies of producer nations and raise the level of risk that is likely to be associated with investments in resource-oriented projects. An additional factor in the argument is that, as noted earlier in this report, the spread of the use of cost-of-living escalators for wages and other forms of income may mean that large temporary increases in commodity prices have a "ratchet effect" on costs and thus the rate of inflation over time.

The specific recommendations made in this area fall under the headings of principles and mechanics.

#### Principles --

1. Commodity agreements should be confined to the single objective of stabilizing price fluctuations caused by temporary shortages. (The objective of income re-distribution is covered later under the appropriate heading.)
2. While stability, or at least reasonable predictability, in commodity prices should be sought over the medium term (three to five years, say), measures to achieve this result should be sufficiently flexible so that prices are responsive to market forces over the longer term.
3. There should be a case-by-case approach to determine whether or not a particular product should be made subject to a commodity agreement, and the decision in this matter should rest with the consumers and producers involved rather than with some "umbrella" organization. This principle follows from a perception that the effectiveness of commodity price stabilization arrangements depends upon a wide variety of factors that differ significantly among commodities. Some of the important factors here include the degree of concentration of production, the economic situation of the producers, the economic importance of the commodity to consumers, the opportunities for substituting other commodities, the cost of carrying buffer stocks, etc.

4. Commodity agreements should be self-financing in the sense that the carrying and operating costs of buffer stocks should be recovered from the administration of these stocks. (Special provisions will have to be made in cases where the real price of a commodity is falling over time, and these provisions are discussed later.)
5. Commodity agreements should follow general conditions set forth by an international body (such as the GATT) and should be open-ended to permit any country willing to ascribe to its positions to join. Sanctions, subject to terms agreed upon internationally in advance, would be permitted to respond to actions contrary to the agreement.

Mechanics --

1. An international organization (the GATT would be a candidate if its membership were to be broadened) would serve as a registration and monitoring center for commodity agreements negotiated among producers and consumers. One of the functions of this center would be to establish general criteria for these agreements that would have to be satisfied before a registration would be approved.
2. Buffer stocks should be a necessary feature of any commodity agreement, and the creation and administration of these stocks should follow guidelines established by the organization registering the agreements. It is envisaged that the financing of these buffer stocks could be provided by an organization with a broader mandate, the terms of which will be set out below. (In this context, a joint affiliate of the World Bank and the GATT might be an appropriate organization for the tasks envisaged.)
3. The appropriate size of buffer stocks would have to be determined on a case-by-case basis. For some commodities (e.g., grains) they would have to be large enough to serve the dual objective of price stabilization and emergency relief; for others (e.g., most metals) these stocks might only have to be large enough to moderate extreme fluctuations in demand or supply.

4. Commodity agreements should be subject to periodic review to insure that their terms and operations are responsive to long-term market forces.
5. In terms of the day-to-day operations of these agreements, it is recommended that certain reasonably automatic procedures along the following lines be adopted:
  - a. A certain basic price would be negotiated, and it is anticipated that this basic price might be allowed to vary over the medium term (i.e., until the next periodic review of the agreement) with some appropriate measure of the overall rate of inflation (e.g., a weighted average of national industrial selling price indices). (Note: The general subject of indexation is covered later under the heading of income redistribution.)
  - b. Buffer stocks would be accumulated when the market price fell below this base price, and the rate of accumulation would accelerate the greater the difference became; buffer stocks would be sold off when the market price exceeded this base price, and the rate of sales would again accelerate as this gap widened.
6. Penalties should be imposed on nations violating the terms of commodity agreements, both through the provisions regarding purchases and sales by the buffer stock administration and other sanctions to be proposed later.
7. While buffer stocks should be administered internationally, this should not preclude individual nations from undertaking their own supplementary buffer stock programs. The conditions should be imposed, however, that these national stocks not be "visible" and that no additions to them from imports should be made when international stocks are being sold off and that no sales should be made for export when international stocks are being accumulated.

Trade reform. This report places primary emphasis upon trade reform as a response to access to supplies issues and regards this emphasis as appropriate from the standpoint of both producer and consumer interests. Recommendations are

grouped under two headings: general principles and specific proposals.

General principles --

1. The multilateral, most-favoured-nation principles of GATT should be applied in the same way to exports as to imports.
2. The level and structure of tariffs and non-tariff distortions should not prevent the balanced economic development of any nation adhering to international trading rules.
3. Regionalization of trading arrangements (an example might be the LOME Agreement between the European community and certain less-developed, commodity-producing nations, although this report views the agreement as a constructive prototype for a broader international agreement) should be avoided unless there is a failure to reach international agreement on basically similar terms.
4. In the event of temporary shortages, "escape clause" provisions should be permitted as an exception to rules regarding non-discrimination in access to supplies, provided that these provisions are made known in advance and follow guidelines agreed upon internationally.
5. Subsidies in the form of preferential prices for domestic customers in producer nations should be permitted only if these subsidies do not provide an artificial incentive for the relocation of production activities. An exception to this principle, similar to the "infant industry" argument for tariffs, would be made for less-developed countries on the condition that preferential domestic prices would be phased out according to a firm schedule.

Specific proposals --

(Note: This report regards a package approach to trade reform to be necessary. It is inconsistent, and impractical, to argue that restrictions on exports should be controlled in the interests of equitable access to supplies without also arguing the restrictions on imports should be reduced in the interests of equitable access to markets.)

1. The tariff schedules of industrialized nations provide for an "escalation" of tariff rates as the degree to which imports are processed increased. This escalation, which is especially pronounced when going from raw materials to semi-processed materials, is an artificial barrier to the industrial development and diversification of less-developed, commodity-producing nations. This barrier, and non-tariff distortions that have the same effect, should be sharply reduced, and progress in this area should begin promptly, without waiting for the completion of the current round of GATT negotiations.

2. At a broader level, generalized preferences for the exports of less-developed countries should be made more meaningful by reducing the list of exemptions to these preferences and by relaxing the quantitative limits beyond which these preferential rates no longer apply. Again, these initiatives should not be delayed by the current GATT negotiations.

Investment matters. Investment is the principal means of relieving supply shortages, regardless of their cause. In recent years, however, three major problem areas have emerged in which barriers are being created to the expansion of investment in important resource sectors: the massive scale of financing required to expand output, especially in the extractive industries; an increasingly unstable investment environment within the producing nations; and a variety of forms of government intervention, taking place without a recognizable long-term policy focus, in several of the major industrialized countries. The recommendations in this section are directed to these three major problem areas.

1. There is a need for careful study of new forms of business organizations to respond to basic changes in the magnitude and the risk of major resource undertakings. In some cases this may involve large-scale joint venture among two or more private enterprises; in others, government involvement in a risk-sharing capacity with firms in the private sector may be necessary. These new approaches, especially those involving mixed private and public sector ventures, will raise

important issues concerning the speed of the decision-making process, attitudes towards risk, and pricing actions.

2. The view of this report is that while there is a need for more effective international coordination of the economic regulations governing the activities of multinational enterprises (MNEs), these companies are generally a constructive and dynamic force for the efficient mobilization of financial, managerial, and technological resources on a world scale. At the same time, the less-developed nations are striving to achieve greater management control over their economies, and their efforts have created an unstable international investment environment. One way of approaching this problem is through the service contract route, whereby MNEs perform certain tasks at a guaranteed rate of return. A major weakness of this approach, however, is that most producer nations (apart from some of the OPEC members) do not have the financial resources to risk in the highly speculative, but essential, stages of pre-exploration and exploration. An alternative course, and one particularly recommended in the context of this report, is to create a more stable investment environment in which MNEs may operate while providing for the gradual assumption of an ownership position by the host country. Such an approach would require agreement, in advance, to a binding contract between both parties, and a push in this direction might be given by the industrialized countries through the provision of insurance against expropriation in resource projects for cases where companies could produce a contract meeting certain prescribed conditions. To assist host countries obtain the financing necessary to achieve a gradual assumption of a controlling ownership position in these ventures, it is proposed that there be a major increase in the authorized capital of the International Finance Corporation.

3. Several of the Trilateral nations (Canada and the United States, in particular) can be charged with creating the kind of structural shortages discussed earlier in this report. The failure to develop clear and consistent approaches to

domestic resource policy issues creates an impression among producer nations of the Third World that there is a lack of resolve on these issues, and they will be able to say with considerable justification that shortages that may soon develop again in the industrialized nations are, to a large extent, of their own making.

Income redistribution. Several of the recommendations above, principally in the area of trade reform, would, at a minimum, create new opportunities for increasing the incomes of less-developed nations. These recommendations have as their primary goal, however, the removal of imperfections and artificial barriers in the international economic system, consistent with the view of this report that efficiency is an appropriate starting point for dealing with the issue of access to supplies. In this section, additional recommendations are made regarding income redistribution measures from the standpoint of equity.

1. The heart of any income redistribution proposal is its source of financing. The recommendation of this report is that a graduated international tax be levied on the basis of national consumption. Below a certain level of consumption, the tax would be zero. This tax would be set in recognition of the fact that it would probably displace a fairly significant proportion of existing aid contributions. The payment of this tax would be out of a nation's general tax revenues. (An alternative approach that was considered involved a tax levied directly on the consumption of a specific list of commodities within nations above a certain income level, but this would be a regressive form of taxation and would involve a number of complex mechanical problems.)

2. The proceeds from this tax, which would be administered by an agency such as the World Bank, would be used for the following objectives:

- a. No nation should receive less (non-military) aid than prior to the introduction of the tax scheme.
- b. Funding would be provided, as necessary, to meet a portion of

any deficits arising from the operation of internationally registered commodity stabilization agreements.

c. Funds would be made available for the purpose of providing adjustment assistance to countries submitting, and having approved, plans to diversify their economic activity away from commodities for which the real terms of trade were declining.

d. There would be an increase in the authorized capital of the International Finance Corporation and financial assistance to the United Nations Development Program in support of resource exploration in developing countries.

e. Remaining proceeds would be used to increase unconditional aid on the basis of incomes (as a sort of international "negative" income tax).

3. This system would be approached in a way that provided an integrated set of sanctions for nations unwilling to participate either in the consumption tax or in the various proposals for bringing about a more assured access to supplies. For example, a nation found to be violating trading rules regarding contrived scarcities would be ineligible for funding under the programs outlined above.

4. The tax schedule would have to be the subject of international negotiation. Tax payments would be phased in over a period of time, but it is noted that the massive gap between potential and current production in the industrialized nations makes this a particularly opportune time to initiate such a program. The initial target for the total amount generated from the tax might be set at 0.5 percent of the national income of a group such as the OECD nations, rising to 1.0 percent at the end of five years, after which the program would be evaluated for its effectiveness.

5. The major benefit of this proposal from the standpoint of the nations paying the tax would be that it would be integrated into an overall approach to access to supplies issues. It would thus provide a positive benefit in the form of

creating conditions for a more stable environment for economic expansion.

The final recommendation of this report concerns the issue of commodity price indexation, a topic that has been discussed at considerable length within the Task Force. Indexation is an attempt to fix terms of trade during a period of inflation. While the objective is understandable, this report regards indexation as an unsatisfactory approach. If, on the one hand, the real terms of trade for a commodity are improving, attempts to hold prices to a rigid indexed level over the long term will eventually result in shortages. On the other hand, if the real terms of trade are deteriorating, an indexed price could be sustained only by the continuous accumulation of surpluses in some sort of "stockpile." A superior approach would be to strive to achieve a stable or improving terms of trade for a diversified range of exports, and it is to this end that earlier recommendations have been made in this report.

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91

THE FUTURE OF THE OCEANS

Draft  
Report of the Trilateral Task Force  
on the Oceans

September 1975

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This report has been prepared for the Trilateral Commission and is released under its auspices. It will be discussed at the Trilateral Executive Committee meeting to be held in Paris, Nov. 29 - Dec. 2. The authors, who are experts from North America, Western Europe and Japan, have been free to present their own views; the opinions expressed are put forward in a personal capacity and do not purport to represent those of any body with which the authors may be connected. The Commission will utilize the report in making any proposals or recommendations of its own. It is making the report available as a contribution to informed discussion and handling of the issues treated.

## THE RAPPORTEURS

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Five Roads to Nordic Security, Oslo 1973 (editor and co-author); and Oljen i sikkerhetspolitikken (Oil in Security Policy), Oslo 1975. He is the editor of the Nordic journal Cooperation and Conflict.

ANN L. HOLLICK is Executive Director of the Ocean Policy Project at Johns Hopkins University's School of Advanced International Studies in Washington, D. C., from which she received her M.A. (1966) and Ph.D. (1971). Born in 1941 in Panama, Professor Hollick has served as a Research Fellow in Foreign Policy Studies at the Brookings Institution (1970-71) and as a Staff Member of the U.S. Senate's Committee on Foreign Relations (1971-72). She was an Advisor to the U.S. delegation to the United Nations Sea-Bed Committee and has been a consultant to the Ocean Affairs Board of the National Academy of Sciences since 1970. Professor Hollick has been a participant in numerous professional conferences on the law of the sea and is author of "United States Law of the Sea Policy in the 1970's" (Orbis, Summer 1971); "United States Vietnam Policy: The Kennedy Commitments" (Committee Print, Committee on Foreign Relations, U.S. Senate, March 1972); "Seabeds Make Strange Politics," (Foreign Policy, Winter 1972-73); "Canadian-American Relations: Law of the Sea" (International Organization, 1974), and other articles on American foreign policy and aspects of the law of the sea. During the current academic year, Professor Hollick will be engaged in research at Harvard University's Center for International Affairs and at the Woodrow Wilson International Center for Scholars of the Smithsonian Institution.

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## THE TRILATERAL PROCESS

The report which follows is the joint responsibility of the five rapporteurs of the Trilateral Task Force on the Oceans. Prior to formation of the task force in the summer of 1974, a study was conducted for the Trilateral Commission of the feasibility of proceeding with an oceans report. This feasibility study was made by one of the North American rapporteurs of the eventual task force, Professor Ann L. Hollick, and involved consultations with over fifty individuals in the trilateral regions. The task force has also drawn on some consultants. Richard N. Cooper, Professor of Economics at Yale University, has worked as an integral part of the group, along with the five rapporteurs. All consultants spoke for themselves and not as the representatives of any institutions to which they belong. Those consulted by the task force included the following:

Eivind Berg, Norwegian Shipowners Association  
Robert R. Bowie, Professor of International Affairs, Harvard University  
Zbigniew Brzezinski, Director of the Trilateral Commission  
John P. Craven, Dean of Marine Programs, University of Hawaii  
George S. Franklin, North American Secretary, The Trilateral Commission  
Richard N. Gardner, Professor of Law and International Organization,  
Columbia University  
J. A. Gulland, Fisheries Department, Food and Agricultural Organization  
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Karl Kaiser, Director of the Research Institute of the German Society  
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Takeo Kurita, Science and Development Department, Japan Federation of  
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Sivert Øveraas, Norwegian Shipowners Association  
Hisashi Owada, Director of Treaties, Ministry of Foreign Affairs  
Gerard C. Smith, North American Chairman, The Trilateral Commission  
Tadashi Yamamoto, Japanese Secretary, The Trilateral Commission

## SCHEDULE OF TASK FORCE ACTIVITIES:

June 25-26, 1974 -- Executive Committee of Commission, meeting in Brussels, considers report on the feasibility of an oceans study and authorizes establishment of task force.

October 4 -- Johnston, Hollick and Cooper meet in Boston for preliminary consideration of task force concerns.

November 4-5 -- Rapporteurs (except Hardy) meet in Tokyo to outline task force concerns and meet with Japanese consultants.

November 29, December 20 -- Oda meets with Japanese consultants in Tokyo.

January 24, 1975 -- Oda meets with Japanese consultants in Tokyo.

February 21-23 -- Rapporteurs meet in New York City with Brzezinski and a few other consultants to consider outline of report and first drafts of inputs.

April 26-28 -- Rapporteurs meet in Geneva to complete interim report.

May 30 -- Holst presents interim report to plenary meeting of Trilateral Commission in Kyoto.

June - August -- Rapporteurs prepare inputs into final report.

August 22-25 -- Rapporteurs meet in Oslo to develop final report.

early September -- On basis of Oslo meeting, Hardy completes full draft of final report.

## SUMMARY

The use of the seas has greatly intensified in recent years. The tonnage of merchant shipping nearly quadrupled between 1951 and 1971. The world catch of fish, the source of some 10% of the world's protein, also quadrupled in the same period. New uses of the seas, spurred by technological development, have grown rapidly. Offshore oil and gas deposits, scarcely developed a few decades ago, now provide some 20% of world production. The polymetallic nodules on the seabed could meet much of future world demand for nickel, copper, cobalt, and manganese.

These developments have created a tension between the traditional law of the sea, based on the notion of freedom, and a growing recognition of the need for more sophisticated regulation. However, in addition to complex technical and economic problems connected with the management and allocation of ocean resources, governments face strong domestic political pressures to exert more extensive national jurisdiction offshore.

For many years governments have sought to resolve these tensions and claims through international negotiations under United Nations auspices, which are described in Chapter II of the report. The most prominent features of the current phase of these negotiations [the third UN Conference on the Law of the Sea (UNCLOS III)] have been accelerated movement towards a radical extension of national jurisdiction over ocean resources by means of a 200 mile exclusive economic zone; and support for the creation of an International Seabed Authority to administer mineral resource exploitation on the seabed beyond national jurisdiction.

The report describes the global interest in rational management of the oceans and in related issues of equity in the use of ocean resources. These global perspectives suggest the outlines of an "ideal" regime of ocean management, which is a useful point of reference for judging the course of UNCLOS III.

Agreement at the conference is by no means assured. Unilateral actions by frustrated nations or competitive regional treaties could undermine the prospects for the conference and lead to increasing conflicts over oceans matters. Even an agreed conference outcome would leave several important issues outstanding.

Many of the Trilateral countries are among those which would benefit most from 200-mile economic zones. Advanced industrial nations would also be better able than others to manage large new areas under their jurisdiction. Despite this, the majority of Trilateral nations have not favored the extension of national jurisdiction offshore, though there have been important policy differences within the Trilateral group. Chapter III of the report describes the positions of the Trilateral countries on the principal issues involved.

The recommendations of the Task Force attempt to bridge the gap between the longer term, global perspective on oceans management and the short-term policy orientation of the Trilateral governments at UNCLOS III. The Task Force recommends:

- that Trilateral countries should not unilaterally extend offshore jurisdiction or commence deep seabed mining in 1976;
- that national continental shelf jurisdiction be limited to 200 miles, with international sharing of a generous portion (such as one-half) of royalties derived from resource exploitation in this zone but outside territorial limits;
- that an International Seabed Authority should manage resource exploitation beyond the 200 mile limit and collect royalties therefrom to be reserved for internationally agreed purposes (and operation of the Authority);
- that coastal state fishery regimes should be augmented by strong regional regulatory authorities related to species or groups of species and operating under coordinating guidance from international agencies; and that fees from licensing arrangements should be internationally shared;
- that free maritime traffic should be encouraged, with coastal states and the international community sharing responsibility for traffic management and pollution control;
- that freedom of scientific research should be maintained;
- that dispute settlement panels for oceans issues should be established under United Nations auspices and that all states in dispute should be encouraged to have recourse to them.

TABLE OF CONTENTS

|   |    |
|---|----|
| CHAPTER I - The Oceans in Global Perspective .....                          | 1  |
| A. Introduction   | 1  |
| B. The Oceans as a Subject of International Negotiation                     | 3  |
| C. The Global Perspective   | 6  |
| 1. Navigation   |    |
| 2. Fisheries  |    |
| 3. Oil and Mineral Exploitation   |    |
| 4. Environmental Management   |    |
| D. Technological Development  | 15 |
| 1. Marine Transportation  |    |
| 2. Fisheries Technology   |    |
| 3. Off-Shore Oil and Mineral Extraction                                     |    |
| 4. Off-Shore Power  |    |
| <br>  |    |
| CHAPTER II - The Third United Nations Conference on the Law of the Sea .... | 20 |
| A. The Existing Law   | 20 |
| B. The Conference Framework and Process                                     | 22 |
| C. Threats to the Conference  | 25 |
| D. The Single Negotiating Text  | 28 |
| 1. Navigation   |    |
| 2. The Exclusive Economic Zone  |    |
| 3. The International Seabed   |    |
| 4. The Marine Environment   |    |
| 5. Marine Scientific Research   |    |
| <br>  |    |
| CHAPTER III - Trilateral Interests and Perspectives .....                   | 40 |
| A. The Exclusive Economic Zone  | 41 |
| 1. Minerals   |    |
| 2. Fisheries  |    |
| B. The International Seabed   | 50 |
| C. Navigation and Regulation of Vessel-Source Pollution                     | 53 |
| <br>  |    |
| CHAPTER IV - Prospects for the Oceans .....                                 | 57 |
| A. Immediate Prospects  | 57 |
| B. A Longer View  | 65 |
| <br>  |    |
| CHAPTER V - Recommendations .....   | 70 |

## CHAPTER I

### THE OCEANS IN GLOBAL PERSPECTIVE

#### A. INTRODUCTION

For over three hundred years, up to the mid-20th century, it was generally agreed that international interest in the seas was best served through a highly permissive regime which extended over the vast expanse of the world's oceans outside narrow territorial limits. Open and unimpeded use of the ocean was deemed to be justified by virtue of a widely shared need to secure navigation, in particular for the purposes of international trade. The fish in the sea were believed to be virtually infinite in variety and supply, their self-renewal assured by the bounty of nature. The vital environmental functions of the oceans were neither threatened nor understood. In the immense areas of the high seas restraints on passage and fishing were minimal and the only legal system available to regulate life on board was that of the state whose flag was flown. In the traditional perspective the key concept was freedom.

Today, modern technology has made possible a much more intensive use of the sea. The volume of world shipping, on which the great bulk of goods entering international commerce is carried, has grown rapidly: merchant tonnage nearly quadrupled between 1951 and 1971. The military use of the oceans has increased in importance, with the development by the United States and U.S.S.R. of powerful long range naval capabilities. The fish in the sea - the source of approximately ten per cent of the world's protein - have been exploited at a growing rate, from 16 million tons in 1950 to 60 million tons in 1970. The deposits of oil and gas beneath the offshore continental margin now account

for approximately twenty percent of world production and the proportion is expected to rise to about a quarter by 1980. The polymetallic nodules, containing nickel, copper, cobalt and manganese, which lie on the deep oceanic bed, mainly in the Pacific, are close to being commercially exploitable. The oceans are, in addition, increasingly the receptacle for man-made wastes. Besides land-based activities, the source of by far the greatest amount of marine pollution, environmental damage may result from ship operations, from accidents in which cargo is released, or from offshore oil exploitation.

To these major ocean uses others could be added - for example, in relation to tourism and recreation, the conduct of marine scientific research, the harnessing of tidal or thermal energy, and the possible transfer of industrial processes to offshore sites. What is of particular significance is the speed with which the various uses of the ocean have developed and grown over the last twenty years, and indeed within the last ten years. The rate of technological advance has been rapid, ranging from the development of giant tankers and the capacity to drill at greater depths, to the ability to track fish stocks and to capture them in quantities such as to imperil the ability of the stock to reproduce. Changing economic conditions have been such as to encourage development and use of this new technology and overall expansion of ocean activities. This overall expansion has occurred against the background of increasing prosperity in the Northern hemisphere and the overall rise in world population, more concentrated in coastal regions. Governments have found themselves under increasing public pressure to maximise their position for the benefit of their inhabitants - to safeguard fishing catches, to expand national limits over mineral resources, and to protect the marine environment. At the same time, they have been faced with the realization that few of their ambitions for more intensive use of the seas could be totally \_\_\_\_\_

assured by individual national means, and that frequently national action to advance one interest would be detrimental to another, if other states reacted by taking similar or countervailing measures.

The pattern of developments has thus created a tension between the notion of freedom, as contained in traditional law, and a growing recognition that the entire expanse of hydrospace must be brought under new and sophisticated forms of control and regulation. Expressed in economic terms, the problem may be represented as the passage from the assumptions of a free and apparently inexhaustible common property resource to one commanding a scarcity rent; from an economic standpoint efficient use of the oceans requires limiting access to those willing to pay this rent. Politically, the problem has been one of allocation and management: how should ocean resources be divided and a more effective use of the marine environment achieved? A steady trend has shown itself over the last thirty years towards the establishment of much more extensive claims to national jurisdiction by coastal states. Almost invariably these claims have been accompanied by statements asserting or implying the claimant's right to exercise special or exclusive authority over economic activities in the offshore areas, now characterized as an extension of its land economy. The risk exists therefore of unrestrained, or unrestrainable, nationalism in ocean matters, side by side with recognition that the extent and multiplicity of national interests cannot in fact be adequately secured without recourse to multilateral or regional efforts - that, if only out of self-interest, regard must be paid to international considerations.

#### B, THE OCEANS AS A SUBJECT OF INTERNATIONAL NEGOTIATION

Repeated attempts have been made to resolve these tensions and

conflicting claims, notably by means of successive efforts at negotiation within the United Nations framework. The First United Nations Conference on the Law of the Sea, held in 1958, led to the adoption of four Conventions which incorporated much of the customary law, as well as embodying steps away from the traditional a number of transitional/regime of freedom. The Second Conference in 1960 was an unsuccessful attempt to resolve various outstanding issues. The Third United Nations Conference on the Law of the Sea (UNCLOS III), which began its substantive work in 1974, is the latest phase of this international negotiation and provides the essential background to any current discussion of the subject.

The most prominent feature of the work of UNCLOS III has been the movement towards a radical extension of national jurisdiction over ocean resources. The basic division of traditional law has been between the territorial seas, a narrow band of waters in which the coastal state has sovereignty, and the high seas, the uses and resources of which are available to all. The 1958 Conference authorized the extension of the sovereign rights of the coastal state over the mineral resources of the continental shelf, which some states had already asserted in national legislation. At UNCLOS III there has been widespread support for the establishment by coastal states of a 200 mile economic zone in which the state concerned would have special or exclusive rights with respect to living and non-living resources - in other words, fishing stocks would be placed under the same basic regime as oil and gas deposits, and control over the latter would be extended to 200 These rights would be miles or, more probably, to the edge of the continental margin, combined with the exercise by the coastal state of extensive powers as regards the prevention of marine pollution and the regulation of scientific research. While the detailed application and precise extent of the rights of the

coastal state within the zone have yet to be determined and constitute indeed the main item of current negotiations, the general notion has already gained wide acceptance. The full force of the proposal may be appreciated when it is recalled that most fish stocks - indeed, in the region of 80 per cent or so of those now exploited - are to be found in the relatively shallow waters within 200 miles of the coast, that virtually all oil and gas deposits now exploitable are situated within the continental margin, and that most shipping - the ocean activity most affected by pollution measures - takes place in the crowded areas round the coast. While the trend in favor of national control is understandable, therefore, it raises a chain of questions as regards the balancing of national and international interests.

The movement towards increased national control over ocean resources has however been accompanied by a counter-tendency as regards the "international" area. It is proposed that the deep ocean floor situated beyond the seaward limits of the economic zone should be deemed to fall under a new jurisdictional concept; the "common heritage of mankind". The exploitation of the mineral resources of this international area, essentially the nodules lying on the oceanic seabed, would be controlled by a new body, the International Seabed Authority. The process of agreeing on the establishment of such an Authority raises a series of issues: the choice of operators and the regulatory framework to be adopted, the effect of exploitation on land-based producers, and the system of political controls to be incorporated in the proposed Authority. The demands of resource management, the pressure for equitable distribution of the benefits of the "common heritage", and political factors are thus closely interwoven. It is also possible that other uses of that area, such as environmental protection and scientific research,

may to some extent be brought under the same regime and that the Authority's jurisdiction may be gradually extended upwards through the superjacent water column to the surface.

### C. THE GLOBAL PERSPECTIVE

These proposals for modifying the freedom of the high seas have been made at a time in history when three non-legal perspectives have been brought to bear on the ocean in a newly urgent way; those of economics, politics and ecology.

From the economic point of view, the ocean is essentially a "resource". This term is used to refer not only to the specific living and non-living resources found in the seas and seabed, but more widely to virtually all the other uses of the ocean. One beneficial result of this perspective is to underline the scarcity factor and thus to enable more accurate estimates to be made of the costs of alternative uses. Even more important, the economic approach has placed appropriate emphasis on the need for tighter concepts and objectives in the management of living and non-living marine resources. Proper economic management of the world's fisheries, for example, would require limiting access and restricting fishing techniques in such a way as to maximize economic returns. But no single formula can be advocated as a conservation objective because of the wide variability in the stock composition of the world's fisheries. At one extreme, some fisheries consist only of one species of commercial significance; yet there are many more, at the other extreme, that are composed of dozens of species whose interactions must be taken into account for purposes of effective management. The economic approach to ocean management tends, then, to reflect awareness of the importance of the level and scale of organization as factors in resource

management and scepticism regarding the potential effectiveness of fishery conservation solely at the national level.

The political approach has throughout been highly conspicuous in law of the sea negotiations. The degree of politicization now prevalent however has complicated UNCLOS III enormously, drawing out the processes of alignment, consultation and pre-negotiation. The United Nations as a political system has had great difficulty in coping with the law of the sea: the operating structure of regional groups has little or no relationship to the interests of the individual member states as entities engaged in ocean activities. It has only been by a process of reiterated politicization of the issue - rather than looking to immediate individual circumstances - that the Third World has been able to maintain its unity; and where that unity has not been fully maintained, the range and complexity of the issues involved have frustrated rapid progress. Many states have nevertheless been induced to focus on the complex of issues with a narrow and short-term interpretation of national advantage. Most coastal states espousing the concept of an exclusive economic zone, for example, have understandably made light of their limitations in resource management and environmental protection. At the same time, the developing states, both coastal and non-coastal, have used UNCLOS III negotiations as one of several arenas for asserting a new set of rights and prerogatives and for demanding concessions from the developed states. Some of them have done so by mixing appeals to a sense of obligation with charges of historic injustice, showing that in their eyes the concept of international interest is virtually inseparable from that of the "new morality" in international relations.

Accordingly, for many states the UNCLOS III issues have a symbolic value in the context of North-South relations beyond the immediate practical benefits that might be achieved.

The concept of a 200 mile economic zone is particularly problematic from the point of view of global equity. The institution of such zones will amount to a virtual appropriation to national jurisdiction of over one-third of the present high seas, a surface area roughly equivalent to the total land mass of the earth; in other words the size of the area which states have to administer will double. A striking feature of this appropriation moreover is that nearly half - 46 percent involved - of the ocean area will go to high income countries - North America, Australasia, Japan, some European countries, the USSR and South Africa - that contain less than a quarter of the world's population, leaving just over half to the poorer countries, which already have over three quarters of the world's inhabitants. The distribution of economic resources on land is likely to skew the distribution even further: it is the developed countries which have the skills and capital to develop their zones. Thus from the perspective of global equity the movement toward national appropriation hardly serves the objective of international economic and social justice. Nor will the benefits to be derived by the world community from the international seabed area be such as to counterbalance this tendency.

From an environmental standpoint the sea is a complex of interlocking ecological systems, both human and natural. Now that more has been learned about the ocean environment, many marine scientists agree that its life forces, and consequently its vital contribution to the biosphere as a whole, are at risk; however it is also agreed that the process

of deterioration can be checked. Because the marine environment cannot be managed scientifically in a random or piecemeal manner, it is regarded as obvious by scientists that environmental norms, standards and institutions should be devised and supported at various levels, not least the global level. It is generally conceded however that a special effort should be made at regional levels to apply particularly rigorous controls to those areas which are the most seriously polluted or the most vulnerable to catastrophic spillages.

The perspectives of international society can be described, then, in a variety of ways. The global interest in proper management of the oceans derives from the scarcity of living and non-living resources, from problems concerning the world distribution of income and equity in the use of those resources, and from the need to foster the sense of belonging to a single human society. From this it follows that there is a strong global interest in conservation of the world's fishing resources for more effective exploitation in a protein-short world, in maintenance of freedom of navigation, in avoidance of widely-dispersed pollution, and, not least, in disposition of any net income arising from the exploitation of all ocean resources, no matter where it takes place. The global perspective might indeed call for extending the United Nations' notion of a "common heritage" to all ocean resources and uses - fishing, navigation and waste disposal, not just ocean minerals.

There is no single way to translate these global concerns into specific principles of management. The following paragraphs are intended to indicate, however, what ocean management in four key areas - navigation,

fishing, oil and mineral extraction, and environmental management - might look like when viewed from a predominantly global perspective. It should be emphasized that this section is not intended to be limited by "present realities", but is concerned instead with outlining an "idealized" system from a global point of view. We recognize that major obstacles to the implementation of the model suggested are rooted in the nature of international society. The UNCLOS III negotiations reflect the current state of international society. Even if they are successful, which cannot be predicted with confidence, they will yield results different from those suggested in the following pages. We believe, however, that the global perspective offered here provides a useful point of reference for judging the different approaches now being taken at the Conference. Such a perspective also helps measure the degree to which those approaches even if adopted, would leave certain issues unresolved, where further negotiation to produce supplementary bilateral or regional arrangements would in any case be necessary.

#### 1. Navigation

The maintenance of the smooth flow of international commerce is of importance to all countries. As in the past, there will be a universal interest in preserving and developing internationally agreed rules governing freedom of passage and the responsibility of shippers. In the global perspective there should be a sharing of coastal state and international responsibility for the management of traffic in congested areas, which will grow in number, the financial burden of such management being shared by all interested parties and not carried solely by the coastal state. There would be strict liability requirements for pollution from ships and special anti-

pollution regulations might be imposed by coastal states within the framework of environmental management discussed below.

## 2. Fisheries

Many of the world's present fisheries are threatened with over-exploitation. Under the laissez-faire approach which has hitherto prevailed, there has been a reduction of fish stocks accompanied by an increase in the cost of fish to consumers and a decline in net earnings. The existing international fishing commissions lack enforcement powers and operate chiefly as arenas in which bargaining can take place over the allocation of catches. The alternative to this system, as outlined at the Law of the Sea negotiations, is the extension of land boundaries and the system of land control out to sea by means of a 200 mile zone, with whatever modifications might or might not be introduced in the final agreement. Most ocean resources would therefore be distributed in a largely arbitrary way, in which some states, including several which are already relatively prosperous, would benefit much more than others, and adequate conservation measures could not be easily established. From a global viewpoint, looking at the situation de novo, it would be better to take as the point of departure the biological factors regarding the different species - and to create the necessary regulatory and allocatory system around those facts. Arrangements would be devised therefore on the basis of distinguishable fishing grounds (by species or groups of species, on a regional or wider basis as appropriate). All interests would be represented within the institutional framework, special weight being given to the coastal states concerned or those which already have interests in the particular fishery. The

functions of these agencies would consist on the one hand, of providing rational management - the assembly of scientific data and their application to the determination of optimum yields, and the limitation, where necessary, of access and of certain forms of fishing gear - and on the other, of determining how the total permissible catch would be allocated among the potential groups of fishermen. The difficulty of deciding how the catch should be allocated would obviously be very great, as indeed it is at present. If the task of management has been taken out of purely national hands, however, this would at least provide some assurance (both for those concerned with food supplies and consumer interests and for those directly engaged in fishing operations) that stocks would be maintained. As regards the problem of allocation, which would remain the central issue, determination of the economic cost of fishing, defined as the most efficient way of catching the fish species and bringing it to shore, would have to be balanced against the social and manpower problems involved - the question of which particular human groups (whether states or groups within a state) should be engaged in the activity in the region in question. Regard would need to be paid to the situation of subsistence fishermen and to areas where alternative employment possibilities were not available, as well as to the possibility of negotiating phasing-out periods in certain instances. Having regard to the extreme difficulties involved in the process of allocation, it is worth while emphasising here that if any fishery which is currently over-exploited does come under economically sound management, there is bound to be a very substantial revenue generated. The Food and Agriculture Organization, and other bodies within the United Nations family, would be responsible for providing

general guidance for conservation and proper management, and for ensuring sufficient co-ordination between the various institutions, so that the overall structure operated efficiently, and was seen to be a coherent system.

### 3. Oil and Mineral Exploitation

The 1958 Continental Shelf Convention already establishes the rights of coastal states to exploit minerals on or under the continental shelf to a depth of 200 meters or to the limits of exploitability in adjacent waters. A global perspective would limit unrestricted national rights of exploitation to a fixed portion of the continental shelf; the narrower the limit the greater the volume of resources and revenue would be available for international purposes. Exploitation of the resources beyond the coastal state limit on the continental shelf would therefore be undertaken on behalf of the international community and be subject to payment of royalties to an international authority. The coastal state would exercise managerial authority in this intermediate zone between the economic zone and the international seabed area on an equal and non-discriminatory basis. Access to mineral exploitation would not be restricted except when necessary to protect the environment, for reasons of conservation, or in order to reduce interference with other uses of the ocean. Beyond the intermediate zone an International Seabed Authority would be vested with the authority of managing the exploitation of resources on the seabed. The Authority would be exercised on the same basis as that of the coastal state in the intermediate zone. Royalties on oil and mineral resources are potentially very large

and further thought would have to be given to the best means of mobilizing these royalties for economic development, but a possible solution would be to channel them through the World Bank institutions and existing regional development banks.

#### 4. Environmental Management

Where waste disposal and other sources of pollution affect many nations there is clearly an international interest in regulating pollution. Indeed there is a global interest in the preservation of the ocean environment as a whole. However, the principal impact of waste disposal in the oceans is on coastal states in the vicinity of the disposal. Since the main source of marine pollution is run-off from the land, coastal states should be permitted to establish whatever level of overall pollution control they deem appropriate for their circumstances and values. General international standards are of course needed to govern waste disposal in the open seas, especially for those forms of waste that are long-lived and travel long distances, but it seems to be necessary, in the global perspective, to have also a world-wide network of (preferably harmonized) national legislation for pollution prevention and control. International standards would, for example, require that such national measures should be non-discriminatory in their applicability to ships using the area, and that in so far as possible they would not discriminate between foreign shipping and domestic polluters on land. Since only one-fifth of pollutants in the ocean comes from ships, to focus anti-pollution requirements on ships alone is to slight the interests of the international community (by increasing shipping costs) with little gain in reduction of total pollution. It would be desirable that each

coastal state's anti-pollution requirements for shipping be kept in line, so far as possible, with its anti-pollution requirements for run-off from the land, making due allowance for the different types of pollution involved. It would be contrary to the international interest to permit the use of anti-pollution control as an instrument for objectives other than control of pollution.

#### D. TECHNOLOGICAL DEVELOPMENTS

As a supplement to the global and idealistic perspective set out above, the following section contains a short description of some of the technological developments likely to take place over the next decade or so. While sophisticated technologies may not provide the answer to the whole range of problems faced by ocean users, developments in ocean technology will in part determine future regulatory requirements and affect the context in which increased use of the oceans takes place.

##### 1. Marine Transportation

After a five to seven year lull in the construction of super-tankers and ultra large cargo carriers (ULCC's), a resurgence is anticipated with probable return to the trend for larger ships in the category of 300,000 to 500,000 tons. This development would depend on the completion of deep water mooring facilities which are now being planned.

The development of terminal facilities and ships for the carriage of liquid natural gas will continue. Plans are already on the drawing boards for a number of pre-stressed concrete conventional barges on which the highly hazardous liquefaction of natural gas could take place offshore. A significant capability is likely to exist by about 1985.

The economic feasibility of large submarine tankers (towed, conventionally powered and nuclear powered) for the carriage of bulk liquid cargoes has been demonstrated in various studies. Despite the conclusions reached in these investigations, the huge investment in terminals, facilities, construction yards, training, etc., which is required is such as to necessitate a major decision of the government of a major industrial state.

A number of sophisticated factory ships and ship-based industrial plants (e.g., for chemical processing) have already been completed. This trend will probably be accelerated in the next decade. An interesting factor in this regard is the unused shipyard capacity resulting from the temporary surplus of tankers and ULCC's.

A number of lesser technical developments in marine transportation will mature in the next decade, including precise navigation on the high seas and ship-to-shore communication via satellite. Thus precise navigational control of shipping will become possible in the next decade, but it may not be deemed necessary.

## 2. Fisheries Technology

Ocean fishing has remained essentially a hunting activity over the years. Recently, however, with the use of aircraft and increasingly sophisticated sounding techniques, the process of search has been greatly improved. With heavier and more expensive equipment the capacity for catching fish through trawling and seining has been significantly enlarged, together with the development of factory ships on which large

catches can be stored and processed. The resulting changes in search and catch techniques put ever greater pressures on existing stocks of fish. In the not-too-distant future it may become possible to track schools of fish on a regular basis and to catch them when they are outside specified geographical jurisdictions, making it necessary to view the fish stock as the appropriate unit for regulation, rather than an arbitrary geographic area. Moreover, in time hunting techniques may evolve into methods of herding, and it may become feasible to lure certain stocks of fish outside their original areas, thus raising further problems as regards the system of regulation and allocation. It should be emphasised however that it is not possible to fix a reliable estimate as to when these developments may occur.

### 3. Off-shore Oil and Mineral Extraction

The development of semi-submersible oil rigs, off-shore storage facilities, off-shore terminals and other sea-based appurtenances of oil and gas will continue, but may abate somewhat in about five years when the major fields, already discovered, begin to mature. Industry may then wish to turn to off-shore extraction of sands, gravel, mineral sands, etc., as an outlet for its construction capability.

The significant new development in off-shore technology is the ability to construct enormous prestressed concrete floating or quasi-floating stable storage facilities. Built without the need for a shipyard per se, these large volume, low-cost-per-unit volume structures can fulfill a multitude of off-shore functions not limited to the storage and processing of oil. The lead time from design to construction in this

area has been relatively short (five years). It is highly probable that these structures will proliferate for various forms of off-shore processing. Since much of the manganese nodule processing will be energy- and chemical-intensive, it is likely to take place eventually on stable platforms at sea, leading possibly to the construction of fairly large artificial islands.

A concomitant to the large stable floating platform is the development of stable work and transportation ships. The key development in this regard is the SWATH (Small Waterplane Twin Hull) - or the SSP (Semi-submerged Platform) ship. Such craft will be able to travel at a high speed and be stable in a heavy seas, albeit at a reduced payload. The substitution of these craft for helicopter or conventional work boats is likely to accelerate the growth of off-shore facilities.

#### 4. Off-shore Power

A number of off-shore power plant concepts have been proposed or initiated. Furthest in advance are the floating nuclear power plants now under development. Capital investment constraints have been the major limitation to this project and it seems evident that some national or international effort in this regard will be required if such facilities are to become a serious option in the next decade. Environmental and safety considerations would, of course, constitute important factors in such initiatives.

A number of studies indicate the technical and economic feasibility of off-shore floating coal-burning power plants as a substitute for land-based counterparts. The leadtime for design and construction would be much shorter than for nuclear power plants and the initial

investment costs would be much lower. It is possible that a substantial number of such plants will exist by about 1985-1990.

Developments are being pursued intended to lead to the development of OTEC (Ocean Thermal Energy Conversion) plants for the fuel-less extraction of solar energy from the sea. The most optimistic date for a prototype is 1981 and the economic feasibility of such a plant is in serious doubt. The probability that other than experimental prototypes will exist in the next two decades must be deemed low.

## CHAPTER II

THE THIRD UNITED NATIONS CONFERENCE ON THE LAW OF THE SEAA. THE EXISTING LAW

The existing law of the sea consists of customary rules and of the four Conventions drawn up at the First United Nations Conference in 1958. In their territorial sea, states have sovereignty, the same plenitude of exclusive rights as they have over land, including control over the superjacent airspace. The sole exception to the principle of exclusive control by the coastal state is that foreign vessels have the right of innocent passage, namely, the right to proceed through territorial waters for the purposes of ordinary navigation, whether or not they are going to the ports of the coastal state concerned. The 1958 Territorial Sea Convention did not fix the outer limit of the territorial sea but a maximum width of 12 miles was generally advocated and most states have now come to accept this limit.

In the high seas beyond the territorial sea, all states may exercise the freedoms recognized in the 1958 High Seas Convention: freedom of navigation, of fishing, of overflight and freedom to lay submarine cables and pipelines. These freedoms, and others recognized by the general principles of international law, may be exercised by all states, coastal and non-coastal states alike, with "reasonable regard" to the interests of other states. The assumptions of the High Seas Convention are of a boundless universe, where all may prosper without need for payment or regulation other than as the flag state may impose with respect to its own vessels.

The 1958 Fisheries Convention, the least successful of the four, was a moderate move towards permitting coastal states to regulate the fishing of stocks round their shores, essentially from the standpoint of conservation. Fishing on the high seas has continued to be governed by the principle of laissez-faire 'first capture' subject to bilateral and multilateral quota arrangements, mostly negotiated within the framework of regional fishing commissions.

Fourthly, the 1958 Continental Shelf Convention granted coastal states sovereign rights over the submarine areas or "continental shelf" outside the territorial sea for the purpose of exploring and exploiting the natural resources located there. This instrument has been widely followed and the main question outstanding has been the geographical extent of states' rights. The 1958 Convention gives no more than an open-ended definition. States have sovereign rights 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"<sup>1</sup> of the submarine area.

The 1958 Conventions, though widely regarded at the time of their adoption as a great advance in international law-making, thus left three major problems unresolved: the width of the territorial sea, the outer limit of the continental shelf, and the arrangements to be made as regards the allocation and conservation of fish stocks. Nor did the Conventions incorporate a process or institution whereby their provisions could be continuously adjusted to deal with changing circumstances. The Second

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1. Article 1, Convention on the Continental Shelf.

United Nations Conference was held in 1960, principally in order to try and reach agreement on the width of the territorial sea. The effort failed, although a proposal for a six mile territorial sea and a six mile fishing zone beyond came very close to adoption.

B. THE CONFERENCE FRAMEWORK AND PROCESS

Following a lengthy period of preparatory discussions between 1968 and 1973, the Third United Nations Conference on the Law of the Sea (UNCLOS III) was convoked in order to deal with the increased technological capacity to exploit the sea and its resources, and the problems of allocation which this capacity has created. The decision to begin the Conference was taken the in/absence of any agreed draft articles and after the agenda had been expanded to include virtually all aspects of the law of the sea. The Conference has held two substantive sessions, in 1974 (Caracas, 20 June - 29 August 1974) and 1975 (Geneva, 17 March - 9 May 1975), and a third session is scheduled for New York in March 1976. There has thus been a marked contrast between the slow process of international decision making and the steady pace of technological development. The years 1968-1975 have furthermore witnessed a considerable change in the international climate and in the relative weight of the major political forces.

UNCLOS III constitutes an ambitious attempt at law-making through world-wide negotiation. Whereas the 1958 Conventions were based largely on existing customs and activities, the present conference is intended to make and recast the law on a much wider scale. The goal of producing a comprehensive law-making treaty may indeed prove to be beyond reach and the negotiators may yet need to change course so as to limit their agreement to certain general principles or to adopt several treaties

covering different parts of the subject matter, supplemented in either case by further measures at bilateral or regional level. The size of the conference (attended by some 140 delegations), the length of the agenda, the different degrees of importance attached by groups of states to individual items, and the observation of the principle of consensus, have together made it difficult to reach the stage of serious bargaining and the construction of packages of adjusted compromise.

The alignment patterns of the East-West conflict have not played a significant part in determining the divisions at UNCLOS III. The USSR and the United States have in fact adopted very similar positions on some of the major issues. They are both global powers with strong interests in unimpeded access to resources and maritime throughfares. They have preferred to discuss questions relating to their conflicting strategic interests elsewhere, among themselves, and to pursue parallel policies at the Conference aimed at maintaining freedom of naval mobility.

The main driving force at the Conference has been the movement towards increased coastal state jurisdiction. The acquisitive claims of the coastal states have been accepted in large measure by a majority of delegations at UNCLOS III. The concept of the 200 mile exclusive economic zone<sup>2</sup> appears to have received legitimacy through UNCLOS III, irrespective of whether or not the concept is finally approved in treaty form.

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2. The outer limit of the zone would be 200 miles from the baselines from which the territorial sea is measured. Assuming a twelve mile territorial sea, the zone as such would thus be 188 miles in width beyond the territorial sea.

Considerable disagreement nevertheless prevails over the precise extent of the coastal state's rights within the zone. The coastal countries, many of their spokesmen being from developing countries, have tended to assert extensive claims, while the developed maritime powers have taken the lead in stressing the dangers of creeping sovereignty which gradually would exclude outsiders from access to a large portion of the oceans. The issue cannot however be accurately characterized solely in terms of a conflict between the interests of developed and developing countries. Provisions amounting to full territorialization of the zone, which for some Latin American countries have argued, would in all probability cause Third World solidarity to break down over the difference of interest between coastal and non-coastal states, unless, at the least, arrangements were made on a regional basis. Indeed, developments in this direction would in all likelihood have a cementing impact on the 48 landlocked and geographically disadvantaged states (most of them developing countries) which on substantive issues command the votes of a blocking minority.

The most significant areas of disagreement, besides those related to the content of the coastal states' rights in the zone, concern the deep seabed regime and Authority, and the conduct of scientific research. The dispute on this last point has been between the coastal states that have wished to make scientific research conducted in the zone subject to the consent of the coastal state, and those that, like most of the Trilateral countries, have sought to maintain the right to conduct research subject to internationally agreed obligations.

The debate concerning the deep seabed regime reflects more than any other item on the agenda both an ideological conflict between the

rich and the poor countries and substantive differences of interest. The developing countries insist that the International Seabed Authority (ISA) should control directly all seabed mining and ultimately become the exclusive operator.)

The developed countries, particularly the United States, Japan and most of the European Community countries, have insisted on security of access. A primary issue of contention has been the authority of the ISA to impose production and price controls for purposes of protecting the interests of land mineral producers. Thus the conflict between high technology countries and the developing countries in regard to the deep seabed regime is linked to the broader conflict over the reorganization of the international system and the creation of a new economic order.

#### C. THREATS TO THE CONFERENCE

The complex and protracted nature of UNCLOS III has produced more than the usual amount of frustration associated with contemporary conference diplomacy. Many states believe they stand to gain a great deal from the legal regimes under discussion and their governments are under pressure to fulfill the expectations raised as regards rights to resources. These frustrations give rise to two kinds of threats to the Conference: first, that a substantial number of influential states will, in their exasperation, resort to some form of unilateral action, thereby destroying the incentive to continue the pursuit of universal solutions; secondly, that one or more groups of like-minded governments may decide not to wait to the end of the global treaty-making

process and resort instead to multilateral arrangements amongst themselves, thereby inviting retaliatory treaty-making by other states.

In either case, the world would be saddled with two or more incomplete and incompatible treaty systems purporting to govern important ocean uses.

The first of these dangers is the more immediately evident. Indeed several nations since the opening of UNCLOS III have already had recourse to one form of unilateral action, namely, the enactment of national legislation establishing 200 mile fishing or economic zones. Pressures for legislation of this kind are growing from month to month in Trilateral fishing countries like the United States, Canada, Britain and Norway. The precarious balance of political power in several <sup>Trilateral</sup> / states gives added leverage to regions and groups representing special interests. Until now the governments in these countries have withstood the pressures for unilateral action, but if one gives way, the others are likely to follow suit. The situation has been graphically described by The Times of London (May 27, 1975):

"Like athletes, the maritime countries stand at the ready, warily watching each other, some wanting to anticipate the starter's pistol - which they know will not go off - but each prepared to join the chase as soon as one of the others makes a break."

In addition to national legislation creating extended coastal zones, some of the technological powers may be tempted, under domestic pressure, to authorize new corporate initiatives in deep ocean mining, in defiance of repeated resolutions by the United Nations General Assembly

calling for a moratorium on such activities, but allegedly still permissible under the laissez faire principles embodied in the old law of the sea. Other states may be tempted to exercise extended enforcement powers in waters still regarded as belonging to the regime of the high seas, for example for the purposes of pollution prevention. Not all such unilateral measures would necessarily and automatically be subversive of future attempts to organise ocean management in the interest of the world community. Much would depend on the manner and timing of the initiatives. But there is a serious prospect that a few relatively moderate initiatives could trigger off a chain reaction among an increasing number of frustrated or resentful states, and that some of these actions would constitute grave deviations from the spirit or the letter of the conference drafts upon which the hopes for universal consensus rest.

The other source of danger to UNCLOS III is that of competitive treaty-making on the part of groups of disenchanted states. It is conceivable, for example, that a simple majority of nations at the Conference, unable to obtain a two-thirds vote for a particular version of the economic zone proposals, might proceed to legitimize a zone of that kind among themselves outside the forum of UNCLOS III. It is equally possible that a large majority, unable to secure more or less universal support for a comprehensive treaty, might nevertheless decide to conclude a limited instrument of that kind, which some of the dissident minority might feel unable to accept, preferring to stick to existing law. The probability of either of these dangers emerging is heightened if

it transpires that a cleavage of opinion develops at UNCLOS III on the legal or even symbolic significance of the single negotiating text prepared in May 1975. Even though this text was understood at the time of drafting to have no binding effect on the delegations and to represent only a basis for discussion, different opinions are likely to be held on the extent to which it reflects an emerging consensus on key issues.

#### D. THE SINGLE NEGOTIATING TEXT

In order to overcome the inability of the Conference to arrive at a common starting point for negotiations, the chairmen of the three main committees were asked at the Geneva session in the spring of 1975 to prepare a three-part "Informal Single Negotiating Text" (SNT),<sup>3</sup> covering the topics assigned to their committees. The principal source for the content of these texts was the work which had been done in various informal groups. Whereas the discussions in these groups had led to a measure of agreement on some issues, or at least to the emergence of a main trend, this was far from being the situation on all issues, and even where broad principles had been established there was still disagreement as to the terms and conditions under which those principles were to be implemented. In consequence the SNT constitutes an uneven mixture: in those areas where there is a measure of agreement, the text either suggests a specific application or has recourse to language broad enough to permit different interpretations; in some instances the text proposes solutions even though it is clear that important groups of countries may find these hard to accept. Thus, while the SNT broke a procedural deadlock, it could not provide an instant solution to the major substantive issues. It will, nevertheless, play a central, and

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3. A/CONF.62/WP 8, Parts I, II and III.

indeed probably dominant, role in shaping the outcome of the Conference. The remaining part of this chapter is a summary of the main contents of the single negotiating text in respect of the principal topics.

### 1. Navigation

There is general agreement in UNCLOS III that the territorial sea should extend out to 12 miles from the baselines. Within the territorial sea all vessels maintain the right of innocent passage. According to the SNT "passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal state."<sup>4</sup> The coastal state is prevented from interrupting or hampering innocent passage and may not levy charges on passage through the territorial sea, except on a non-discriminatory basis for specific services.

Since some 120 international straits will be overlapped by a 12 mile territorial waters regime, it has been a major objective of the maritime powers to ensure continued unimpeded passage through such straits. Some straits states have sought to limit the right of navigation to innocent passage, thereby requiring submarines to travel on the surface and aircraft to receive permission for overflight. The SNT accommodates the views and interests of the maritime powers in providing for the right of transit for all ships and aircraft.

While freedom of navigation through the economic zone is maintained, this is subject to the exercise by the coastal state of regulatory powers, in particular with respect to pollution, and to flag and coastal state enforcement of pollution standards (an aspect which is dealt with

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4. A/CONF 62/WP 8, Part II, Art.16, para. 1

further in the section below on the marine environment). Resource-related activities in the economic zone will in any case increase the need to regulate traffic so as to avoid conflicts over uses of the sea.

A further concept to which the Conference has given legitimacy is that of archipelagic waters, defined as the waters enclosed by the straight baselines joining the outermost islands and drying reefs of an archipelagic state; such waters are thus distinct from the economic zone surrounding the archipelago. Considerable disagreement exists as regards the length of baselines permitted in determining archipelagic waters and with respect to the ratio of land to water within the baselines. Having regard to the large expanse of presently open seas thus enclosed, in some instances (most notably Indonesia) of major significance for international navigation, it is important that ships of all states should be accorded the right of innocent passage through archipelagic waters.

Both coastal and archipelagic states are given regulatory power to designate special sealanes and to prescribe traffic separation schemes within territorial and archipelagic waters. Increased recourse to the establishment of such schemes will certainly be a feature of the future pattern of marine transport.

Although the Conference does not deal with military matters as such, the regulations with respect to navigation have implications as regards security issues. Some of the controversy over the extent of coastal state sovereignty in the economic zone is connected with the interest of the major naval powers in freedom of access and transit for

naval forces, and in the possibility of installing underwater listening devices. For reasons of geography the USSR would be much more constrained in terms of its naval operations than the United States should navigation through international straits be limited to innocent passage. The increased range of submarine-launched ballistic missiles will make the United States deterrent less and less dependent on passage through international straits. The major exception would be Gibraltar, but the presence of United States strategic missile-carrying submarines in the Mediterranean is important primarily for political symbolic reasons, rather than for strategic purposes. Presumably ad hoc arrangements could be made with the littoral states independent of the international legal regime. The major constraint on American naval power would be on the rapid projection of surface naval power into a conflict area. The issue of overflight rights could also be important in certain contingencies. The question should be posed in this connection whether it would be in fact in the interest of the littoral states to be in a position to make decisions with respect to the passage of great power naval forces. Such a position could involve them in conflicts which otherwise might not extend to their shores. It should nevertheless be noted that the development of precision guided munitions is likely to improve significantly the capability of coastal states to deny even powerful naval forces passage through straits.

## 2. The Exclusive Economic Zone

The SNT establishes the principle of a 200 mile exclusive economic zone. Within the zone, the coastal state is accorded "sovereign rights" to exploit and manage natural resources, "exclusive rights and

jurisdiction" over artificial islands and installations, "exclusive jurisdiction" over all activities pertaining to economic exploitation of the zone (as opposed to its resources) and over scientific research, and "jurisdiction" with regard to the preservation of the marine environment.<sup>5</sup> "Subject to the relevant provisions of the present convention" all states shall enjoy "the freedom of navigation and overflight and of the laying of submarine cables and pipelines"<sup>6</sup> within the zone.

As regards fisheries, although coastal states are granted overall sovereign powers, they are under obligation to conserve stocks and to promote optimum exploitation by allowing other states access, subject to payment of a fee or other arrangement, to the portion of the allowable catch which exceeds their own harvesting capacity. The articles on anadromous species (e.g. salmon) give regulatory powers to the states in whose fresh waters the anadromous fish originate. It did not prove possible to reach agreement on highly migratory species such as tuna and swordfish during the Geneva session, and the SNT limits itself to a vague prescription of cooperation between coastal states and other states harvesting such species through appropriate international organizations.

The SNT provisions for accomodating the interests of landlocked states in the zone of adjoining states are equally vague. Such states are accorded the right to participate in exploitation of fishing resources of these zones "on an equitable basis", taking economic and geographic

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5. A/CONF 62/ WP8/ Part II, Art.45.

6. Op Cit. Art.47

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circumstances into account. The terms of this participation, however, are not spelt out but are left to be negotiated bilaterally or regionally.

According to the SNT, coastal states may exercise sovereign rights over the continental shelf for the purpose of exploring or exploiting its natural resources. The continental shelf is defined as the natural prolongation of the land territory to the outer edge of the continental margin or out to 200 miles from the baselines, whichever is the furthest. The exclusive right of the coastal states to the exploitation of oil and gas on the continental margin beyond 200 miles remains a controversial issue however. As a possible compromise it is stipulated that the coastal states shall pay a royalty (unspecified) on extraction from the continental margin beyond 200 miles.

### 3. The International Seabed

The provisions of the SNT in regard to deep sea mining constitute perhaps the most controversial group of issues for further negotiations. The text has in large measure been structured in accordance with the interests and expressed wishes of the "Group of 77", which at UNCLOS III includes some 104 countries. The draft articles derive from the agreed premise that the deep sea area and its resources are the common heritage of mankind. The SNT provides for the establishment of an International

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7. Op. Cit. . Art. 57, Para. 1.

Seabed Authority, comprising an Assembly, a Council, a Tribunal, an Enterprise and a Secretariat. Activities in the deep seabed area shall, according to the SNT, be conducted directly by the Authority. However, provisions are made for the conclusion of service contracts and the establishment of joint ventures with individual operators in order to carry out exploration and exploitation. The Authority is to avoid discrimination in granting concessionary rights, but it is explicitly stated that special consideration for the interests and needs of the developing countries is not to be regarded as discrimination. The Authority is furthermore expected to ensure an equitable sharing of benefits derived from deep seabed mining and to further the transfer of technology to developing countries. Particular attention has been devoted to the need to protect the economic interests of the land producers of the minerals contained in manganese nodules, and the SNT explicitly grants the Authority the powers to determine the extent of the area to be exploited as well as the rate of exploitation. Protective measures, such as integrated commodity arrangements and buffer stock arrangements, are among the measures provided for.

The United States has made clear its position that the Authority<sup>8</sup> "should not have the power to control prices or production rates".

It remains to be seen whether some compromise formula can be found between the preventive and compensatory approaches in regard to licensing

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8. Secretary of State Henry A. Kissinger in his address to the American Bar Association, Montreal, 11 August, 1975.

and provisions for revenue distribution which might satisfy the dominant interests involved.

The extent to which deep seabed mining would have an adverse economic effect on mineral exporting countries is hard to assess due to the technical and economic uncertainties involved. Some United Nations studies indicate that nodule mining will increase total supplies only minimally over the next ten years in terms of copper supply (1 -2 percent in 1985), somewhat more with respect to manganese ( 8-16 percent) and nickel (14-29 percent), and substantially in the case of cobalt (33-66 percent).<sup>9</sup> In 1972 the developing countries accounted for only 13 percent of the world's total nickel production, but the share has been growing. Only one developing country (Gabon) is dependent on manganese exports. The cobalt producers include developing countries like Zaire, Zambia, Cuba and Morocco. It has been estimated that the developing countries' export earnings from the four minerals in question - which are roughly \$2 billion<sup>per annum</sup>/at present and which will probably double over the next decade - could be \$300 - 400 million lower in 1985 than would be the case in the absence of seabed mining.<sup>10</sup>

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9. United Nations Secretariat, Economic Implications of Sea-Bed Mineral Development in the International Area: Report of the Secretary General, A/Conf. 62/25, 22 May 1974, p.53

10. Development Policy Staff, International Bank for Reconstruction and Development, Energy and Minerals: Outlook for Developing (more P.17)

#### 4. The Marine Environment

The SNT from the Third Committee establishes the principle that "states have the obligation to protect and preserve all the maritime environment".<sup>11</sup> A broad consensus has emerged on the monitoring and assessment of land-based pollution as well as in regard to provisions about ocean dumping and continental shelf pollution. Vessel source pollution has been the major obstacle to general agreement.

As regards land based pollution the SNT stipulates that states shall establish national laws and regulations and that they shall endeavor to harmonize their policies as well as to establish global and regional rules and standards. Similar attempts at coordination and rulemaking are envisaged in regard to the control of pollution from continental shelf activities and as regards the dumping of wastes. Within an unspecified zone the coastal state is to have the exclusive right to regulate dumping.

With respect to vessel source pollution the SNT provides that "States, acting through the competent international organization or by general diplomatic conference, shall establish as soon as possible and to the extent that they are not already in existence, international

#### 10. (Continued)

Countries and Selected Issues, Paper prepared for 1st World Energy Symposium. Energy and Raw Materials, November 1973, P. 12. The figures cited are to be interpreted as indicating the approximate order of magnitude. The overall income of land-based producers would nevertheless be considerably greater than at present because of the increased world demand for the metals. See United States working paper, A/CONF. 62/C.1/L.5, table 2.

11. A/CONF.62/WP. 8/Part III, Protection and Preservation of the Marine Environment, Art. 2.

rules and standards for the prevention, reduction and control of  
 pollution of the marine environment from vessels." <sup>12</sup>

It seems likely that the Inter-governmental Maritime Consultative Organisation (IMCO) will be the principal organ in this connexion. Flag states are obliged to establish laws and regulations which are at least as stringent as the international standards. Coastal states may establish special laws and regulations for the protection of the marine environment on a non-discriminatory basis in areas where pollution might cause "irreversible disturbance of the ecological balance." <sup>13.</sup>

The effective enforcement of rules and standards for preventing pollution is entrusted to the flag state. The port state and the coastal state are also accorded a right of enforcement however as regards vessels voluntarily within their ports or territorial waters. The coastal state may inspect and arrest vessels for violations committed within the territorial sea and take judicial action if the flag state fails to institute proceedings for the offence. The coastal state may also request information and, in the case of flagrant violations, board a vessel for inspection when there are reasonable grounds for believing that it has discharged in violation of international rules and standards within an as yet unspecified area (which, however, will probably be commensurate with the economic zone).

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12. Op. Cit., Protection and Preservation of the Marine Environment, Art. 20, para. 1.

13. Op. Cit., Protection and Preservation of the Marine Environment, Art. 20, para. 5.

That steps should be taken to deal with serious pollution is widely agreed. Shipping interests are concerned however lest anti-pollution enforcement provisions may be applied in ways that impede or harass navigation. The fact that provisions to protect the marine environment will probably remain general in any treaty likely to emerge, leaving the details of regulation and enforcement to coastal states, may result in a diversity of separate regulations to which shippers will have to conform. The traditional freedom of navigation, including the right of innocent passage, might thus be considerably compromised. As against this consideration is the need to assure that nations will be empowered to introduce measures sufficiently strong to protect the coastal environment. A balanced solution to this problem would thus require that national measures relating to shipping conform to international norms and standards.

##### 5. Marine Scientific Research

The SNT lays down the premise that all states have the right to carry out scientific research. Such research shall be for peaceful purposes only and be conducted in such a way that it will not unduly interfere with other legitimate uses of the sea. The dispute at UNCLOS III has chiefly revolved around the issue of coastal state consent to scientific research within the economic zone. Marine scientists and geologists fear that the requirement for prior consent may unduly impede important scientific works, in a period in which new evidence on the structure and internal motion of the earth is being drawn increasingly from beneath the sea. Their apprehensions concerning arbitrary denial of access are reinforced by experience of the last decade with respect to

research on the continental shelf, where access has been frequently not granted despite the stipulation in the 1958 Continental Shelf Convention that permission to do research would normally not be withheld. Coastal states, particularly developing states, on the other hand, have insisted that consent is a necessary adjunct to their control over resources, since research will often generate knowledge on the availability of exploitable resources. There is the further consideration that research may also have military implications. On both grounds there has been a demand for close surveillance of research activity and access to the results.

According to the SNT coastal states would have the exclusive right to conduct and regulate research in their territorial sea. The SNT from the Second Committee establishes the need for coastal state consent in the zone, but provides also that such consent shall not normally be withheld. The text from the Third Committee on the other hand emphasizes only the obligation of researchers to respect the rights of the coastal state; research "related to the living and non-living resources of the economic zone and the continental shelf shall be conducted only with the explicit consent of the coastal state."<sup>14</sup>

States are obliged to promote the development and transfer of marine sciences and technology. The most important measure which the SNT provides for in this connection is the establishment of regional marine scientific and technological centers in cooperation with the International Seabed Authority.

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14. Op.Cit., Marine Scientific Research, Art.21.

## CHAPTER III

TRILATERAL INTERESTS AND PERSPECTIVES

The outcome of the Third United Nations Conference on the Law of the Sea will have a major impact on the international setting within which Trilateral Commission nations operate in the coming decades. An overriding concern of UNCLOS III is with ocean resources and the most notable result of that Conference is likely to be the enclosure within national jurisdiction of the great bulk of the resources now exploitable. Depending upon their geographic circumstances, some Trilateral Commission countries will benefit more than others from this move. Those that are already well endowed in terms of resources, island possessions, and lengthy coastlines will acquire more resources and ocean space than the rest. Similarly, on a global basis, the Trilateral nations, proportionate to their size, benefit more from territorial extensions than do most of the developing world. Relatively fewer Trilateral countries are geographically disadvantaged than is true for the world as a whole.

Despite these geographic circumstances, the majority of Trilateral nations have not favored the extension of national jurisdiction offshore, and only recently have some Trilateral nations acquiesced in the widespread support for economic zones of 200 miles. Trilateral nations will not only benefit from such extensions, but they will also be better able than most to cope with the difficulties attendant upon acquiring vast new areas. Problems that are already apparent include boundary disputes, enforcement of national and international regulations, and the

exacerbation of divisions within nations between coastal regions and central governments. Wise management of newly acquired ocean resources will be difficult at best for Trilateral nations and is likely to be even more problematic for developing nations. Areas posing special problems and requiring cooperative approaches include semi-enclosed seas such as the North Sea, the Mediterranean and the Yellow Sea, as well as similar areas elsewhere of concern primarily to developing countries, such as the Caribbean and the West African bight.

The perspectives of individual Trilateral Commission countries toward the use and management of the ocean's resources are influenced by a variety of factors: geographical situation, dependence on ocean resources, alternative land-based sources of supply, historical orientation to the oceans, domestic interest groups, political relations with neighboring states, and the like. These different perspectives influence the policies pursued with regard to main topics under consideration at UNCLOS III, namely jurisdiction over offshore zones (including fishing), deep sea mining, navigation and vessel source pollution. The policies, and the reasons behind these policies, are considered below.

#### A. THE EXCLUSIVE ECONOMIC ZONE

##### 1. Minerals

According to their circumstances, Trilateral countries have adopted different positions on the question of the establishment of a 200 mile economic zone. As an island nation with island dependencies, Japan has a lengthy coastline compared to its land mass. Despite its proximity to the mainland, Japan would rank seventh among coastal nations benefiting from 200-mile extensions and would acquire 4.6 percent of the world-wide economic zone. (See Table 1). Moreover, potentially rich oil

fields have been discovered beneath the Yellow and East China Sea and are estimated to be among the world's ten largest deposits. Japan has proposed that the coastal state have the right to establish a coastal seabed area to the outer limit of the continental shelf to a maximum distance of 200 nautical miles from the baselines.<sup>15</sup> Coastal state rights in the area would be limited to exploring and exploiting mineral resources. Where states are adjacent or opposite to one another, delimitation would be by agreement and would take the equidistance principle into account. Due to the existence of a major trench off its shores, Japan does not fare as well under an extension of jurisdiction to the outer edge of the continental margin (440,900 square nautical miles) as to a 200-mile seabed zone (1,126,000 sq. n. miles).

Canada, on the other hand, fares well under both a 200-mile economic zone, (it would rank fifth among coastal nations, with 5.6 percent of the world-wide zone) and an extension to the edge of the continental margin (second among coastal states with 9.3 percent of the world's margins), and has claimed both. Mineral potential off Canadian shores is estimated at 59.6 billion barrels of recoverable oil and 457.2 trillion cubic feet of recoverable gas.<sup>16</sup> Although Canada's pre-occupation with its continental margin is relatively recent, it is now a

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15. A/CONF. 62/C.2/L.31, Rev. 1.

16. Offshore drilling to the end of 1973 was insufficient to estimate reserves. Of 80 holes off the east coast, no commercial oil or gas field was confirmed. Canada, House of Commons, Standing Committee on External Affairs and National Defence, Minutes of Proceedings and Evidence, Issue No. 27, Dec. 12, 1973, pp. 39,82.

Table - 1

Trilateral Commission Member States:  
 Geographic Situation in Relation to 200 Mile Economic Zones and Territorial Sea Claims<sup>a</sup>

| Country                     | Coastal length<br>(nautical miles) | Margin Area to 3,000 m. depth<br>(square naut. miles) | Margin Area to 200 naut. miles<br>(square naut. miles) | Territorial Sea Claims<br>(naut. miles) |
|-----------------------------|------------------------------------|---|--|---|
| Belgium                     | 34                                 | 800   | 800  | 3                                       |
| Canada                      | 11,129                             | 1,240,000   | 1,370,000  | 12                                      |
| Denmark                     | 686                                | 20,000  | 20,000   | 3                                       |
| France                      | 1,373                              | 75,800  | 99,500   | 12                                      |
| Federal Republic of Germany | 308                                | 11,900  | 11,900   | 3                                       |
| Ireland                     | 663                                | 84,100  | 110,900  | 3                                       |
| Italy                       | 2,451                              | 160,000   | 161,000  | 6                                       |
| Japan                       | 4,842                              | 440,900   | 1,126,000  | 3                                       |
| Luxembourg                  | ...                                | ...   | ...  | ..                                      |
| Netherlands                 | 198                                | 24,700  | 24,700   | 3                                       |
| Norway                      | 1,650                              | 463,700   | 590,500  | 4                                       |
| United Kingdom              | 2,790                              | 281,800   | 274,800  | 3                                       |
| United States               | 11,650                             | 862,600   | 2,222,000  | 3                                       |

<sup>a</sup> Sources:

Albers, John P., et al., Summary Petroleum and Selected Mineral Statistics for 120 Countries, Including Offshore Areas. Geological Survey Professional Paper 817, Washington, D. C., U.S. Government Printing Office, 1973, p. 125.

United States, Department of State, National Claims to Maritime Jurisdictions, International Boundary Study, Limits in the Seas (Series A), No. 36, 1st Revision, 1973.

strongly held interest and Canada has been extremely active at UNCLOS III in pressing for coastal state jurisdiction over the margin beyond 200-mile zones. <sup>17</sup>

Norway, like Canada, has pressed for a 200-mile economic zone (acquiring 2.4 percent of the global economic zone, placing Norway eleventh among coastal states acquiring offshore territory) and jurisdiction to the outer edge of the continental margin (under which Norway ranks eighth). In delimiting offshore boundaries Norway has supported a median line and equidistance approach. Presently unresolved are Norway's continental shelf boundary with the Soviet Union in the Barents Sea and the status of the continental shelf surrounding the Svalbard (Spitzbergen) archipelago. Norway has concentrated its oil exploration in the North Sea south of the 62° N. latitude. Confirmed reserves on Norway's North Sea Shelf are 750 million tons of oil and 750,000 million cubic meters of gas. The estimated total reserves are 1000-2000 million tons of oil and 1000,000-2000,000 million cubic meters of gas. <sup>18</sup>

Member states of the European Economic Community do not benefit uniformly from extensions of jurisdiction over offshore resource zones and continental margins. While the United Kingdom has supported a 200-mile zone plus seabed jurisdiction to the outer edge of the continental margin (which would also be favorable to Ireland); Belgium, Germany, Luxembourg and the Netherlands have jointly pursued a policy of limiting coastal state extensions of jurisdiction. Together with a number of land-locked and shelf-locked states the latter countries have proposed the creation of regional zones, revenue-sharing from the mineral resources of the zone, and participation

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17. A/CONF.62/L.4.

18. St.meld. nr. 81 (1974-75)

for land-locked and other geographically disadvantaged states in the exploitation of living and non-living resources in the zones of adjacent and nearby coastal states.<sup>19</sup> France and the United Kingdom have a number of island possessions which they wish to see accorded the same jurisdiction as other land territories. Denmark similarly takes the Faroes and Greenland into account in its attitude to a 200-mile zone. Without them Denmark would acquire an area of only 20,000 sq. nautical miles under either a zonal or margin delimitation due to the presence of nearby states. Italy, like Denmark, acquires less than a full 200-mile zone due to the proximity of neighboring states.

Oil prospects of EEC countries are affected by size of the continental shelf to be acquired in the North Sea, the major area of promising activity. Total reserves of the whole North Sea are estimated to be around 40 billion barrels.

United States policy with regard to offshore jurisdiction has been characterized by extensions of jurisdiction, followed by a sharp policy reversal in 1970, with a subsequent return to a policy of expanding jurisdiction. Like Canada, the United States fares well under both a 200-mile zone (ranking first among coastal nations with 9.1 percent of the world-wide zone) or the extension of jurisdiction to the edge of the margin (ranking fourth, with 6.5 percent of the world's margins). The United States also has abundant offshore reserves of petroleum, estimated at 144 billion barrels of oil and 822 trillion cubic feet of natural gas.<sup>20</sup> The United States policy reversal in 1970, therefore, was not due to lack of interest in offshore resources but rather represented an effort to create an international

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19. A/CONF.62/C.2/L.39.

20. U.S. Department of the Interior, News Release of March 26, 1974, "USGS Releases Revised U.S. Oil and Gas Resource Estimates." The United States Ecological Survey estimates were substantially lower than earlier estimates as used in the Frezon summary in Table -2. A recent study by the National Academy of Sciences places the estimates still lower, holding that the United States Ecological Survey methodology of estimating was unrealistic. Mineral Resources and the Environment, NAS, Washington, 1975.

seabed regime that would not be detrimental to freedom of navigation. Since then United States policy has reverted to the expansion of offshore jurisdiction and the United States has expressed support for a 200-mile economic zone (including fisheries) extending, as regards mineral resources, to the edge of the continental margin.<sup>21</sup> Within the economic zone the United States proposes five international features: no unjustifiable interference with other uses of the area, international pollution standards, guarantees of investments, compulsory settlement of disputes, and revenue sharing.

## 2. Fisheries

Trilateral nations harvest roughly one-third of the total world fisheries catch. Fisheries questions at issue among Trilateral countries fall into two categories: (1) policy differences between Japan on the one hand and the United States and Canada on the other; and (2) differences among states fishing in the North Sea and Northern Atlantic. The fisheries off North America are some of the most valuable in the world, and United States and Canadian fishing off the shores of other nations is limited. These two countries have therefore supported a combined species approach and a 200-mile coastal state resource zone. According to their proposals the coastal state would have exclusive rights to fisheries within 200 miles of the shore, but would allow foreign nationals to fish for that portion of the stock not harvested by the coastal state. Anadromous species (notably salmon) would be reserved exclusively to the country of origin and highly migratory species would be governed by international regulation.<sup>22</sup>

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21. A/CONF.62/C.2/L.47.

22. A/CONF.62/L.4,  
A/AC.138/SC.II/L.38,  
A/CONF.62/C.2/L.47 and A/CONF.62/C.2/L.80.

Table -2

Trilateral Commission Countries:  
Population and Ocean Resource Situation<sup>a</sup>

| Country                        | Population<br>in mil.<br>(mid 1971) | Fisheries                        |   | Potential Offshore<br>Resources <sup>b</sup> |                        |
|--------------------------------|-------------------------------------|----------------------------------|---|--|------------------------|
|                                |                                     | Catch<br>in thous.<br>met. tons. | Value of<br>landings in<br>thous. US \$ | Oil in<br>Bil. bbls.                         | Gas in<br>tr. cub. ft. |
| Belgium                        | 9.7                                 | 52.7                             | 33,205.0                                | 1-10   | 1-10                   |
| Canada                         | 21.6                                | 1,151.6                          | 300,119.0                               | 10-100                                       | 10-100                 |
| Denmark                        | 5.0                                 | 1,464.7                          | 238,904.0                               | 1-10   | 1-10                   |
| France                         | 51.2                                | 796.8                            | 505,472.0                               | 1-10   | 1-10                   |
| Federal Republic<br>of Germany | 61.3                                | 475.2                            | 180,653.0                               | 1-10   | 1-10                   |
| Ireland                        | 3.0                                 | 90.7                             | 24,665.0                                | 0.1-1  | 1-10                   |
| Italy                          | 54.1                                | 389.7                            | 308,614.0                               | 1-10   | 10-100                 |
| Japan                          | 104.7                               | 10,701.9 <sup>c</sup>            | 2,049,184.0 <sup>c</sup>                | 1-10   | 1-10                   |
| Luxembourg                     | 0.4                                 | ...                              | ...                                     | ...  | ...                    |
| Netherlands                    | 13.2                                | 343.8                            | 152,903.0                               | 1-10   | 10-100                 |
| Norway                         | 3.9                                 | 2,974.5                          | 355,461.0                               | 10-100                                       | 10-100                 |
| United Kingdom                 | 55.9                                | 1,144.4                          | 383,800.0                               | 10-100                                       | 10-100                 |
| United States                  | 207.0                               | 2,669.9                          | 907,400.0                               | 100-1,000                                    | 1,000-10,000           |

<sup>a</sup>Sources:

World Bank Atlas, 1974, Washington, D.C., World Bank Group, 1974.

Food and Agriculture Organization of the United Nations, Yearbook of Fishery Statistics, 1973.

Sherwood E. Frazon, Summary of Oil and Gas Statistics for Onshore and Offshore Areas of 151 Countries, U.S. Department of the Interior, Geological Survey Professional Paper No. 885, Washington, USGPO, 1974.

<sup>b</sup>See footnote 20, for explanation of alternative estimates.

<sup>c</sup>Japanese fisheries figures are for 1972, latest year available. All others are for 1973.

Japan, on the other hand, does a substantial portion of its fishing off North America. Distant water and offshore fisheries account for 50 percent by weight and value of the Japanese catch. These are primarily large-scale, technologically intensive fishing operations. If 200-mile zones are established on a global basis, Japan might lose about half of its ten million ton annual catch.<sup>23</sup> The areas of greatest loss would be in the Northern Bering Sea, the Sea of Okhotsk, the Northwest Sea of Japan and the East China and Yellow Seas. Fifty to sixty percent of the annual protein consumed in Japan is from fish. Japan does not wish to accept a 200-mile fishery zone unless it is carefully defined and has proposed instead that developing coastal states be given preferential rights to offshore fisheries, up to a certain percentage of allowable catch. Japan agrees with the United States and Canada on the need for international regulatory commissions for highly migratory species but opposes reserving anadromous species to the host state. Instead, Japan recommends regional intergovernmental arrangements to conserve and manage salmon.

The difficulties over fishing among European states, in particular those bordering the North Sea, arise in large part from the complex fishing pattern that has arisen over the years. Most states are engaged in coastal fishing, in so-called middle-water fishing, and in distant-water fishing. Traditionally the last of these has been the most important, at least for the United Kingdom, France and Germany, but the pressure from coastal states - primarily represented in this context by Iceland and Norway - to extend their limits, rising fuel costs, and the movement at UNCLOS III to establish 200-mile economic zones, have made it necessary to reconsider how fishing in the North Sea and North Atlantic is to be conducted

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23. Suisan Keizai, July 11, 1973.

in the future. Norway has adopted a straightforwardly "coastal state" approach to fishery jurisdiction issues. The fifth largest fishing nation in the world, Norway takes three-quarters of its catch within 50 miles of the shore. The Norwegian government is in the process of negotiating towards a 200-miles fisheries zone, but it is on record as opposing unilateral action prior to the 1976 UNCLOS session. Norwegian proposals at UNCLOS III favor extensive regulatory power for the coastal state.

So far as the E.E.C. states are concerned, the situation is more complex. At the Caracas session these countries (with the exception of the United Kingdom) submitted a set of draft articles<sup>24</sup> based on the idea that the coastal state should have preferential (i.e. non-exclusive) rights within an unspecified area of coastal waters, with regional or sectoral organizations playing a role in the determination of the maximum sustainable yield and in the allocation of the catch. The position of the United Kingdom was strongly influenced by the division of its fishing activities between inshore and distant-water fishing and, as regards relations with its Community partners, by the provisions of the E.E.C. common fisheries policy. The United Kingdom expressed support at the Caracas and Geneva sessions for a 200-mile zone, being relatively favorably placed (by comparison with the Federal Republic, the Netherlands and Belgium for example) to make such an extension, indicating that it saw itself becoming a state which fished mainly in the zone round its coast. The E.E.C. common fisheries policy consists of a market organization for fish products<sup>25</sup> on the one hand, and a so-called "structural" provision on the other.<sup>26</sup> Under the

24. A/CONF.62/C.2/40.

25. Regulation (EEC) No. 2142/70, Official Journal of the European Communities No. L236/5, 27.10.70.

26. Regulation (EEC) No. 2141/70, Official Journal of the European Communities No. L.236/1, 27.10.70.

second, subject to limited derogations in favor of coastal fishermen,<sup>27</sup> there is a right of equal access for all E.E.C. fishermen in waters under the sovereignty or jurisdiction of the various member states. While adopted at a time when national fishing limits did not extend beyond 12 miles, it would mean that if the E.E.C. states were to extend their limits, the waters would be shared. The United Kingdom has raised the question of the adaption of this policy, to take account of the extent of the changes now likely to take place as regards fishing in what were formerly open seas. As matters stand at the time of preparation of this report, it is clear that a more elaborate and developed fishing regime will be required for European waters than the Law of the Sea Conference is likely to produce.

#### B. THE INTERNATIONAL SEABED

Most of the Trilateral Commission countries have the technological capability to engage in mining of deep sea manganese nodules regardless of an international authority. A foremost consideration in their policies toward a seabed regime beyond national jurisdiction has been supply and demand for constituent metals of manganese nodules: nickel, copper, cobalt and manganese. Japan is the most dependent on external sources, importing 90 percent of its manganese and copper, and all of its cobalt and nickel.<sup>28</sup> The E.E.C. states are also major importers of the metals in question, importing one-fifth of the world trade of nickel, one-fourth of copper, two-thirds of cobalt and one-fourth of manganese. The United States is a net importer of each of these minerals; in 1973 it imported 82 percent of its manganese,

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27. See articles 100 and 101 of the Act of Accession.

28. U.S., Council on International Economic Policy, Special Report: Critical Imported Materials, December 1974: Japan Statistical Yearbook, 1973/1974. Figures given reflect net imports as percentage of consumption. Gross imports would be somewhat higher.

95 percent of its cobalt, 65 percent of its nickel and 5 percent of its copper.<sup>29</sup> Canada, on the other hand, is a net importer of manganese only (valued at \$5 million in 1972). Canada ranks fifth in world mineral production and produces 38.1 percent of world nickel, 10.7 percent of world copper, and 7.5 percent of world cobalt.<sup>30</sup> Norway is a net importer of copper and nickel, imports all of its manganese, and uses a negligible amount of cobalt, which it produces itself.

Trilateral Commission nations are pursuing their interests in deep sea mining in two different and sometimes inconsistent ways: (1) through consortia arrangements among their respective mining firms and (2) through government proposals at UNCLOS III. The first joint venture, Ocean Resources, Inc., was formed in 1970 and now includes twenty-five companies. In January 1974, six firms announced a joint venture with \$50 million earmarked to work on prototype equipment. They included Kennecott Copper of the United States, Rio Tinto Zinc Corporation and Consolidated Gold Fields, Ltd. of Britain, Japan's Mitsubishi Corp. and Canada's Noranda Mines. Later in the year the United States firm Deep Sea Ventures of Tenneco, Inc. joined with three Japanese trading companies, Nichimen Co. Ltd., C. Itoh and Co., Ltd., and Kanematsu-Gosho Ltd., and subsequently with the United States Steel Corporation of Pittsburgh and Union Minière of Belgium. This group has programmed over \$20 million to develop its own ocean mining system. International Nickel Co. of Canada has also announced a joint venture with Japanese and European partners that calls for an estimated \$35 million to be spent on developing mining systems. Société le Nickel and Pechiney Ugine Kuhlman of France are negotiating to form a consortium, as are Metallgesellschaft and several

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29. Critical Imported Materials, op cit.

30. Canada, Department of Energy, Mines and Resources: The Canadian Economy and Mineral Industry in 1973, 1974.

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other German companies.

While private firms have been pressing ahead with plans for deep sea mining, their governments have adopted a variety of policies at the Law of the Sea Conference. As a major producer of nickel, the Canadian Government has sought a licensing system for the deep seabed regime that includes production controls and marketing and distribution mechanisms.<sup>32</sup> Canada has also tried to adapt her approach to the "enterprise system" supported by a large number of developing and mineral producing nations. Similarly Norway has been willing to delegate regulatory powers to an international authority. The United States, on the other hand, has proposed a seabed regime designed to spur mineral production.<sup>33</sup> With United States firms having the most advanced mining technology, the government has proposed international machinery that would issue licenses on a first-come first-served basis combined with incentives such as low royalties and work requirements for mining a site. The Japanese Government also proposes a licensing system but to avoid a situation in which one or a few nations select all the choice mining sites, Japan proposes delays in selection of contractor bids. In the event of competing bids, Japan suggests that the Authority should select among the national contractors according to the number of contracts each proposer has already received and according to national mineral resource import needs. If unable to select a contractor, the area would be auctioned to the highest bidder. At the Caracas session, the E.E.C. countries, except for

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31. "Tapping the Lode on the Ocean Floor", Business Week, October 19, 1974, p. 130 and John E. Flipse, "Joint Venture Commitments Highlight Ocean Mining Year", Sea Technology, January 1975, p. 32.
32. International Sea-bed Regime and Machinery Working Paper Submitted by the Delegation of Canada, A.AC.138/59, 24 August 1971.
33. Draft United Nations Convention on the International Seabed Area, A/AC.138/25 (1970); United States; Working Paper on the Economic Effects of Deep Sea-bed Exploitation, A/CONF.62/C.1/L.5, 2 August 1974; United States of America: Draft Appendix to the Law of the Sea Treaty Concerning Mineral Resource Development in the International Seabed Area, A/CONF.62/C.1/L.6, 13 August 1974.

Ireland, adopted a joint position on deep sea mining.<sup>34</sup> They favored a modified licensing system with basic conditions for operators being specified in the Convention and, like the Japanese, sought to restrict the number of contracts that any single nation might receive from the International Authority.

#### C. NAVIGATION AND REGULATION OF VESSEL-SOURCE POLLUTION

The majority of Commission member nations are either maritime states or are heavily dependent upon international commerce. Of particular concern to many members is the transport of petroleum supplies. Japan, for instance, imports 99 percent of her petroleum by ship and of the Trilateral countries is perhaps the most dependent on maritime commerce. In addition, Japan is a major ship-building nation, launching around 48 percent of world ships in 1972. Ship sales account for more than 7 percent of export earnings and about 50 percent of Japan's trade is carried in domestic bottoms. As a result of her maritime orientation, Japan opposes any restrictions on navigation that might adversely affect maritime commerce. Japan has a three mile territorial sea and supports a limited but unambiguous right of transit for ships in international straits. Any special regimes for archipelagoes should not hamper international navigation. On the other hand, Japanese islands are separated by straits and Japan seeks to protect its coastal interests through coastal state enforcement of international regulations to avert shipping accidents and vessel-source pollution.

Among the Trilateral nations, Canada has gone the furthest in pressing for the coastal state's right to qualify the right of navigation through adoption and enforcement of anti-pollution regulations. Canada has neither an extensive merchant fleet nor a large navy although it is a major trading nation and 25 percent of its exports are carried by sea. In 1970, Canada extended its territorial sea to twelve miles and established pollution

34. A/CONF.62/C.1/L.8.

Table - 3

Trilateral Commission Countries:  
Tonnage and Composition of Merchant Vessel Fleets<sup>a</sup>

| Country                        | Ship<br>Tonnage<br>(millions of<br>gross tons) | Number<br>of Ships<br>(all kinds) | Tanker<br>Tonnage<br>(millions of<br>gross tons) | Number<br>of<br>Tankers |
|--------------------------------|--|-----------------------------------|--|-------------------------|
| Belgium                        | 1.2  | 251                               | 0.33   | 20                      |
| Canada                         | 2.5  | 1,231                             | 0.26   | 66                      |
| Denmark                        | 4.5  | 1,349                             | 2.20   | 70                      |
| France                         | 8.8  | 1,341                             | 5.51   | 125                     |
| Federal Republic<br>of Germany | 8.0  | 2,088                             | 2.14   | 133                     |
| Ireland                        | ...  | ...                               | ...  | ...                     |
| Italy                          | 9.3  | 1,710                             | 3.67   | 322                     |
| Japan                          | 38.7   | 9,974                             | 16.0   | 1,537                   |
| Luxembourg                     | ...  | ...                               | ...  | ...                     |
| Netherlands                    | 5.5  | 1,358                             | 2.51   | 109                     |
| Norway                         | 24.8   | 2,689                             | 12.20  | 297                     |
| United Kingdom                 | 31.6   | 3,603                             | 15.20  | 581                     |
| United States                  | 14.4   | 4,086                             | 4.88   | 314                     |

<sup>a</sup>Source: Lloyd's Register of Shipping Statistical Tables 1974, London, 1974.

control zones and extensive fishing zones, despite United States protests. Canada has, moreover, indicated its support for the regime of innocent passage in all straits covered by a twelve mile territorial sea, taking special pains to note that the Northwest Passage is not an international strait.<sup>35</sup>

The majority of Trilateral nations have supported minimum coastal state restrictions on navigation, both as regards unimpeded passage through international straits and flag state enforcement of international and regional pollution regulations, coordinated with port state rights of inspection. The United States, Japan, Norway and the majority of E.E.C. states have pursued these policies for a variety of reasons.

The United States is a major maritime power with what it perceives to be global interests. The government places high priority on its deterrence strategy and on United States naval mobility to facilitate that strategy. Although lacking an extensive commercial fleet operating under its flag, the United States is a major trading nation and is particularly dependent - at least for the next half decade - on increasing imports of petroleum. In addition to protecting shipping lanes, naval mobility to influence local conflicts is another aspect of the perceived United States interest in maintaining order.

While Norway has a coastal orientation as regards fishing and oil and gas resources, it is the fourth largest merchant shipping nation in the world by tonnage and has had a long seafaring tradition. Norway has therefore sought to limit coastal state powers over straits transit and pollution regulation where these might restrict navigation. Japan, and the majority of E.E.C. states, as major shipping nations have likewise sought to protect their navigational interests along closely similar lines.

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35. Third United Nations Conference on the Law of the Sea, Paper submitted by the Government in the House, November 2, 1973

The Federal Republic of Germany, together with Belgium, Luxembourg, the Netherlands and eighteen other land-locked and shelf-locked nations have submitted articles proposing territorial seas up to twelve miles be carefully defined in terms of baselines and in terms of their effect on nearby states.

The nine E.E.C. countries have moreover submitted articles recommending additions to the 1958 Convention on the High Seas. These articles would propose more stringent obligations on flag states with regard to ships flying their flags. The obligations would include a register of shipping, survey of the vessel, and inquiry into incidents. The flag state would be required to conform to international standards as concerns manning the vessel, use of communications, construction and seaworthiness.

## CHAPTER IV

PROSPECTS FOR THE OCEANSA. IMMEDIATE PROSPECTS

The single negotiating text produced in May 1975 deals primarily with the allocation of legal jurisdiction over ocean areas and uses, and reflects the predominantly coastal orientation that has characterized UNCLOS III. It is the main, if not indeed the sole, product of the law of the sea deliberations to date and, while formally not binding on participating nations, may be expected to play a decisive role in future negotiations. The single negotiating text gives accordingly some idea of the final outcome of the Law of the Sea Conference - not a complete idea, for it has yet to undergo the process of scuttling in the contentious atmosphere of the Conference - but an image, subject to a series of qualifications, of the conditions under which maritime uses and the exploitation of ocean resources are likely to be conducted in the future. Ambitious though the text is, it nevertheless does not cover all aspects of ocean activities and it may be useful therefore to call attention to some of the matters that fall largely outside its scope, despite their importance when examining the overall uses of the sea.

One aspect which is not dealt with, for example, is that of the general, non-navigational conditions of maritime transport. Besides the long-standing problem of flags of convenience, a strong movement is underway, consolidated in the 1974 UNCTAD Convention on a Code of Conduct for Liner Conferences, to secure to the exporting state, particularly when it is a developing country, the movement of goods under its flag - a trend in

favor of flag preference in short, in place of the traditional free, though not unstructured, market in the provision of shipping services. This movement is not confined to non-industrialized countries; pressure exists in the United States to require a percentage of officially generated commerce to be carried by national flag vessels. The growth of the merchant fleets of states other than Trilateral countries (who constitute, by and large, what are termed the traditional maritime powers) has indeed advanced considerably in recent years, as witnessed by the rapid expansion of the USSR merchant tonnage, and this example is likely to be followed by others - the new rich Arab states, Iran, some of the East European countries, a number of states in West Africa, India, Brazil, for example - by a range of new medium powers in fact. This movement, similar to the creation of national airlines, is likely to lead to excess capacity and over-capitalization, although it may cause a wider number of countries to become more acutely aware of the importance of unimpeded freedom of maritime transit.

Secondly, the Geneva text takes relatively little account of the technological developments that may be expected to occur, except, at least by implication, in the provisions relating to the International Seabed Authority. While most of the anticipated technological advances relate to activities to be conducted within the areas under national jurisdiction and may therefore fall largely under the residual supervision of the coastal state, the problem of adjudicating between conflicting uses in the congested areas near the coast may be expected to raise a series of difficult issues at national as well as at regional and international levels. In defense of the attitude taken in the single negotiating text it may be said that the majority of technological developments now foreseeable are likely to

require particular, rather than necessarily global solutions, i.e., regulation at national or regional levels at least for a considerable period to come.

To this generalization two main qualifications should be added. First, the administrative and regulatory part of the future regime for the deep seabed will need to be periodically adjusted to developments in the exploitation and processing of seabed minerals, and indeed the text now proposed makes some provision for this requirement. There is in this area then a process whereby changes can be made in the light of technological improvements, even though the solution proposed - to adjust the regulatory mechanism as techniques progress - runs counter to the objective pursued by the majority of Trilateral countries of specifying operational conditions so far as possible in advance, in order to provide secure conditions for the operators called upon to invest their capital and know-how in an untried activity. Second, if indeed it should become possible to establish the exact identity of origin of different fish stocks - not merely of anadromous species but of those spawned at sea - the approach now advocated, based on allocation of particular areas, would need to be reconsidered. It should be stressed, however, that no accurate prediction can be made as to when, and if, this development might take place. The major inadequacy of the present approach to fisheries management, as has already been pointed out, is that a system of predominantly national control cannot function effectively over the long term when the same stock is being fished, under a different regulatory system, elsewhere.

The use of the oceans for military purposes also falls largely outside the scope of the Geneva texts. The overreaching strategic considerations

of the USSR and the United States have, by mutual agreement, continued to be dealt with elsewhere, although the efforts both governments have made to maintain naval mobility have been reflected in the text. The new family of precision guided weapons may however produce a considerable change in the character of military operations at sea; there may be a reduction in the value of "massive" naval strength and small powers may be able to inflict considerable damage on others seeking to disturb their maritime "rights."

A much more general consideration concerns the economic conditions for the development of the 200 mile economic zone. It is important to point out that sovereign jurisdiction over a resource such as fish or seabed minerals is not the same as exploitation of the resource. Exploitation is likely to require large amounts of capital and the application of specialized knowledge. While in many cases these necessary inputs will be available on the world market - developing countries have borrowed substantial amounts of capital in the euro-currency market - in other cases the assistance of those directly in possession of the capital or, more especially, the knowledge may be needed.

The world fishing industry today has probably too much capital devoted to it, and improved regulation of world fish stocks could render the ships and gear devoted to fishing even more redundant. At the same time, technological improvements in tracking, harvesting, and processing fish have increased both the capital and the technical skills required for efficient fishing. On balance, the calls of fishing on new capital will be relatively modest, but in many cases efficient exploitation of a stock may well result in the hiring of "foreign" fishing fleets.

Seabed mining and offshore oil extraction, in contrast, will require enormous amounts of capital. Not only will these industries expand rapidly - in the former case from virtually nothing - but the capital costs per unit output are large and growing. While a typical well in the Middle East requires an investment of about \$250 per daily barrel productive capacity, for example, the capital cost for equivalent offshore extraction in the North Sea is closer to \$6,000 while some estimates run as high as \$8,000.<sup>36</sup> Movement into deeper water may require even higher capital expenditures. The technical requirements for such extraction are also more demanding. In many instances, therefore, the actual exploitation of resources will remain in the hands of the relatively few firms (including some national firms) that command the requisite capital and knowledge, and "ownership" of the resource will involve mainly regulation of the volume of output and extraction of royalties. The question of how, in specific terms, the 200 mile economic zone is going to be developed is one with which the great majority of coastal states have not yet begun to grapple.

Turning from consideration of the single negotiating text to the question of the outcome of the Conference itself, the first hypothesis which may be envisaged is that the Conference will prove successful, "success" being defined as the adoption by the end of 1976 (or, at the latest, early in 1977) of a text acceptable to all major states or groups of states. On the basis of the experience of the Conference so far the chances of this being achieved cannot be rated very high, but it would be unreasonable to discount them. The states opposed to the single text, or to parts of it,

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36. Ewan Brown, "Finance for the North Sea," in M. Saeter and I. Smart (eds.), The Political Implications of North Sea Oil and Gas, Guildford: IPC Science and Technology Press, Ltd., 1975, p. 113.

will have had almost a year in which to reflect on the alternatives; in a decentralized world, the alternative possibilities may well prove to be even less advantageous, thus providing an impetus for final - if in some cases reluctant - agreement.

What, however, would appear a somewhat more likely course - with the addition of all the variants and sub-variants that the pressure of time and the ingenuity of diplomacy may produce in actuality - is that the Conference session in the Spring of 1976 will make some progress but not enough to resolve all difficulties. A further session may be held in 1976 - but this is not certain - and thus the negotiating session may be lengthened. As time stretches out to the end of 1976 and into 1977 more and more states, in the Northern as well as in the Southern hemisphere, may be unable to resist the pressure to extend their limits to 200 miles and to establish fishing - or more ambitious - zones. So far as the control of resources is concerned, such action, whatever its demerits from the standpoint of ideal global equity, would be relatively effective as a means of satisfying immediate national aims, and could be presented as being based on the work of the Conference to date. The long-term adequacy of the results achieved as regards fishing resources would depend on the particular circumstances of the fish stock in relation to the number of "national" fishing pools: conservation of the stock and operation of the fishing industry at economic levels would require co-ordination of national plans on a bilateral or wider, normally regional scale. The principal dangers of such unilateral action, apart from those relating to conservation and existing patterns of fishing, are two-fold: one, that freedom of navigation would be threatened, as controls extended for one purpose (resource allocation) are used for another; and, two, that extensions may not stop

at 200 miles but, by a series of arguments (contingency, traditional rights, special circumstances) proceed further, until virtually all the oceans are under national sway.

These perils would appear to have a sufficient touch of possibility to require to be taken seriously, and will be amongst the factors that governments have in mind as they enter the next session of the Conference. Trilateral countries, with their heavy dependence on overseas trade, would be particularly affected if these developments were to take place in their most aggravated form. By way of partial mitigation of the possible situation, it may be pointed out that it would be unlikely that navigation would, in practice, be suddenly and gravely hampered throughout large areas of the globe; the more probable course would be the creation of local problems and incidents involving delays and complaints. Even as regards threats to existing fishing grounds, arrangements could be made, if at a price, to maintain access. The fact that the state extending its limits may wish to export its fish products and in any case will usually lack the means to police the area effectively may cause a note of caution and compromise to enter into bilateral and regional negotiations, difficult though these will be. So far as the possibility of indefinite expansion, or of expansion beyond 200 miles, is concerned, relatively few states would actually be able to make such extensions in the near future or have a real interest in doing so; beyond a certain distance from the coast counter balancing forces (both those operating within a country and internationally) start to come into play. It would be reasonable to assume however that a breakdown of the Conference, in the sense of failure to achieve any result, would eventually lead to a number of national extensions beyond 200 miles, either in respect of living resources or of minerals.<sup>37</sup>

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<sup>37</sup> Some claims in respect to oil and gas resources have in fact already been made beyond 200 miles, either on grounds of the "natural prolongation" theory or under the doctrine of acquired rights as applied to the provisions of the 1958 Continental Shelf Convention.

The issue of unilateral measures also needs to be considered in relation to the resources involved: So far as manganese nodules are concerned, the countries most likely to be motivated to make claims in order to exploit nodules beyond 200 miles are Trilateral Commission countries. Their interests as mineral consumers would thus have to be balanced against their interests in other uses of the sea (such as in navigation, both military and merchant shipping) and, more generally, in their attitude to the rest of the world, in particular the developing countries. A system of 200 mile zones could be established if the Conference did not reach a formally successful conclusion, or not at an early date. This is not the case, or at least not to anything like the same degree, as regards the international seabed, the most clearly North-South issue before the Conference.

Looked at purely in isolation, the small number of potential operators would enable international seabed activities to be conducted for a considerable period to come without international regulation. The political cost to Trilateral countries, however, would be high. The Third World would rally against any such move - for all that they may be held to have helped provoke it by the reluctance of some of their spokesmen to compromise - and the present conflict of interests over the future of the international seabed would become implanted as a more or less permanent ideological issue. While this might be regarded as merely an addition to an already lengthy list, this particular conflict would not appear to be worth the price to be paid as regards the probable political outcome on the one hand, and, on the other, to constitute a serious loss through the curtailment of the possibility which the international seabed

offers of making a significant step forward in the organization of international society. The notion of running, collectively, approximately one half of the globe - albeit under water - is a unique prospect; no other aspect of the current scene offers so tantalizing a possibility for long-term gain. The International Seabed Authority has a value as a symbolic instrument, as a model for the future, which does not exist elsewhere amongst the other topics before the Conference, and which unilateral action would make much more difficult to obtain.

In the absence of a global treaty, or even if a treaty based on the single negotiating text were to emerge, there would in any case be many local issues outstanding: maritime boundaries between adjacent and neighboring states will require many years to settle, and quarrels over resource allocation in particular areas may be anticipated, irrespective of whether or not a general treaty is concluded. If the treaty, as has been proposed, contains a dispute settlement procedure, it would nevertheless provide a framework for the resolution of such bilateral and regional differences, and there can be no doubt that a solution via a treaty acceptable to all major states and groups of states would be the best outcome from the standpoint of Trilateral countries.

#### B. A LONGER VIEW

Before concluding this report and setting out the Task Force's recommendations it may be useful to attempt to give some tentative forecast - despite the difficulties involved - of the state of ocean affairs at a somewhat more distant date, such as one or two decades ahead. With current developments in mind, it is possible to foresee the emergence of a regulatory system for the oceans which will resemble a mosaic consisting of the following components:

- (i) an incomplete codification of general principles reflecting mainly the ethic of the developing countries, in the form of treaties, declarations and resolutions adopted at the universal level of international organizations;
- (ii) a proliferation of dissimilar regional (and sub-regional) arrangements and treaty systems in different parts of the world, reflecting an uneven rate of regional development, and diverse interpretation and application, of the global principles; and
- (iii) increased recourse to analogies drawn from non-marine principles of international economic and environmental law.

The prevailing feature of this emerging legal system will be its flexibility or elasticity, as well as its uncertainty. Almost regardless of the outcome of UNCLOS III, the recent and present period of law-making is likely to be looked back upon from around the year 2000 as one of great legal change which culminated in a loosely conceived framework of broad principles and concepts. Whereas in the past there was relatively little international law relating to the oceans, but much of it was embodied in fairly hard and fast rules, the law which is now emerging is more ambitious in its scope, but cannot, it would appear, yet be formulated in detailed, universal terms. Put in another way, it seems best to assume that all nations will have to learn how to share internationally apportionable resources in an equitable and efficient manner through a period of trial by error - by experience in short - before the majority will be prepared to trust to a written code of universally applicable specific, relatively complex, rules of law.

The significance of this for the future of the oceans may be assessed in the light of four main criteria: the minimalization of conflict; effective

resource management; the maintenance of transport and communication; and adequate environmental protection. As regards the first, it seems advisable to anticipate a period of increasingly frequent and bitter conflicts over marine-related issues. One is virtually compelled to predict decades of inevitable, if not usually major, conflicts of this kind, shaped by the moral and political imperatives of our time. There is certainly little comfort in the history of border disputes between nations on land or in the history of wealth allocations to groups and individuals within national societies. In some cases the stakes may be so high that legal disputes over marine issues between otherwise relatively friendly states will escalate into serious conflict, perhaps for the first time in their history. In other cases states accustomed to confrontations between each other on other issues will find in ocean management problems further cause of hostility, even to the point of serious violence. While it is difficult to envisage the precise impact of multinational corporations in this scenario of projected ocean conflicts, it is evident that the major role which these entities are likely to play in ocean development will create fresh problems as states and organizations search for an adequate operational framework. The coming emergence of the corporate phenomenon in the oceans underlines the inadequacy of a purportedly comprehensive approach to treaty-making in the law of the sea which is confined almost exclusively to relations between individual national states.

While there is frequent talk of "rational" resource management, the content behind this principle has yet to be fully established. It seems clear that in practice we are already into an era of trial by error in most areas of resource management, not least in that relating to marine resource management. The expected extension of coastal state jurisdiction out to the 200 mile limit will give rise to a series of social and economic issues, and

the task confronting communities, national and international alike, will be to relate "rational management" to political demands. How fast should offshore oil resources be exploited for example? Or manganese nodules? In the case of fishing, it might make sense in some societies to develop the industry in a highly uneven way, with a certain segment dependent on new capital investments in advanced forms of fishery technology to be applied far out to sea, while other segments remain dependent on simpler methods close to shore. In other countries it may be more desirable to have a more uniform pattern of fishing techniques throughout the national zone. What we should expect - or hope - then is that some coastal states will eventually develop particular solutions that meet their own chief purposes, at least for a period of time, and that any economic loss in the global perspective may be offset by commensurate gains in social stability. Other states, and these will probably be the majority, are likely to find after various errors of commission and omission that their best interest lies in sharing their management systems with neighboring, adjacent, and other states. Flexibility in the system of legal norms and procedures would in such circumstances prove conducive to the making of appropriate institutional adjustments. The less "sovereign" the type of language employed in describing the coastal state's management in its zone, the smoother these transitions and adjustments would be.

Ocean space will certainly continue to be of primary importance for the maintenance of international transport and communications. Present trends suggest that systems, or sub-systems, of transportation, based on high technology, will be devised, related to developments in the patterns of world trade. The increased volume of goods entering world commerce will require

more specialized forms of ocean transport, linked with enlarged port facilities, a considerable number of which will be situated offshore and incorporate industrial processing plants. The attitude of developing states to shipping issues may be expected to evolve as they are drawn into the development of shipping lines and harbor facilities. Here as elsewhere increased recourse will be had to joint or regional ventures.

Fourth, and last, it is predicted that environmental protection will continue to be the focus of serious attention. By the end of the 1980s global normative development and standard-setting with respect to vessel-source pollution will have been accomplished to the satisfaction of most governments, chiefly through the work of IMCO and UNCTAD, and a host of more rigorous requirements will have emerged in bilateral and regional agreements. In the case of land-based pollution of the ocean, progress will be slower, confined mostly to bilateral and regional arrangements in the more affluent regions of the world.

CHAPTER V  
RECOMMENDATIONS

The recommendations of the Task Force on the Oceans attempt to bridge the gap between the long-range perspective as regards the management of the oceans and the short-term policy orientation of the Law of the Sea Conference. The context for our recommendations - and the premise on which they are based - is that an international agreement on ocean problems is preferable to unilateral action, if a satisfactory international agreement can be achieved in a timely way.

- We therefore recommend that Trilateral nations should not proceed unilaterally in 1976 to extend offshore jurisdiction over marine resources or to commence mining in the deep seabed. We urge instead continued international efforts to achieve agreement on specific issues whether through a single treaty or separate agreements.

The following recommendations are based on the premise that the coastal state will have economic sovereignty in a 200 mile zone.

- Believing that an expansive definition of the continental shelf benefits those states that are for the most part already well endowed with natural resources or otherwise relatively prosperous, the Task Force recommends that the national continental shelf be limited to 200 miles. Within the area from the outer edge of the territorial sea to the distance of 200 miles, the coastal state should reserve a generous portion of its royalties, such as one half, for international purposes. The coastal state would have first claim to exploit the continental margin beyond its 200 mile zone.

- Exploitation in the area beyond national jurisdiction should be undertaken on behalf of the international community and be subject to the the payment of royalties to an International Seabed Authority. The Authority should be vested with responsibility for managing the exploitation of seabed mineral resources. It should have full powers as regards licensing and technical regulation of seabed mining. Efforts should continue to negotiate a compromise between the divergent views of developing and industrialized states. The creation of appropriate arrangements for joint ventures offers a possible avenue for settlement. The decision-making structure of the Authority must be such as to encourage agreement and avoid majority usurpation of power. Royalties not utilized in the operation of the Authority should be reserved for internationally agreed purposes.
  
- Marine fishing involves issues both of allocation and of conservation. Since a number of important fisheries extend into the ocean beyond a 200 mile zone and most stocks are to be found in adjacent zones, coastal state regulatory regimes should be augmented by international management provisions and by strong regulatory regional authorities, to be established for each distinguishable fishing ground and related to species or interacting groups of species. All fishing interests could be represented in these authorities, with special weight given to the coastal states in whose economic zones the species are found. The Food and Agriculture Organization should provide general guidance to ensure coordination of the work of the various agencies within a coherent global system of fisheries management. For efficient utilization, access to fisheries must be regulated,

and this might best be done, both for areas beyond 200 miles and for areas not fully exploited by residents of the coastal state, by charging licensing fees. These fees should be pro-rated between the coastal state and the regional authority, and the latter share should be used for management of the fishery, scientific research, and other internationally agreed purposes.

- Revenues generated by the exploitation of the living and mineral resources of the oceans should be directed to providing economic assistance for developing countries, in particular for the poorest among them. These revenues might be channelled through World Bank institutions and existing regional development banks.
- The Task Force urges that maritime traffic should be encouraged and its free movement on the oceans promoted to the fullest extent possible. In areas where traffic congestion is or will become acute, coastal state and international responsibilities must be spelt out for the management of vessel traffic. Financial and operational responsibilities for such management must be shared by all interested parties. Traffic control systems should be instituted in highly travelled waters.
- National and regional controls over land-based sources of marine pollution should be strengthened and so far as possible harmonized, due allowance being made for the fact that the volume of waste materials and the absorptive capacity of the natural environment vary substantially in different parts of the globe.
- International standards should be developed relating to vessel-

source pollution. National measures should be non-discriminatory in their application to ships within areas of national jurisdiction. Stringent liability requirements should be established, particularly for ecologically vulnerable areas.

- In view of its importance for the understanding of fundamental aspects of the human environment, the freedom to conduct scientific research designed to increase knowledge of the marine environment should be maintained. The results of research should be disseminated as widely as possible.
  
- It is important for world order that disputes arising out of ocean uses be settled amicably. Mediating panels of acknowledged experts should be established under United Nations auspices to be made available to countries in dispute over ocean matters, and the international community should bring moral pressure to bear on all states to have recourse to these panels to help resolve disputes.



*The Journal asked for petrodollar information*

—A quick reference aid on U.S. foreign relations primarily for Government use. Not intended as a comprehensive U.S. policy statement.



BUREAU OF PUBLIC AFFAIRS

DEPARTMENT OF STATE

## INTERDEPENDENCE: THE PETRODOLLAR PROBLEM

1. Background: The quadrupling of international oil prices in late 1973 is resulting in a major shift of financial resources to the oil-exporting nations. The 13-nation Organization of Petroleum Exporting Countries (Abu Dhabi, Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, Venezuela) will collectively enjoy a financial surplus of about \$60 billion in 1974. These funds are often called "petrodollars." Depending on assumptions about the production and price of oil, some experts have forecast accumulated OPEC petrodollar surpluses of \$300 billion by 1980. The magnitude of an investible surplus anywhere near this size in the hands of a small group of countries presents problems of financial and economic adjustment for the world economy.
2. OPEC earnings: The oil-producing nations generate an investible surplus because they earn more from oil exports than they are able to spend on imports of other goods and services. The size of the surplus varies among OPEC nations. Collective OPEC oil earnings in 1974 will amount to an estimated \$105 billion; other export receipts, \$5 billion. Allowing for lags in payments on oil of \$15 billion and for total OPEC imports of \$35 billion, a financial surplus of \$60 billion remains for investment or foreign aid. Next year's surplus, depending on events, could be in the same range.
3. OPEC investments: OPEC revenues not spent on imports of goods and services must be invested somewhere in the group of oil-importing nations as a whole. About \$45 billion in the first 10 months of 1974 has been invested in a variety of ways:
  - A little less than 1/4 of these funds has been invested directly in the US, principally in bank deposits and marketable government securities.
  - About the same amount has been invested directly in the domestic assets of other industrial countries.
  - Substantial amounts (a little less than 40%) have been placed in Euro-currency markets.
  - Direct loans to other governments and to international institutions, such as the World Bank and the IMF's Oil Facility, have accounted for the remainder of investible OPEC funds.

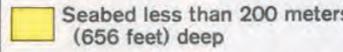
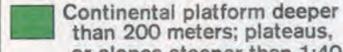
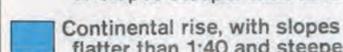
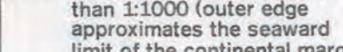
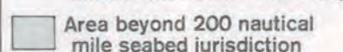
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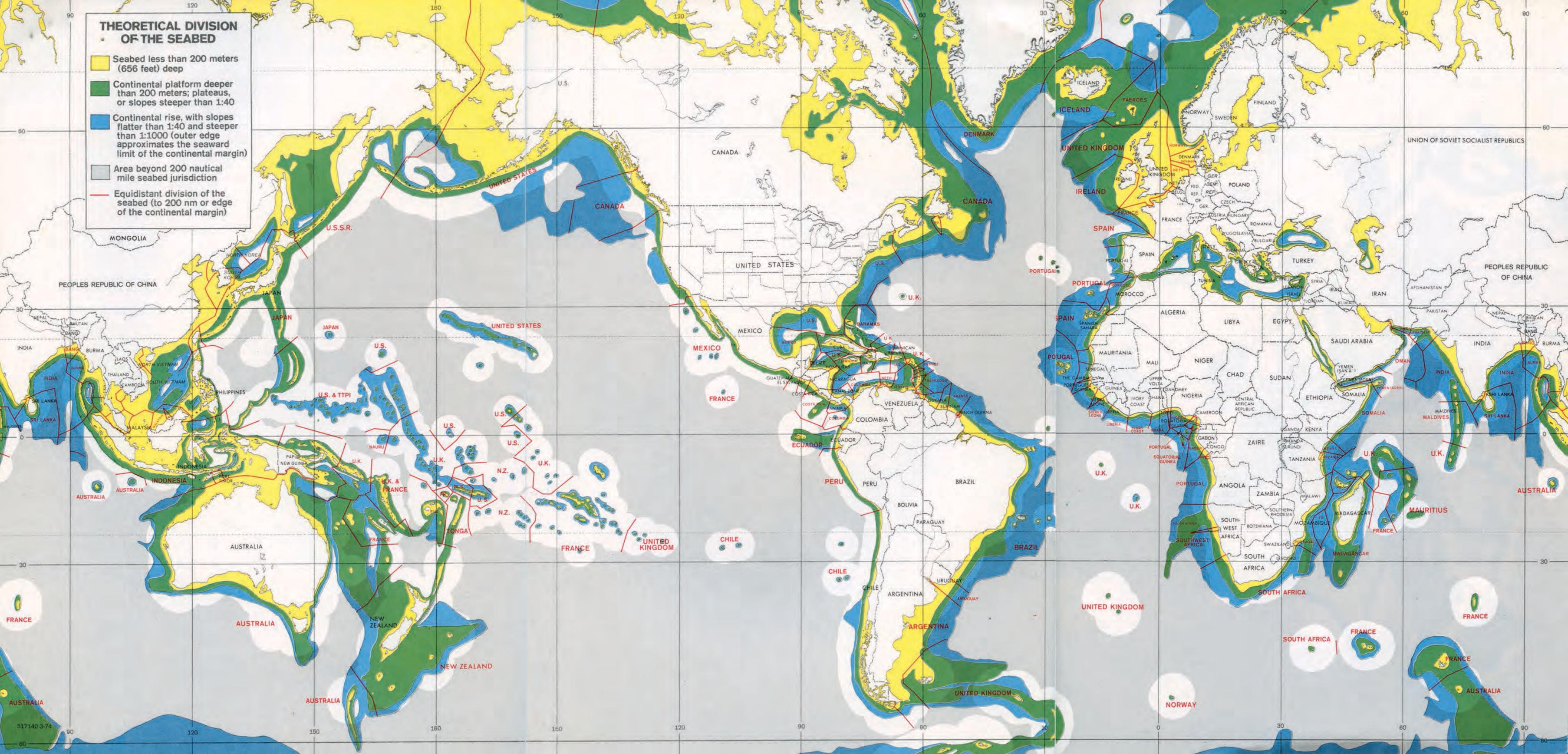
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5. US proposals: In mid-November 1974 the US proposed as part of an overall approach to the oil problem two new international financial facilities:
  - A \$25 billion financial safety net among industrial nations which cooperate in reducing dependence on oil imports; and
  - A trust fund of \$1.5 to \$2.0 billion for concessional lending to the developing countries most severely affected by higher oil prices.

The US proposed that the former be associated with OECD because of the financial magnitudes involved and the link which will exist between borrowing and measures to reduce dependence on imported oil. We suggested that the trust fund for the most severely affected developing nations be managed by the IMF, with contribution of funds from the oil-producing nations and other sources, including profits from the sale of some of the IMF's gold holdings. The details of these new facilities remain to be worked out with other nations. Congressional approval for appropriate US participation will also be necessary.

6. Financial solidarity fund: The US believes that the financial solidarity fund among industrial nations, the first new facility proposed above, should reflect a variety of fundamental principles:
  - Participation must be linked with a commitment to cooperate in reducing dependence on oil imports.
  - Participants must follow responsible adjustment policies and avoid recourse to restrictive trade measures, or other "beggar-thy-neighbor" policies.
  - The facility must be large enough -- we have suggested \$25 billion -- to provide reasonable insurance and confidence to participants.
  - The facility must lend on market-related terms to supplement, rather than replace, private financial markets.
  - Decisions on the provision of financial support should be made by a weighted vote of participants and should be based on the overall economic position of the borrower, not on any single criterion such as oil import bills.
  - All members should share the credit risk on the basis of their share of participation.

### THEORETICAL DIVISION OF THE SEABED

-  Seabed less than 200 meters (656 feet) deep
-  Continental platform deeper than 200 meters; plateaus, or slopes steeper than 1:40
-  Continental rise, with slopes flatter than 1:40 and steeper than 1:1000 (outer edge approximates the seaward limit of the continental margin)
-  Area beyond 200 nautical mile seabed jurisdiction
-  Equidistant division of the seabed (to 200 nm or edge of the continental margin)





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Report on the Trilateral Commission

*File for Speaker*

Governor Jimmy Carter of Georgia

Monday 9-9-74 11:15 a.m.

The Trilateral Commission consists of a group of persons representing the three developed democratic regions of the world -- North America, Japan, and the common market countries of Europe. The purpose of the Commission is to present brief and incisive analyses of international subjects which are of paramount current interest to the public and private leaders of our nations.

Private financing permits the unstrained development of position papers which can express in clear terms both the common and conflicting interests of the nations and regions involved in a controversial problem. Major public figures such as Prime Minister Tanaka and Secretary Henry Kissinger participate actively in the deliberations of the Commission. Studies cover such topics as the social, cultural, economic, and political attitudes of people in the three regions, future of the seas, international trade, arms control and security, relations with the Communist World, aid to developing countries, and international policy.

Many of these concise reports can be quite valuable to Governors and other state leaders because they present comprehensive analyses of widely differing viewpoints on subjects of immediate interest to our people. To illustrate this, I have summarized below our recent discussions of the international aspects of the energy crisis.

International aspects of the energy crisis:

General - The world economy simply cannot withstand a continuation of present circumstances and trends. In effect, the organization of Petroleum Exporting Countries has just levied a \$70 Billion annual sales tax on the rest of the world, which will increase quickly to \$100 Billion annually. This will give the OPEC countries this year about \$65 Billion in surplus revenues, equal to two-thirds of the book value of all U. S. private foreign investments. If they chose to so invest this amount, they could purchase 100% of the stock in all international oil companies in the world, and still have \$15 Billion left for other investments. By 1980 their liquid surplus capital will be at least \$400 billion, or about 70% of the world's monetary reserves.

The economies of weak developing countries with no major exportable products are being quickly devastated. Italy is already almost bankrupt, deeply in debt and with a balance-of-payment deficit of more than \$1 billion a month. Other European countries and Japan are also quite vulnerable, and they know their situations are growing worse.

All major oil importing nations are, in effect operating on credit, and escalating charges and interest costs will have a pyramiding effect, with the weaker nations suffering most.

Furthermore, in consuming nations any attempted drastic reduction in fuel consumption might cut productivity and the nation's resources much more than could be saved by reducing oil import costs. The lives of developed countries depend on adequate energy supplies.

The OPEC COUNTRIES - The private oil industry, primarily U.S. companies, has lost all control of their former assured oil supplies and transmission systems in The Persian Gulf Countries. The producing governments now unilaterally set posted prices, export quotas, and determine the identity of customers. In 1970 their oil revenues per barrel were about 90¢. Now total government revenues will average about \$9.25 per barrel. Rapid domestic development of processing plants and shipping capability

is planned by the major producing nations, which will further unbalance international payments.

The accumulation of surplus funds by The OPEC Countries could very well lead to further aggravation of the oil crisis if these nations decide that their incomes are sufficient, that investments in other nations are not sound, or that their own oil in the ground might be the best long term investment of all. Then worldwide oil supply shortages and higher prices would result.

The OPEC Countries are understandably demanding enough industrial development so that they can be economically viable by the time their oil supplies are substantially depleted after thirty years or so. They claim that past oil prices paid to them have been unfairly low compared both to the value of their product and to alternative energy sources. Furthermore, they explain that the new high prices will prevent unnecessary waste of oil and will encourage the development of other sources of energy.

So long as the OPEC cartel remains intact, there is little likelihood of any appreciable voluntary price reduction for oil or for commitments of assured supplies. These countries recognize their present strategic advantages and have no intention of relinquishing them.

The OPEC countries do, however, have a major investment in the soundness of the world-wide economic system and will probably be careful not to sever their close ties with the free nations of the world for fear of undesirable enhancement of Russian influence.

Major Oil Companies -- In the absence of any cohesive policy or action of our own government during last winter's oil crisis, the major companies had to assume the responsibility for distributing the world's available oil. They performed this task well, within the limits imposed on them by the Middle East producing nations.

The companies enjoyed greatly increased financial profits, but also suffered heavy passes in public confidence and support. In addition, their control over foreign oil supplies has been lost. Chances are that the oil companies could not repeat their previous performance if

another similar embargo crises should be precipitated by The OPEC countries. Neither the producing nor consuming nations are likely to permit oil companies to play such a large intermediary role in the future.

There will undoubtedly be greater governmental intrusion into the affairs of the oil companies, with demands for additional information and with the prospect of reducing or eliminating special tax privileges.

The U.S. oil companies are expected to play a major role in the development of new energy sources, and the government will have to be deeply involved with a permanent commitment toward reaching the goal of reasonable national energy self-sufficiency.

U. S. Government -- "Project Independence" is a farce. No substantive steps have been taken to assure that we will be independent of doubtful foreign oil supplies anytime in the foreseeable future. We have no long range national energy policy. We are forming no binding alliances with other consuming nations to coordinate research and development efforts or to share future oil shortages. Our foreign policy toward the OPEC countries is not designed to force reasonable price reductions. We have not even imposed any limits on their investments of oil profits in our country.

We have begun no new concerted effort to develop additional types of energy supplies. There is no major energy conservation program in this country. No substantial increase in stockpiling facilities is underway. Even the director of the federal energy office is projecting an increase in imports of oil between now and 1980 and multiple efforts are being made to identify deep port sites for these increased oil imports. Some suggestions -- The oil consuming nations must refrain from unilateral and selfish decisions and join together for concerted action.

Understandable and specific long range goals should be established.

A permanent and concerted conservation program should be implemented as a major national effort.

A commitment to an adequate research and development program on a multinational basis should be commenced.

Economic and political persuasion should be exerted on the oil exporting countries to insure stable supplies of oil at reasonable and predictable prices.

International arrangements should assume the economic viability of those nations which are being most severely injured by the recent oil price increases.

Stockpiling facilities should be built to assume at least a six-month supply of adequate fuel supplies in case of a future embargo from foreign sources.

An international arrangement must be evolved to protect major financial institutions from failure as they attempt to deal with the unprecedented burden of a disrupted economic system.

All reports of the Trilateral Commission will be made available to Governors.

TRILATERAL COMMISSION

JOINT STATEMENT

I

During the past three years, the Trilateral Commission reports on major international issues have highlighted the need for reform of international institutions and consultative mechanisms. At its meeting at Ottawa May 10-11, 1976, the Commission discussed reports by two task forces concerned with international institutional problems. In the light of the discussions, the Commission urges the trilateral governments to take initiatives to promote reform of international economic institutions and to improve international consultative processes.

II

Institutional reform by itself cannot provide solutions to the world's problems. Nevertheless, strong political commitments by governments to use improved institutional and consultative mechanisms are essential. Governments should support essential institutions with national delegations of high quality and authority and encourage the creation of strong international staffs which can play a key role in proposing and implementing policies.

Continuous efforts are required to adapt the international institutional system to changing priorities and new patterns of influence so as to avoid friction and harmful disagreement. A cardinal requirement for the reform in international institutions is that those whose interests are significantly affected by

particular international problems participate in decisions about how those problems can be resolved. Flexibility and resourcefulness are needed to fulfill this requirement. Although some existing institutions, such as the IMF and IBRD, have partially adapted to changing circumstances, the response of the international system has been inadequate. As a result, the existing institutional framework has been seriously strained and is too weak to discharge the tasks that lie ahead.

### III

The Commission believes that institutional reform should involve: -

1. Strengthening existing institutions.

(i) Within the GATT framework, there is a growing need for the elaboration of new rights and rules governing export controls, such as those which have for years covered import controls. The provisions of Article XI of the GATT on quantitative restrictions have proved inadequate for the current political and economic circumstances.

(ii) In the OECD, member governments should place even greater emphasis on the coordination of macroeconomic policies and on the concerting of constructive approaches to global economic problems. In addition, the OECD should examine whether its present membership adequately reflects the changing balance of international economic relationships.

(iii) The IBRD should increasingly play a coordinating role between the rapidly proliferating multilateral aid organizations and between national and international aid efforts even to the extent of drawing up an annual "world development budget" for discussion with full participation by developing countries.

(iv) In the IMF, new rules are required to achieve effective multilateral surveillance over the system of flexible exchange rates and control over international liquidity.

(v) The UN System should be reformed so as to improve coordination of international economic policies.

2. Creating new institutions to meet new needs. New institutions should only be created where there is a real need. The problem of international investment and the management of the oceans are two areas in which such a need exists.

The structure of new institutions should depend on their functions. Institutions which would have to conduct operations, for example in deep seabed mining, would need a structure different from those whose purpose is to administer agreed rules or to develop a common policy consensus. But in all cases, the use of consensus as the basis for decision should be encouraged, so as to minimize the risks of confrontations arising from rigid voting procedures.

3. The improvement of mechanisms for informal consultation between governments. Formal institutions work best if their functions relate to specific problem areas. Less formal consultative mechanisms, participation in which may often be restricted, are needed to shape approaches to issues not yet ripe for collective action and to provide the necessary coordination between the different institutions concerned with international economic problems. The growing interaction between domestic and international policies makes international consultation at all levels increasingly important before national policy decisions are made. To this end: -

(i) Keeping in mind the valuable experience of the European Political Cooperation machinery, consideration should be given to the creation of a trilateral consultative mechanism. In such a mechanism it would be desirable for the European Community to work through a single representative.

(ii) The Conference on International Economic Cooperation represents a potentially important and flexible device for consultation among developed and developing countries. If it proves to have continuing value, a small secretariat should be established to support its work.

The Trilateral Commission believes that its work can help to generate the necessary shared perspective and joint will to act in all these areas.

IV

Conduct of International Business

The Commission also discussed questions concerning the conduct of international business. The discussion focused on the recent disclosures of improper payments by various international firms, and on the sharp political reactions in some of the countries where such payments may have been made. The Commission concluded that while the recent disclosures involve only a small proportion of international firms, bribery, wherever it occurs, is a cancer which seriously weakens the international role of enterprises, subverts the case for free markets, and threatens the values of democratic societies. The Commission appeals to all international firms and governments of the Trilateral countries to form a consensus on the impropriety of bribery and related practices, and to consider disclosure regulations which, by insuring that both proper and improper payments are made public, will serve to deter the solicitation and the making of improper payments, and facilitate the prosecution of those that may still occur.

V

Future Program of the Commission

The Commission approved its policy program for the coming year. The program will consist of:

- (i) The completion of two trilateral reports already in hand -- on how to involve communist powers constructively

in dealing with global problems; and on a framework for a renovated international system;

(ii) Three new trilateral task force reports - on East-West relations; on relations with developing countries; and on labor/management relations in advanced industrial societies.

The next meeting of the Commission will be held in Japan January 1977.

THE TRILATERAL COMMISSION  
345 EAST 46TH STREET  
NEW YORK, N. Y. 10017  
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Steve  
J

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DEPUTY DIRECTOR

September 30, 1975

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The Hon. Jimmy Carter  
Jimmy Carter Presidential Campaign  
Post Office Box 7667  
Atlanta, Georgia 30309

Dear Jimmy:

I am enclosing with this letter a copy of the Trilateral Commission's second annual report. Apart from giving a summary of the Commission's activities during the year, the report contains (on pages 4-5) a description of the various Trilateral Task Forces which are now at work and will be completing their reports during the coming year.

I would like to take this opportunity to say how much we welcome comments and suggestions on our policy program from members of the Commission at any time, and not only at our various meetings. Please do not hesitate to let us have your comments and to let us know if you would like to be more closely involved in, or informed about, any of the on-going activities described in the report.

Finally, I would like to tell you that we are now beginning to think about the future program, structure and financing of the Commission in keeping with the unanimous disposition of the Executive Committee at the Kyoto meeting for the Commission to remain in existence. This subject will be discussed at the New York meeting of the North American members of the Commission on October 16-17 in preparation for the meeting of the Executive Committee in Paris on December 1-2, at which a

JAPANESE OFFICE

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FALMER, SUSSEX BN1 9RF, ENGLAND

final decision will have to be taken. I hope that you will be able to let us know your views directly at the New York meetings. But your thoughts before then, particularly if you are unable to get to the meeting, would also be most welcome.

Sincerely yours,



Zbigniew Brzezinski

Enclosure

# THE TRILATERAL COMMISSION

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YOSHIO HAYASHI  
KAZUSHIGE HIRASAWA  
YUSUKE KASHIWAGI  
JOHN H. LOUDON  
KINHIDE MUSHAKOJI  
SABURO OKITA  
JEAN-LUC PEPIN  
EDWIN O. REISCHAUER  
MARY T. W. ROBINSON  
DAVID ROCKEFELLER  
WILLIAM M. ROTH  
WILLIAM W. SCRANTON  
RYUJI TAKEUCHI  
OTTO GRIEG TIDEMAND  
NOBUHIKO USHIBA  
PAUL C. WARNE  
SIR KENNETH YOUNGER  
SIR PHILIP DE ZULUETA

## SECOND ANNUAL REPORT

The Trilateral Commission's second year ended on June 30, 1975. The year culminated in the first full meeting of the Commission in Kyoto, Japan, in late May. The success of the Kyoto meeting provided the basis for a unanimous expression of support by the Executive Committee for the continuation of the Trilateral Commission after its initial three-year period of operation, which ends on June 30, 1976.

## TRILATERAL MEETINGS

### Executive Committee

The Executive Committee met in Washington on December 8-10, 1974. The meeting concentrated on the problems of oil and related financial issues, and on inflation. The Committee discussed the report Energy: A Strategy for International Action by the Trilateral Task Force on the Political and International Implications of the Energy Crisis; and the report OPEC, the Trilateral World and the Developing Countries by the Trilateral Task Force on Relations with the Developing Countries. The Committee also heard speeches on the energy and monetary problems from three Commissioners, George W. Ball (formerly U.S. Under Secretary of State), Paul Delouvrier (Chairman, Electricité de France), and Nobuhiko Ushiba (formerly Japanese Ambassador to the United States). On the basis of the reports of the Task Forces (which are summarized below) and its own discussions, the Executive Committee adopted a Resolution endorsing the recommendations in the reports and calling for a cooperative rather than a confrontational response by the Trilateral countries to the problems of inflation and increased oil prices. The Resolution also endorsed the proposal made by George Ball for a new Bank for Fund Recycling and emphasized the importance of progress towards a settlement in the Middle East guaranteed by the United States and the Soviet Union. The Executive Committee also approved the Trilateral Policy Program for the following period.

## JAPANESE OFFICE

JAPAN CENTER FOR INTERNATIONAL EXCHANGE  
7A HERMANOS AKASAKA BUILDING 8-4-3, AKASAKA  
MINATO-KU, TOKYO

## EUROPEAN OFFICE

CENTRE FOR CONTEMPORARY EUROPEAN STUDIES  
UNIVERSITY OF SUSSEX  
FALMER, SUSSEX BN1 9RF, ENGLAND

During the meeting, the Executive Committee discussed with President Ford the Commission's recommendations, with emphasis on the need to avoid a confrontation with the oil producers, and the President's forthcoming summit meeting with President Giscard d'Estaing. Secretary of State Kissinger gave a dinner for the members of the Executive Committee at which he spoke and answered questions. Members of the Executive Committee also met with members of the Senate Foreign Relations Committee to discuss the Commission's work and recommendations.

### Commission

The Commission held its first plenary meeting in Kyoto on May 30-31, 1975. One hundred thirteen Commissioners (62 from Japan, 20 from Western Europe, and 31 from North America) took part. The meeting was organized around the two principal themes "The Global Redistribution of Power" and "The Trilateral Community: Key Problems and Prospects." On the first theme the Commission heard keynote remarks by Saburo Okita, President of the Overseas Economic Cooperation Fund, and received interim reports from the Trilateral Task Forces on Access to Supplies and the Oceans. John Schnittker, formerly U.S. Under Secretary of Agriculture, spoke on the World Food Problem. On the second theme, the Commission discussed the report of the Trilateral Task Force on the Governability of Democracies, with an introductory talk by Ralf Dahrendorf.

A subsidiary theme of the meeting was the Commission's continuing interest in the recycling problem and the Middle East. Yusuke Kashiwagi, Deputy President of the Bank of Tokyo, gave his assessment of the changing dimensions of the recycling problem. Gerhard Schroeder, formerly Defense Minister of the Federal Republic of Germany, spoke and introduced a discussion on the prospects for peace in the Middle East, to which Zbigniew Brzezinski, Francois Duchene and Kiichi Saeki contributed a paper.

The closing session was introduced by Zbigniew Brzezinski, who drew together the themes of the conference in an address on the state and future of trilateral relations. Following a discussion, Francois Duchene made a report summarizing the course of the two days' meetings. Kiichi Miyazawa, Foreign Minister of Japan, delivered a speech at the conclusion of the meeting and gave a reception for the members of the Commission that evening.

Before the meeting Prime Minister Takeo Miki gave a luncheon for members of the Commission in Tokyo. Commission members from North America and Western Europe also attended a two-and-a-half day series of seminars on Japan in Tokyo, which were organized by the Japanese office of the Commission immediately before the full Commission meeting. The seminars covered a range of subjects from political trends and socio-economic issues in Japan to issues in external relations and some cultural and sociological perspectives on those relations.

POLICY PROGRAM 1974/5

Three Trilateral Task Forces completed reports during the year and six others started work on reports to be completed during the forthcoming year.

The three reports completed were:

i. Energy: A Strategy for International Action, by the Trilateral Task Force on the Political and International Implications of the Energy Crisis, presented to the Executive Committee in December 1974. While not pessimistic about the long-term future, the Task Force's report foresaw a transitional period of extraordinary difficulty and adjustment for the Trilateral countries and a corresponding need for a cooperative long-term strategy. The report recommended a broad positive approach by the oil consumers to the oil producers, seeking common interests far wider than oil. At the same time, the Trilateral countries should cooperate to maintain their own financial health and to reduce their dependence on uncertain external energy sources. This would require action to increase supplies of fossil fuel by intensive development of resources within the Trilateral area and to promote conservation by limiting the rate of increase of energy consumption to levels well below those of the pre-1973 period. The rapporteurs of the Task Force were John C. Campbell, Guy de Carmoy, and Shinichi Kondo, who drew on contributions from a wide range of consultants in the three trilateral regions during the period June-December 1974.

ii. OPEC, The Trilateral World and the Developing Countries: New Arrangements for Cooperation 1976-1980, by the Trilateral Task Force on Relations with Developing Countries, presented to the Executive Committee in December 1974 and later refined for publication in March 1975. The report concluded that an extra \$6 billion a year in overseas development assistance will be needed in the period 1976-80 to assure a 2% growth rate in per capita income in the approximately 30 low-income developing countries. On the basis of estimates that development assistance from OPEC countries will reach \$3 billion per year, the report recommended that an additional \$3 billion per year should be provided by the World Bank for a five-year period through a new lending facility. According to this proposal, the funds for this "third window" would be borrowed from OPEC countries at 8% and lent to developing countries at 3%, the difference being subsidized primarily by the Trilateral and OPEC countries. The total annual interest subsidy required would be \$900 million, of which the report recommended that the Trilateral countries should provide \$500 million, the OPEC countries \$300 million and the World Bank, from its earnings, \$100 million. Thus the contribution required of any one country would seem modest in relation to the total additional quantity of development assistance. One-third of the seats on the management board of the facility would be held by OPEC countries and the overall voting strength of OPEC in the IMF/IBRD would be significantly increased at the same time. Richard N. Gardner, Saburo Okita and B. J. Udink were the rapporteurs of the Task Force. They were aided by several meetings with consultants. The basic proposal was subsequently adopted by the IBRD and is now being put into effect.

iii. The Governability of Democracies, a report by Michel Crozier, Samuel P. Huntington and Joji Watanuki, presented to the plenary meeting of the Commission in Kyoto in May 1975. The report, which was the most extensive yet produced under the Commission's auspices, examined the current difficult phase in which the demands on democratic governments have grown, while their capacities seem to have shrunk. On the basis of studies of the situation in each of the three trilateral regions, the report concluded that while lack of confidence in the functioning of democratic systems has grown, no significant support has developed for any alternative image of political organization. The situation has become one of "anomic" democracy in which democratic politics have increasingly become an arena for the assertion of conflicting interests rather than a process for building common purposes. While this problem may be seen partly in terms of a changing external environment, many problems seem to be intrinsic to democracy itself. The pursuit of the virtues of individualism and equality has brought about a general delegitimation of authority. The growth of political participation has created an "overload" of demands on governments. Political interests and parties have increasingly fragmented. The demands of domestic pressures have encouraged parochialism in foreign affairs. The report seeks to provide a basis for the discussion of ways of responding to these problems. The report will be published in book form by the New York University Press this fall, together with a summary of the Commission's discussion of the subject at Kyoto. Consideration is also being given to ways in which the debate stimulated by the report can usefully be continued.

The six Task Forces which began their work during the year are on the following themes:

1. The Oceans. The final report of this Task Force is due in December 1975. The rapporteurs are Michael Hardy, Ann Hollick, Johan Holst, Douglas Johnston, and Shigeru Oda. An interim report was submitted to the Kyoto meeting of the Commission. Against the background of the continuing negotiations at the UN Law of the Sea Conference, the Task Force is assessing the global perspective on such critical oceans issues as the exploitation of mineral resources, fisheries and environmental management. The Task Force is likely to propose that governments should refrain from unilateral actions during 1976 which could prejudice the UN Law of the Sea Conference; that national continental shelf jurisdiction should be limited to 200 miles; that there should be generous international revenue sharing provisions for resource exploitation within 200 miles but beyond territorial limits; that an International Seabed Authority should be established with full responsibility for managing the exploitation of seabed resources beyond national jurisdictions, with royalties used for internationally agreed purposes, including development assistance; and that there should be strong regulatory regional authorities for fishery conservation and allocation.

2. Access to Supplies, interim report presented at Kyoto in May, final report due in December 1975. The rapporteurs are Carl Beigie, Wolfgang Hager and Sueo Sekiguchi. The Task Force is considering access to supplies of commodities as a policy issue in international economic and political relations. The Task Force will seek to define the complex issues involved in the problem of commodity supplies and to describe the political and economic environment within which these issues must be tackled. Among the Task Force's preliminary recommendations are a proposal for new codes of conduct and principles for commodity markets; new approaches to price stabilization on a commodity by commodity basis, including internationally managed, self-financing buffer stocks; trade reform to improve access by developing countries to the markets of developed countries; new approaches to generating adequate investment in the production of raw materials, including arrangements to make more capital available to developing countries; and possible measures to promote a more equitable global income distribution, such as an international tax on consumption which would gradually replace existing forms of economic aid.

3. International Institutions, final report due in Spring 1976. The rapporteurs are Fred Bergsten, Georges Berthoin and Kinhide Mushakoji. Against the background of the post-World War II experience of international institution-building and the lessons to be learned from that experience, the Task Force will examine the institutional problems posed by changing international circumstances. The report will offer proposals for new institutional arrangements and rules to cope with current problems; and recommendations on the reform of existing international institutions and on ways in which all such institutions can be most effectively mobilized in the interests of future world order.

4. Trilateral Consultative Procedures, final report due in Spring 1976. The rapporteurs are Egidio Ortona, Robert Schaetzel and Nobuhiko Ushiba. The Task Force will consider ways of improving trilateral consultation against the background of an increasingly interdependent world in which the domestic and international dimensions of economic problems are more and more interrelated.

5. Constructive Global Involvement of the Communist Countries, final report due in 1976. The involvement of the USSR, the Communist countries of Eastern Europe, and China could contribute to tackling certain global problems and, at the same time, assist in the improvement of East-West relations. The Task Force, of which the rapporteurs are Chihiro Hosoya, Henry Owen and Andrew Shonfield, will study a number of the key issues, such as food and energy, in which the Communist countries might become constructively involved and draw conclusions and recommendations from their study.

6. The Renovated International System, final report due in 1976. The rapporteurs, Richard N. Cooper, Karl Kaiser and Masataka Kohsaka, drawing on the conclusions and recommendations of earlier trilateral task forces, will provide a framework for interpreting the challenges faced by the existing international order and guidelines for policies which will encourage the emergence of a renovated system.

### Regional Activities

In addition to the full trilateral meetings, the various regional groups of the Commission held a number of separate meetings during the year.

The Canadian members of the Commission held a colloquium in Montreal on May 16 on the Task Force report on the Governability of Democracies. This colloquium afforded a valuable opportunity for exchanges between a group of Canadians from varied fields and members of the Task Force and provided additional insights into the subject based on the Canadian experience.

The British, French and Italian groups of the Commission also held meetings during the year.

The Japanese members of the Commission held a meeting on May 20 shortly before the full Commission meeting in Kyoto. The Japanese group was also most active in arranging regional meetings of the Japanese members of the Trilateral Task Forces.

Members of the Commission from the United States held two small meetings during the year for members of the Congress. Gerard Smith, North American Chairman, held a dinner for Congressional members of the Commission in February 1975; and Representative John Anderson, a member of the Commission, organized a dinner in June 1975 for members of the Commission to meet members of the House of Representatives.

### IMPACT

In keeping with its aim of furthering public education about the issues in trilateral relations, the Commission has continued to give wide dissemination to its publications and recommendations. These efforts have steadily increased the impact of the Commission's work on informed opinion and the public at large.

At the governmental level, the meetings with President Ford and Secretary Kissinger in December 1974 and with Prime Minister Miki and Foreign Minister Miyazawa in May 1975 gave members of the Commission the opportunity to present the Commission's views and recommendations at the highest level. In these ways, and as a result of the individual contacts which members of the Commission have had with governments, the Commission has contributed to the increasingly widespread recognition of the importance of the trilateral idea and improved trilateral relations and policies. The Commission has in particular consistently advocated a cooperative rather than a confrontational approach to international economic problems, notably those crystallized by the rise in oil prices in 1973. It has welcomed the gradual growth of a consensus in the trilateral countries in favor of such an approach, of which the proposed 27-nation conference in December 1975 will be a symbol. The

Commission has also formulated new approaches to development assistance, such as the "third window" lending facility which was recommended by the Trilateral Task Force on Relations with the Developing Countries in December 1975 and is now being established by the IBRD; and new approaches to international monetary matters, such as the proposal for open market sales of official gold stocks, echoed by the recent IMF agreement on the reduction of the Fund's gold holdings, of which one-sixth will be sold, with the proceeds being used to establish a Trust Fund to assist developing countries.

In terms of broader public impact, the year saw increasing attention in the media to the Commission's work. Press representatives were specially invited to attend the Kyoto meeting and were also associated with the December Executive Committee meeting. As a result considerable coverage was given to the Commission's work, notably to the study on the Governability of Democracies.

The North American element of the Commission has continued to distribute its information bulletin Dialogue, of which two editions were produced during the year in a new and expanded format.

In Japan, the Kyoto meeting of the Commission was the occasion of extensive comment in the media. Takeshi Watanabe, Japanese Chairman, spoke on Commission activities at the annual meeting of the Board of the Federation of Economic Organizations and discussed the Commission's work in a number of articles and television appearances. The Japanese group has also continued to produce a bulletin Trilateral News, of which three editions appeared during the year.

Energy - cooperation



Office of the Governor  
Atlanta

Trilateral  
Commission

from the desk of  
Jimmy Carter

12-15-73

To Zbigniew Brzezinski:

We should utilize our  
tri lateral approach to the  
energy problem.

Because of the reluctance  
of some to deal now with  
oil because of political  
considerations how about  
exploring the long range  
development of other energy  
sources in concert with  
Japan & the European  
countries?

Jimmy

THE TRILATERAL COMMISSION

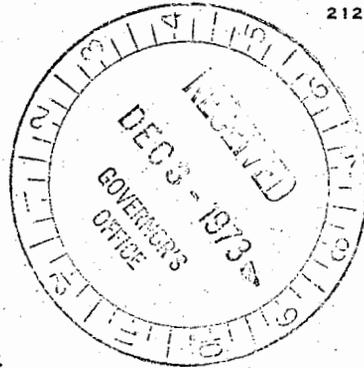
345 EAST 46TH STREET

NEW YORK, N. Y. 10017

212-661-1180

ZBIGNIEW BRZEZINSKI  
DIRECTOR

GEORGE S. FRANKLIN  
SECRETARY (N.A.)



CABLE  
TRILACOM NEWYORK

November 30, 1973

MEMORANDUM

TO: Commission Members

FROM: Zbigniew Brzezinski *ZB*

The enclosed two articles, written by two members of our Commission, struck me as particularly perceptive and I thought that you might be interested in them.

*Coop on research  
& future energy  
sources -  
J*

Enclosures (2)

# Impact of Mideast crisis

THE CHRISTIAN SCIENCE MONITOR  
November 14, 1973

By Robert R. Bowie

In foreign affairs, what nations do is largely influenced by how their leaders and people perceive their predicament. Sometimes a dramatic event may modify or clarify their perceptions and thereby greatly alter their future course. The current Middle East crisis could well be such an event for several groups of countries.

First in the Middle East itself, it may have changed the outlook of the Arabs and Israel so as to open the way for real peace. Skeptics can point out that three earlier wars did just the reverse: They only sharpened the enmity and distrust which produced the most recent hostilities. But history does not develop in a straight line. Western Europe offers a hopeful example. There, too, the states waged a series of wars culminating in World War II. The first impulse was to repress Germany, but in 1950 Robert Schuman, then French foreign minister, had the wisdom to see that only reconciliation could break out of the tragic pattern and produce real security for France and Europe. Two decades later, war in Western Europe has become literally unthinkable, and the members of the European Community are prospering together. It may be that some leaders among the Arabs and Israelis are groping toward a similar conclusion.

It is too soon to be sure President Sadat and King Faisal have implicitly accepted the existence of Israel. But ways will have to be found to assure Israeli security by guarantees and disarmed areas without stimulating Arab revanchism. That will not be easy. Such a course will have to overcome many obstacles, including the opposition of other leaders rigidly committed to past positions. The United States can play a constructive role in this process. It has the leverage to strengthen the hands of the moderate leaders — both Arab and Israeli — if it too is prepared to shift to an even-handed policy in support of a fair settlement based on United Nations Resolution 242 of 1967.

Second, the crisis has clarified the nature of the detente with the Soviet Union. It has shown that it is more limited than many had been led to

assume. The U.S.S.R., of course, wants to avoid nuclear war with the U.S. and hopes to obtain trade, technology, and credits in a more relaxed atmosphere. For the Soviets, however, "coexistence" does not mean cooperation, but active rivalry to extend its influence in Europe, the Middle East, and elsewhere.

Clearly the Middle East will continue to be a major target for Soviet activity to expand its influence. A real peace would eventually reduce the Arab dependence on the Soviet Union, but a settlement will enhance Soviet influence in the Persian Gulf. The Soviet fleet there is already significant, and reopening the Suez Canal would allow it much more flexibility in moving ships between the Mediterranean and the gulf.

Third, the crisis should drive home to the U.S., Western Europe, and Japan their intimate interdependence and the critical need for working closely together. Thus far, the effect has been just the opposite. The U.S. acted unilaterally in its all-out support for Israel and in its worldwide alert. Predictably, the allies reacted by separating themselves from the U.S. position, hoping to protect their oil supplies against the Arab cutback provoked by the U.S. actions.

As I stressed in my previous article, this split is deplorable and potentially extremely damaging to the many shared interests. Whether or not the experience will ultimately lead to restoring the links remains to be seen.

In his energy speech, the whole emphasis of the President was on national actions to make the U.S. more independent. Cooperation with allies was not mentioned in relation to either the immediate or the long-term problems. That is hardly a good omen. The eventual conclusions and actions of the allies are also uncertain. The rational answer by the West Europeans would be to speed up their progress toward European union in order to exert more influence in the partnership with the U.S. One thing is certain: It will take an enormous amount of patience and good will all around to repair the damage and revive the trust and cooperation which are essential.

In all these areas, this crisis could clarify understanding of the situation and lead to more suitable choices and priorities. Whether it actually does so depends on the leadership in the various countries involved. As always, constructive action will require the combination of two qualities which seem in conflict: freedom from illusions about how things really are and the vision to see the potentialities for making them better. Such leaders are never common. They are especially hard to find today. Indeed, in a period of varied shortages, that may be the most costly one.

*Dr. Bowie is a member of the Harvard Center for International Affairs and of the Harvard faculty.*

## Oil: Spread It Around

By George W. Ball

LONDON—How one thinks about the situation in the Middle East—and particularly the Arab oil embargo—largely depends on one's point of vantage. The Arabs justify the embargo as a reasonable response to our hostile action in airlifting military supplies to their enemy during recent hostilities. They see it as a proper diplomatic instrument to induce us to press Israel to settle on their terms, and, though Americans often refer to the oil curtailment as blackmail, it is a far less drastic action than our carpet-bombing of Hanoi last Christmas in an effort to improve our position in the Vietnamese negotiations.

As we saw it, of course, an airlift to Israel was a necessary counter to the Soviet airlift. What we sought was to prevent an Israeli defeat while we worked out a cease-fire and searched for a settlement—and we need not apologize for the actions we took.

Yet people in Europe and Japan regard the matter quite differently. They consider themselves bystanders who are suffering the consequences of an American policy they had no part in making and about which many have serious reservations. They feel resentment, approaching bitterness, that their lack of indigenous oil reserves may cause them to suffer more than the United States, which has, in their minds, helped to create the problem by condoning Israeli obduracy after 1967.

As a result, our relations with our allies in Europe and Japan are being rapidly eroded. This process can be far more costly and the damage more lasting than any losses we may suffer from the temporary slowing down of our economy as a consequence of a protracted embargo. Nevertheless, for reasons of myopia and domestic politics, we have approached the problem along strictly nationalistic lines,

expressing pique rather than sympathy at our allies' discomfort. Admittedly, the European reaction to the American airlift was less than heroic and the lack of solidarity, even among the member nations of the European Community, has been shocking. Yet Europe's failure to cooperate with us is, to some extent, a price we pay for our recent concentration on unilateral diplomacy with the Communist powers and for letting our petulance show in dealing with our allies.

This is, however, a time for neither blame nor self-congratulation. Not only are our relations with our allies in Europe and Japan in critical jeopardy, but we have gravely weakened our bargaining position with the Arab states by letting them pit one consuming nation against another through the subtle seductions of discrimination.

It is not too late for the United States to reassert its leadership and repair much of the damage. What is needed is an offer to pool our oil resources along with those of the other principal consuming nations.

Such an action would not be directly hostile to the Arab oil-producing states—not like the unwise suggestion of inherently ineffective countermeasures, which would have cost us exports while strengthening the Soviet hand in the Middle East. The purpose of a pooling arrangement would merely be to insure that, as far as possible, the consuming nations should present a common front by letting none suffer greater hardship than the others—and that includes the Netherlands, which has been quite unfairly singled out for special punishment. Possibly one or more—or even most—of our allies might reject this proposal in the hope that by avoiding direct association with the United States they could obtain a special advantage with the Arab rulers. But the mere making of the proposal would be a powerful demonstration of American good faith and a reassertion with the

Western alliance and Japan of that American leadership that has lately been so visibly lacking.

Coupled with this offer might well be a proposal for a coordinated program to develop alternative sources of energy. There is experience and technology in Germany, Britain, Japan and other nations that could be pooled in an effort to develop cheap and efficient means for the production of synthetic oil, the gasification of coal, etc. It should be a common purpose of the major oil-consuming countries to become as little dependent as possible on Middle Eastern oil—not to stop using such oil, but to reduce the excessive leverage of certain Arab states and thus be able to assure its procurement on reasonable terms.

*George W. Ball, an investment banker, was Under Secretary of State in the Kennedy and Johnson Administrations.*

January 10, 1974

①  
—MEMORANDUM

FROM: Zbigniew Brzezinski

SUBJECT: Report on Trilateral December 16-20 Meeting

To implement the decisions made by the Executive Committee at its October meeting in Tokyo and discussed earlier at various regional meetings of our Japanese, European, and North American Commission members, the three Chairmen, the Director, and the three Secretaries met in Washington from December 16-20, 1973.

On December 17 and 18 they were joined by Messrs. Nobuhiko Ushiba (former Japanese Ambassador to the United States and currently serving as the Japanese rapporteur for the trilateral trade task force), Guido Colonna di Paliano (former Italian member of the EEC Commission and currently serving as the European rapporteur for the trilateral trade task force), Philip Trezise (former Assistant Secretary of State for Economic Affairs and currently serving as the American rapporteur for the trilateral trade task force), Richard Gardner (former Deputy Assistant Secretary of State for International Organizations, now Professor of Law at Columbia University and serving as the North American rapporteur for the trilateral task force on LDC priorities), Professor Akira Ohnishi (former staff member of the International Labor Organization and currently Chief Economist and Project Manager of the International Development Center of Japan and Japanese rapporteur for the trilateral task force on LDC priorities), and John Campbell (Senior Research Fellow, Council on Foreign Relations, and North American rapporteur for the trilateral energy task force).

The group also consulted with Robert McNamara, President of the World Bank, with regards to the energy problem and our planned LDC report.

Special attention was given to the particularly destructive impact of the energy crisis on the growth prospects of the LDC's.

I. Two Global Views of the Energy Crisis

Prior to a review of our program, those present engaged in a tour d'horizon in regards to the energy crisis. Basically, two points of view emerged, each with a rather sharply divergent historical perspective:

1. According to some participants, we are confronting currently a crisis in its effects on world order more profound than the two world wars. This time the lights may go out everywhere in the sense that nothing will ever be the same again. A new power group has burst on the western-dominated scene and it will remain a major force in world affairs for a long time to come. As a consequence, we are confronting a structural crisis, and certain kinds of industrial activities will no longer be able to sustain themselves. For example, the European automobile industry will find it extremely difficult to continue as before if the price of oil becomes \$15 or so per barrel. We may anticipate a similarly dramatic price rise in various other commodities, especially in the case of those where OPEC-type monopolies can be organized. All of this means an era of generalized shortages, an increasing scramble for resources, and increasingly grave social-political crises within the advanced societies.

From this view of the situation, there are two possible ways to perceive the future. One outcome might be increasing competition and conflict. The result will be a breakup of the one-world concept and an international affairs in which the powerful do what they can and the weak suffer what they must. Trilateralism will degenerate into unilateralism.

Alternatively, a more benign development may occur, but it is less probable because it requires a revolutionary change in human outlook. It would require the creation of an international system in which the strong as well as the weak are given a stake in the new world order. It means, in turn, a more egalitarian world, both at home and abroad. Transfer of resources will also mean the transfer of power, involving also a wide-ranging and extraordinarily difficult process of reconversion, one in which controls by government will become increasingly important and our old free-trade liberal economic system will gradually fade away.

2. The foregoing view was strongly contested by other participants. They maintained that we are, first of all, still quite uninformed about the true dimensions of the oil crisis. Moreover, in any case, when prices go up, consumption will go down, and thus a new form of an equilibrium will eventually emerge. The notion that the advanced economies will grind to a halt is a wildly panicky concept [and we should not forget that the present difficulties within the United Kingdom have relatively little to do directly with the energy-oil problem but more with the internal coal and railroad strike].

In addition, skepticism was expressed about the notion that there will be generalized raw material shortages. The present rise in commodity prices is the outcome of a sustained boom in the United States and Japan as well as, to some extent, in Western Europe. We can expect commodity prices to drop sometime next year. This is not to deny that there will be some shortages - for example, in copper and oil, but this is not the same thing as a generalized crisis.

Accordingly, global change will not be all that drastic. World order will not be fundamentally altered. In that context, trilateral unity will remain both desirable and attainable, and we must proceed, therefore, with our existing agenda, stressing both trilateral cooperation and the need to create a wider framework of cooperation between the advanced and the developing countries [especially the richer developing countries, such as the oil producing ones, which must be given both a stake in the international order and which must themselves increasingly assume some of the burdens in regards to their poorer neighbors].

## II. Next Phase of the Program

Given the urgency of the energy problem, it was agreed that an interim trilateral report on the international implications of the energy problem [to be prepared by Messrs. Campbell, Uri/Hager, and Ambassador Kondo] will be presented to the next Executive Committee meeting, scheduled for June 23-25 in Brussels, with the final version to be presented, as originally planned, to the fall 1974 meeting of the Executive Committee.

Accordingly, the following is tentatively envisaged as the present agenda for the June 23-25 Executive Committee meeting:

- June 23, evening - General meeting, perhaps with a leading European figure.
  
- June 24, AM - Trade
- lunch - Trade discussion continued
- PM - Trade
- dinner - Perhaps official reception with the Belgians
  
- June 25, AM - Interim report on energy
- lunch - Action reports and decisions with regards to the LDC's priorities report and probably a report from a consultant concerning the feasibility of a trilateral study of the oceans problem
- PM - Open - to be filled depending on further circumstances
- dinner - Informal.

Note: If an updated monetary proposal is developed and a brief report is available, it presumably would be fitted into the above schedule.

III. Preparatory Steps Towards the June Executive Committee Meeting

Trade: The three rapporteurs will meet in late March to review a preliminary draft and they will also hold regional consultations on it with task force members and consultants.

Energy: The three rapporteurs will participate in a trilateral meeting on energy scheduled for late March and will develop a preliminary report by mid-April for review and discussion.

LDC's: In addition to regional consultations, a meeting with representative spokesmen and experts from the LDC's will be held in March.

Monetary: In late spring our original rapporteurs will consult to establish whether an updating of the report's recommendations is desirable.

Oceans: The consultant will visit Japan in April to obtain Japanese inputs for the feasibility study.

IV. Other Items

Values: A trilateral exploratory meeting concerning a joint study of changing values is to be held in the spring of 1974.

Security: A memorandum on the security issue is to be prepared for discussion later this spring.



# TRIALOGUE

***A Bulletin of American-European-Japanese Affairs***

*published by:*

**THE TRILATERAL COMMISSION (N.A.)**

GEORGE S. FRANKLIN  
*Secretary*

GERARD C. SMITH  
*Chairman*

MICHAEL J. SODARO  
*Editor*

Could you  
why

North American Commission Meeting, May 29-30, 1974

May 29, 7:00 PM, Dinner, Century Association, 7 West 43rd Street

Brief statements by Gerard Smith and Zbigniew Brzezinski, followed by an off-the-record talk by Arthur Hartman\* Assistant Secretary of State for European Affairs, on U.S.-European Relations.

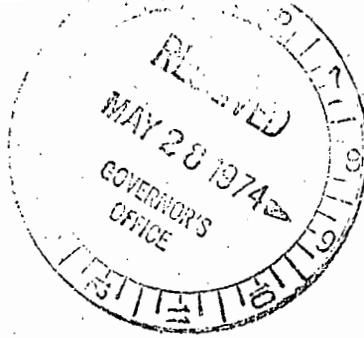
May 30, 9:30-4:30, Terrace Lounge, 12th Floor, Carnegie Endowment Building, 345 East 46th Street

9:30-12:30 Discussion of Proposed Interim Report on Relations With the Less Developed Countries led by Richard Gardner, North American Rapporteur, Task Force on Less Developed Countries, Professor of Law, Columbia University.

12:30-1:45 Luncheon, Discussion of Proposed Commission Work on Oceans led by Ann Hollick, Director, Ocean Policy Project, School of Advanced International Studies.

2:00-4:30 Discussion of Proposed Interim Report on Energy led by John C. Campbell, North American Rapporteur, Task Force on Energy, Senior Political Fellow, Council on Foreign Relations, comment on the monetary aspects by Richard Cooper, North American Rapporteur, Task Force on Monetary Affairs, Provost of Yale University.

\* Being replaced by Paul Volcker -  
see following page



To: North American members of the Trilateral Commission  
From: George Franklin  
Re: Dinner on Wednesday, May 29

Arthur Hartman, Assistant Secretary of State for European Affairs, who was going to speak to us at the dinner for North American commissioners on Wednesday, May 29 at the Century Association, has had to cancel because of important government business.

In his place we shall have a talk by Paul Volcker, Undersecretary of the Treasury for Monetary Affairs since 1969, who will discuss with us the effects of recent developments, particularly energy, on monetary problems and especially the implications of these problems for relationships between the United States, Europe and Japan.

*George Franklin*

# OFFICE OF THE GOVERNOR

State Capitol, Atlanta, Georgia 30334  
Telephone 404/656-1776

*File*  
*J*

## Memorandum

To: Governor Carter  
From: David Fox  
Subject: Trilateral Commission Meeting - Briefing  
Date: May 28, 1974

*To Stu  
Eizenstat  
J.C.*

1. Agenda and topics of discussion
2. Information on topics
  - a. Less Developed Countries - task force report
  - b. Implications of the Energy Crisis - task force report
  - c. ~~Ocean Policy (no available information)~~  
*now attached*
3. Recent Activities of Commission
4. Profile - new members
5. List of Members - North American Commission
6. Constitution of Trilateral Commission

DF/sa

*Governor,  
you have already  
read this material - you  
should be able to scan it  
rapidly.  
David*

THE TRILATERAL COMMISSION (NORTH AMERICA)

345 EAST 46TH STREET

NEW YORK, N. Y. 10017

212-661-1180

*see to Vicker*  
*C*

October 1, 1975

MEMORANDUM

TO: North American Commissioners

FROM: George Franklin

RE: Future Commission Meetings

The next two Trilateral meetings after the October meeting in New York are:

1. Executive Committee, Paris, November 29 - December 2

All members of the Commission are now invited to attend and participate in this meeting of the Executive Committee. An outline of the program and the subjects to be discussed at the meeting is enclosed.

Unfortunately, the Commission is not in a position to pay the expenses of Commission members to and in Paris. Rooms for members have been reserved at the Inter-Continental Hotel, 3 rue de Castiglione (near Vendôme), at a price of about \$65 a night, including service, taxes, and continental breakfast. The exact amount will depend on the exchange rate. Meals which are part of scheduled meetings will be paid for by the European regional group of the Trilateral Commission or the French Government, which means virtually all meals except Saturday and Sunday lunches. Please let me know for what dates you would like a room at the Inter-Continental, and whether you wish a single or double.

2. Ottawa, May 9 - 11, Washington, May 12

This will be a plenary meeting of the Commission, and the last meeting of the Commission's first three-year term. The agenda will include reports on international institutions and trilateral consultative procedures. There will also be meetings with Canadian Government members and probably also with members of the U.S. Government in Washington.

We do hope you will be able to attend both these meetings, which will be the climax of the Commission's work so far.

Executive Committee Meeting: Paris, November 29-December 2

Saturday, November 29

- AM Seminar on France
- a. Political Affairs: with speakers representing the Government majority and the Opposition
  - b. Economic & Social Affairs: with speakers representing industry, trade unions and regional interests.
- PM Seminar on Europe, with speakers representing the European Community and German, British and Italian views.
- Evening Dinner, addressed by M. Francois-Xavier Ortoli, President of the Commission of the European Communities.

Sunday, November 30

- Evening Dinner addressed by Signor Guido Carli, formerly Governor of the Banco d'Italia

Monday, December 1

Executive Committee Meetings - Theme: Global Resource Management

- AM Discussion of Trilateral Task Force Report: "Seeking a New Accommodation in World Commodity Markets."
- Lunch Interim Report on behalf of the Task Force on International Institutions
- PM Discussion of Trilateral Task Force Report: "The Future of the Oceans."
- Evening French Government Dinner at the Quai d'Orsay, with senior Ministerial speaker

Tuesday, December 2

Executive Committee Meetings

- AM The Future of the Trilateral Commission
1. Structure
  2. Finances
  3. Study Program
- Lunch Given by the President of the Senate, M. Alain Poher
- PM General discussion and possible joint statement

The Trilateral Commission: Executive Committee Meeting

Paris, 29 November - 2 December

The principal theme for the meeting will be Global Resource Management. Three half-day sessions will be devoted to discussion of various aspects of this theme, based on three Trilateral Task Force reports which will be presented to the Committee. The first report, entitled "Seeking a New Accommodation in World Commodity Markets," will deal with a wide range of issues concerning international trade in primary products from the vantage points of the developing as well as the developed countries. The report argues that a new balance of responsibilities is required in the international economic and political system. More enlightened and cooperative policies are required by both developed and developing nations to promote the stable environment needed for global expansion. And the world's finite resources must be utilized more efficiently so that the well-being of future generations is not sacrificed. Among the preliminary recommendations of the Task Force report are the following proposals:

- a. A new set of general principles governing commodity markets is required. These would include recognition of the right of producer countries to control exploitation rates for their resources, subject to an obligation to minimize hardships on other nations; non-discrimination in the supply of commodities; and recognition that the rights of future generations are equal to those of the current generation.
- b. An international information and research center for commodities, representing producer and consumer nations, to provide information and forecasts relevant to the operation of commodity markets.
- c. New approaches to commodity price stabilization, on a case-by-case basis, designed to ensure that prices remain responsive to market forces over the longer term. Self-financing buffer stocks should be established and operated by reference to a basic price which would be subject to periodic renegotiation, but would not be indexed.
- d. Trade reform measures based on non-discriminatory, worldwide trade agreements. These would include tariff reductions by developed countries to improve access to their markets for semi-processed materials and better generalized preference schemes.
- e. New approaches to investment in raw material extraction, including the creation of a more stable investment environment for multinational enterprises (MNEs) linked to the gradual assumption of an ownership position by host countries in projects initiated by MNEs. A major increase in the capital of the International Finance Corporation is recommended to facilitate this process.

- f. New measures to improve global income distribution, possibly including an international tax on consumption which would replace existing forms of development assistance.

The second report, The Future of the Oceans, will consider the global and long-term perspectives on the management of the oceans and review the current negotiations at the UN Law of the Sea Conference in the light of these perspectives. The Task Force will make the following recommendations:

- a. That Trilateral nations should not extend their offshore jurisdiction unilaterally in 1976.
- b. That coastal state regulatory regimes for fisheries should be supplemented by strong regulatory regional authorities for both allocation and conservation of fisheries. Revenues which might be generated by the regulation of fisheries should be used for internationally agreed purposes.
- c. Royalties from the exploitation of marine resources beyond territorial limits, but within coastal state jurisdiction, should be internationally shared.
- d. In areas beyond national jurisdiction, seabed resource exploitation should be managed by an International Seabed Authority with full powers for licensing and technical regulation. Joint ventures with the Authority might be encouraged to resolve the existing international disagreement about how these resources should be exploited.
- e. Controls over marine pollution should be strengthened.
- f. Dispute settlement panels for ocean affairs should be established under UN auspices.

The third report, an interim report of the Task Force on International Institutions, will review the successes and failures of post-War efforts to create multilateral institutions and recommend ways in which such institutions can be reformed so as to facilitate international cooperation in an increasingly interdependent world.

Taken together, the reports outline policies which would breathe life into the idea of multilateral management of global problems in the era of interdependence. The reports on Commodities and the Oceans recommend new ways of generating revenues which would be internationally shared and which, in conjunction with the policies of existing institutions such as the IBRD, could contribute to a more equitable global income distribution and provide more automatic sources of economic assistance such as have been increasingly discussed in the UN and other fora. Yet the proposals are also carefully conceived to preserve a stable climate of economic and political expectations which would facilitate global economic growth.

# THE TRILATERAL COMMISSION

345 EAST 46TH STREET

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NORTH AMERICAN SECRETARY

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EUROPEAN VICE CHAIRMAN

October 2, 1975

ZBIGNIEW BRZEZINSKI  
DIRECTOR

## MEMORANDUM

CHRISTOPHER J. MAKINS  
DEPUTY DIRECTOR

TO: NORTH AMERICAN COMMISSIONERS

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RYUJI TAKEUCHI  
OTTO GRIEG TIDEMAND  
NOBUHIKO USHIBA  
PAUL C. WARNKE  
SIR KENNETH YOUNGER  
SIR PHILIP DE ZULUETA

SUBJECT: PAPERS FOR MEETING OF NORTH AMERICAN MEMBERS OF THE  
COMMISSION IN NEW YORK CITY, 16-17 OCTOBER

These two folders contain the papers for the meeting of the North American members of the Trilateral Commission in New York on 16-17 October. Details of the program are in the first folder. The first folder also contains a preliminary version of the report Seeking a New Accommodation in World Commodity Markets from the Trilateral Task Force on Commodities. The final version of this report will be presented to the Executive Committee in Paris on December 1. The preliminary version will be amended before the Paris meeting in the light both of Commissioners' comments at the New York meeting and of consultants' views expressed at a recent meeting in Japan, an account of which will be given during the New York discussions.

The second folder contains the report The Future of the Oceans from the Trilateral Task Force on the Oceans. This report, an interim version of which was put before the Commission at the Kyoto meeting in May, is now in the form in which it will be presented to the Executive Committee at the Paris meeting. Comments made in the discussions in New York and Paris will be reflected in the final version of the report after the Paris meeting. The folder also contains a map which helps to illustrate the implications of expanding national jurisdiction over ocean areas. (The map is intended solely for illustrative purposes: no significance should be attached to any political implications which the data in the map may carry.)

### JAPANESE OFFICE

JAPAN CENTER FOR INTERNATIONAL EXCHANGE  
7A HERMANOS AKASAKA BUILDING 8-4-3, AKASAKA  
MINATO-KU, TOKYO

### EUROPEAN OFFICE

CENTRE FOR CONTEMPORARY EUROPEAN STUDIES  
UNIVERSITY OF SUSSEX  
FALMER, SUSSEX BN1 9RF, ENGLAND

Energy

The Energy Task Force will prepare an interim report of 10-20 pages indicating the issues to be addressed in a lengthier report to be written at a later date. The interim report will examine the following questions:

1. The effect of the supply and price of energy on the political and economic relations of the consuming nations, both among themselves and with the producing countries, and where common interests may be in both cases;
2. Problems to be expected in both the short term (say 1974-76) and the long term (1980-85), how they will interact, and how policies and actions taken from one perspective will affect the dimensions of what can or should be done from the other.

The longer report, to be ready by the fall 1974 Executive Committee meeting, will:

1. Analyze the political implications of the energy crisis, and
2. Recommend steps to be taken by the Triilateral Commission.

THE TRILATERAL COMMISSION

345 EAST 46TH STREET

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SIR KENNETH YOUNGER  
SIR PHILIP DE ZULUETA



MEMORANDUM

TO: North American Commissioners

FROM: Zbigniew Brzezinski *ZB*

SUBJECT: Interim Paper on the Political and International Implications of the Energy Crisis

I enclose herewith the draft of our interim report on the political and international implications of the energy crisis. I apologize for the late date of this mailing, but its preparation was delayed because Mr. Campbell was attending a meeting in Europe between European and Arab political figures and energy experts, and he was also taking part in consultations with our European and Japanese rapporteurs in Europe. The enclosed draft has benefitted from these discussions.

The draft will be discussed at the meeting of the North American Commission May 30, but written comments from those unable to attend will be welcome.

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EUROPEAN COMMUNITY INSTITUTE FOR UNIVERSITY STUDIES  
RUE DE TREVES 47  
1040 BRUSSELS, BELGIUM

TRILATERAL TASK FORCE ON THE POLITICAL

AND

INTERNATIONAL IMPLICATIONS OF THE ENERGY CRISIS

Energy: The Imperative For

A Trilateral Approach

John C. Campbell  
Guy de Carmoy  
Shinichi Kondo

May 1974

[Subject to final clearance  
by Messrs. de Carmoy and Kondo.]

## THE TRILATERAL PROCESS

The report which follows is the joint responsibility of the three rapporteurs of the Trilateral Task Force on the Political Implications of Energy, with Mr. John C. Campbell serving as the principal drafter.

Although only the three rapporteurs are responsible for the analysis and conclusions, they were aided in their task by extensive trilateral consultations held during 1974 in Tokyo, Brussels and New York, which at various stages in the development of the report included the following:

Zbigniew Brzezinski, Director, The Trilateral Commission  
George S. Franklin, North American Secretary, The Trilateral Commission  
Wolfgang Hager, European Secretary, The Trilateral Commission  
Rokuro Ishikawa, Executive Vice President, Kajima Corporation  
Paul F. Langer, Senior Social Scientist, The RAND Corporation  
Walter J. Levy, President, W.J. Levy Consultants Corporation, Inc.  
Kiichi Miyazawa, Member of the Diet (LDP); former Minister of International Trade and Industry  
Yoshihiko Morozumi, Vice Chairman, Committee for Energy Policy Promotion; former Vice Minister of International Trade and Industry  
Sohei Nakayama, Counsellor, Industrial Bank of Japan  
M.V. Posner, Director of Studies, Pembroke College, Cambridge University  
Ronald Ritchie, Chairman, Institute for Research on Public Policy, Montreal  
Kiichi Saeki, President, Nomura Research Institute of Technology and Economics  
Masao Sakisaka, President, Institute of Energy Economics/Japan  
Dieter Schmitt, Energy Institute of Cologne, University of Cologne  
Pierre Uri, Atlantic Institute for International Affairs, Paris  
Carroll L. Wilson, Professor of Management, Alfred P. Sloan School of Management, Massachusetts Institute of Technology

(Draft, May 17, 1974)

ENERGY: THE IMPERATIVE FOR A TRILATERAL APPROACH

First Report of the Trilateral Commission  
Task Force on Energy

I. The Scope of the Problem

The energy crisis confronting the nations of Western Europe, North America and Japan is both specific and general, immediate and long-range. In its simplest and most urgent form it concerns the shortages of supply and the staggering increases in the price of oil with which each country has had to contend within the past year. More broadly, it has to do with shocks which these developments and our governments' attempts to cope with them may inflict on the world's monetary and trading system. And in the longer run the crisis poses fundamental questions about how our expanding industrial societies, which in the past quarter century have been fuelled increasingly by cheap and plentiful oil, will fare in the coming decade when oil supplies are neither cheap nor secure, and in the more distant future when they have virtually disappeared.

The war of October 1973 in the Middle East and its accompaniment of embargoes, cutbacks in oil production, and rises in price did not create the energy problem. These events speeded up trends already visible, gave them a sharp political twist, and revealed with merciless clarity the vulnerability of the industrial countries. It was evident that these countries could not go on indefinitely at the rate at which their consumption of energy had been expanding since 1950, for that expansion would

have to come mainly from imported oil, its availability uncertain and its price inordinately high.

The pervasive influence of the energy crisis on the entire fabric of national and international economic life will inevitably have political consequences and will require hard political decisions. Hence the importance, for the governments and peoples of the Trilateral countries, of seeing the magnitude and scope of the problem. When they see it, we believe they will find no viable alternative to a common approach.

This Report first examines the economics of the future energy picture, then the politics of it, and finally makes some proposals.

#### A. Economics

It is useful to distinguish two time perspectives, one for the next ten years or so, and the other running to the end of the century and into the next.

In the first period the economy of the industrialized Trilateral region as a whole will continue to be dependent on oil imports from OPEC (Organization of Oil Exporting Countries) sources. Our societies are based on high energy consumption. They cannot suffer a drastic drop in available supply or stagnation in the rate of energy growth without serious economic and social consequences. Against this structural demand there is an insufficiency of reliable supply, since a critical part of their current supply is subject to decisions on access and on price which are out of their control and can be arbitrarily made. Because substitute sources of supply will take years to develop, the period of continued dependence will last into the 1980s for virtually all the Trilateral countries and beyond 1985 for most of them.

The magnitude of the anticipated gap depends on how one estimates the growth in requirements for imported oil. Projections made in the early 1970s, based on what had been normal rates of growth in energy consumption during the two previous decades, set U.S. requirements in 1985 in the vicinity of 13 million barrels per day, Western Europe's at about 23 million, and Japan's at about 11 million. All three regions, in those circumstances, would be increasingly and critically dependent on imports, which would have to come mainly from the Middle East. As a result of experience and further study since the autumn of 1973, such projections can be revised to take account of anticipated conservation, greater efficiency in energy use, increased domestic oil and gas production, import substitution, and higher prices. Much more can be accomplished by such measures in the United States, however, than in Europe or Japan. The U.S. import requirements might be reduced to less than 5 million b/d, perhaps as little as 3 million, by 1985 or even by 1980. Western Europe's imports would still be between 15 and 20 million b/d, and Japan's at about 9 million.

The question of price may be even more difficult, for the drastic rise in prices determined by OPEC at the end of 1973 inevitably upset the economic equilibrium of the consuming countries and foreordained a massive transfer of financial assets, and thus of economic power, from them to the oil-producing countries. The anticipated additional oil bill, for 1974 alone, is in the vicinity of \$50 billion for the industrial countries and \$10 billion for the developing countries unfortunate enough not to be exporters of oil. The effects on the international monetary system, on currency values on rates of inflation, and on living standards are impossible to calculate but bound to impose strains of an unprecedented character.

Looking well beyond the immediate problems and those of the next decade, we can see the end of the hydrocarbon age. The date cannot be fixed because the size of new discoveries of oil and gas cannot be predicted, but with consumption outrunning additions to proved reserves the handwriting is on the wall. The world must be prepared, accordingly, to make the transition 30 or 40 years hence to an economy based primarily on coal (and its derivatives) and on nuclear power. The goal will be to reach, without a disastrous gap, the age when abundant renewable energy is available for the world's use through breeder reactors, controlled nuclear fusion, harnessing the power of the sun, or in other ways. The conditioning factors for supply of energy over the long term are investment, technology, and ecology, and the initial decisions have to be made now.

The economic problems may seem simple -- how to restrain demand and maximize supply at tolerable cost and where to put investment in alternatives to oil -- but in fact are complex because they combine short, medium, and long-term considerations and at the same time involve a balancing of financial, technological and other factors. They will require on the part of democratic governments considered and far-reaching decisions, often to serve international rather than strictly national interests, in situations where the short-term pressures from their constituents will often be pushing them in the other direction. Thus a large part of the problem of making economic decisions may be, in fact, political.

#### B. Politics

In the necessary effort to bring the world through the next decade and on toward the age of nuclear energy without major upheavals, the advanced industrial societies of North America, Europe and Japan have a deep

involvement and special responsibilities. With economies which are interdependent and political interests which in the past have been compatible and mutually supporting, they have an overriding concern with the good health of their relations among themselves and with the preservation of a workable trading system and an effective international monetary structure, both of which are already under stress.

It seems clear that international economic relations, with a strong assist from the energy crisis, will take on an increasingly political character. This is already apparent in the relations between oil-consuming and oil-producing states. The private oil companies, where they have not already been taken over, can no longer make decisions on such matters as how much they will produce in the latter states or at what price. The governments of consuming countries do not have much to say about those matters either, but they know now that how to get oil is their problem and that they have to deal with it both in discussions with each other and in negotiations with producing states.

How are the OPEC members, mainly the big Persian Gulf producers, to be persuaded to keep up the supplies of oil? All of them know that their oil reserves are finite. They will decide for themselves on the rate at which they use them up. Some, with major economic development programs, may prefer a high level of oil exports in order to maintain a high level of income. Others, with smaller populations and less ambitious programs, may be reluctant to push production beyond the point which meets their own needs for money income. Some may restrict production in order to prolong the life of their reserves. All will wish to keep prices up.

And some may wish at one time or another to determine policy on production and export of oil on essentially political grounds. The partial relaxation of Arab embargoes and production cutbacks early in 1974 was tactical rather than strategic; the Arab oil-producing states have said that they will use the "oil weapon" again if they find it necessary.

Similarly in the case of relations with the less developed countries which are not oil-producers, the effects of the energy crisis will bring governments of the Trilateral countries, by choice or by circumstance, into increasing involvement in international economic relations. The rise in oil prices threatens the world's poorer countries with economic ruin, which they will seek to avert by mobilizing such political pressure on the rest of the world as they can for massive concessional aid and by trying to apply the OPEC method to any valued raw materials they themselves may have. The developed countries and the newly rich oil-producers will have to make basic political decisions on what to do about it.

The end of the era of cheap and plentiful energy is most striking, perhaps, in its impact within our own countries where it impinges on the lives of individuals. Beyond the obvious adjustments to shortage and inconvenience, it poses more fundamental questions about rates of growth, conservation of resources, the balance between economic and environmental values, and the creation or refashioning of institutional structures adequate to the challenge of new demands. Within national economies, under the pressure of high-cost energy, governments and peoples will have to take decisions on allocation of resources, on priorities among different forms of production and subsidies to investment, on revamping of transportation systems, on patterns of location for industry, public services, and housing.

One cannot predict how far-reaching the economic and social effects of the energy crisis will be. What is predictable is that under these multifarious dislocations and pressures, the lines between private decision and public control, between the freedom of individuals to live their own lives and the social requirement for rationality and equity in the use of scarce resources, will come under strain. These are practical rather than philosophical questions. They will challenge the ability of our societies to maintain democratic institutions and the essentials of free enterprise necessary to an efficient economy.

These are, in the common view, problems of domestic policy, and we do not pretend to judge how each country will succeed in dealing with them. But the line between domestic and foreign policy is unclear, and the inclination is always present to have the cost paid by someone else. At such a time it will require extraordinary leadership on the part of governments, as well as extraordinary public understanding and discipline, to avoid seemingly simple solutions which promise, in the short run, more imported oil or higher exports or a cheaper currency. For such a course will lead only to destructive competition in scrambling for oil, pushing exports and shutting off imports, and devaluing currencies.

It is hard to avoid the conclusion that the greatest challenge of the energy crisis lies in the relations among the developed nations of the Trilateral region. Thus far it has done more to disrupt the European Community than to pull it together, and the same is true of Europe's and Japan's relations with the United States. Unless these nations can establish the necessary cooperation with each other, they can hardly be effective in dealing with the rest of the world, the oil-producing countries especially. In order to have a realistic basis for such collaboration,

it is necessary to see what the respective positions of the different Trilateral countries are and what are the factors of competition and of common interest to be taken into account.

C. Relative Positions of the Three Regions

The balance among the three regions should be conceived first of all in terms of energy resources, but also in terms of political and military influence, economic and monetary strength, and technological capabilities.

The position of North America is relatively strong. The United States and Canada have very large potential resources (oil, natural gas, coal, oil shale, tar sands) which if developed could produce energy well beyond their own needs. The United States will not be critically dependent on Middle East oil, which made up only 6 percent of primary energy consumption in 1973, unless it allows the whole of its increment in energy growth to come from that source. It has the natural resources, the financial means, the technological capacity and presumably the political will to become virtually self-sufficient in energy by 1985 and to remain so. The net supplementary cost of oil imports may amount to \$10 billion in 1974, but the balance of current account with the oil-producing countries may be running the other way within a year or two because of their desire for American goods and the attractiveness of the American market for long-term investments. The dollar is emerging from the energy crisis stronger than before.

Canada is roughly self-sufficient in energy now (imports of oil to eastern Canada in the past were generally matched by exports from western Canada) and likely to remain so. When Alberta's conventional oil sources begin to taper off, they will probably be more than replaced by oil and gas from the Arctic, and eventually, oil from the Athabasca tar sands.

Canadian governments of whatever political stripe are likely to be developing a national energy policy carefully attuned to Canada's needs, and to be chary of any rapid exploitation of its resources by foreign capital largely for foreign markets.

The United States is the strong partner in the Atlantic alliance and in its security arrangements with Japan. Its naval power in the Mediterranean and the Indian Ocean is the only military counterweight to Soviet power in those areas. It is the main supplier of arms to Israel, Jordan, Iran, and other Middle East countries and is regarded by a number of those states as a mainstay of their security. The United States also has considerable political and diplomatic leverage in the Arab-Israeli conflict through its influence with both sides, although its policies of support for Israel have tended to undermine its relations with the Arab states, including the oil-producers.

Western Europe is in a much weaker position, both politically and in respect of energy. Although the E.E.C. functions as a common trading unit, it lacks strong political institutions. Neither the Community nor its member states have significant military influence in the Middle East. They have an interest in a peaceful settlement of the Arab-Israeli conflict but have not been able to play an effective part in bringing it about through negotiation.

The dominant fact of Western Europe's energy situation is its dependence on Middle East oil (60 percent of OECD Europe's primary energy consumption in 1973). This proportion may be somewhat reduced in the next decade through the development of North Sea oil and gas and the pursuit of strict and consistent policies on the use of energy, but it is doubtful

that dependence on external supplies will be brought below 45 percent by 1985. This relatively weak position is accentuated by the absence of a common energy policy in the E.E.C. One has therefore to consider the positions and policies of individual countries.

Great Britain and the Federal Republic of Germany are about 50 percent self-sufficient in primary energy consumption. Britain will have difficulty in the next few years in meeting its oil import bill at a time of serious balance-of-payments difficulties and uncertainty over continued membership in E.E.C., but its longer-term prospects are favorable because of North Sea oil and gas. Germany, at least in the short term, can balance its trade in spite of the high cost of oil thanks to its formidable export potential and large monetary reserves; but Germany may lose export markets as other countries take defensive measures to protect their own industries and pay for imported oil.

France is faced with large trade deficits, is investing heavily in nuclear plants, and has resorted to substantial external borrowing. Its position is essentially weak despite some positive elements such as comparatively large gold reserves (which will jump if there is a revaluation at or around the market price), heavy sales of arms to oil-producing countries, and a pro-Arab foreign policy that might win special favors. The plight of Italy is the most serious. Unable to stop the drain on its balance of payments despite heavy borrowing, it has introduced import restrictions to the detriment of its partners in E.E.C. as a short-term palliative measure. Italy's fundamental problems remain unsolved, and its situation is likely to get worse.

Japan is even more dependent than Western Europe on external supplies of energy -- about 75 percent of domestic consumption. All of its petroleum is imported, over 80 percent of it from the Middle East. Thus Japan is the most vulnerable of all the industrial nations and does not expect the major international oil companies to be able to guarantee the needed volume of supplies. High prices for oil (the import bill is likely to increase by \$8 billion in 1974) have already led to a weakening of the previously strong trading position, depreciation of the currency, and a further rise in inflation. Japan will try to develop its own energy, principally nuclear energy, as well as to diversify its external sources of supply, but it cannot escape from its position of dependence and vulnerability for many years. Its ability to continue meeting its oil bill will depend on its long-range export possibilities, especially to oil-producing countries, and on the demonstrated capacity of government and the business community to reach decisions and to adapt the economy to changing conditions.

For any and all of the oil-consuming countries, the prospect of massive exports to producing countries is very attractive, as is the idea of getting back as investment the funds they pay out for oil. They are, however, in competition with each other in exports and in attracting investments, and those in the stronger positions are likely to have the advantage. Thus the United States has an edge in the selling of arms, for reasons of technology and political influence. Germany and Japan have the best possibilities for selling equipment. And investments of oil money from the Middle East are more likely to flow to America or Germany rather than

to countries with weaker currencies and dimmer prospects. The absence of strong European institutions works against the recycling of funds to Europe.

This factual picture of differing economic and financial positions of the countries and regions of the Trilateral area must be understood both for its political reality and for its disturbing implications. For some years ahead the United States, Canada, and later Great Britain will feel a certain confidence in the possession of energy resources which the others will not have. Germany and Japan may have compensating advantages in the competitive strength of their economies. Intensive competition, if it is uncontrolled, can turn out very badly for those in a weaker position. Competition should therefore be matched by cooperation.

Cooperation, of course, has its limits; for example, it cannot determine where Arab investors will put their money or to whom private bankers will make loans. The stronger countries will not be inclined to engage in an unending series of operations to rescue the weaker. Yet all have a stake in the survival of all, and in the survival of a viable economic order in the world. In the framework of a long-term approach which makes sense for all, which offers a constructive alternative to the uncertainty and vulnerability of the period immediately ahead, it becomes politically possible and indeed necessary for the stronger economies to aid the weaker, provided the latter, through conservation of energy and in other ways, are pulling their weight and not merely getting a free ride.

## II. The Need for Cooperation

The energy problem requires not only a series of defensive measures against shortage, dislocation, inflation, and the excesses of economic nationalism, but also a positive strategy which sets priorities and assures the rational, long-term development of energy resources in ways compatible with democratic freedoms. Market forces will provide much of the motive power, but it is necessary to set the context within which private decisions on investment, for example, can be made and market forces can operate to the best advantage. The overall strategy must take the form of public policy based on the conscious choice and dedicated effort of governments and peoples, first of all among the advanced industrial nations but with full consideration for the interests of other nations and an open invitation for their cooperation.

The Trilateral countries must go forward together in a joint commitment to develop energy and to meet its high cost, with a plan covering the next 20 years or so. They will/succeed if they have, in effect, "Project Independence" for the United States and "Project Arabia" for Europe and Japan.

At the Washington conference of February 1974 the countries of the three regions(except France) agreed on the need for "a comprehensive action program to deal with all facets of the world energy situation by cooperative measures." Based on that agreement a coordinating group was established, and work goes forward in the O.E.C.D. and in ad hoc working groups. It is not our purpose here to review or to judge this work in its present early stages. This report will concentrate on the overall approach to the problem, the need to establish long-term goals, and the specific fields in which early and effective action is essential.

1. Conservation and efficient use of energy

We stress this subject both for its promise of actual results and for its important psychological effects. Avoidance of waste and increasing efficiency in the use of energy are mandatory in an age of scarcity and high cost, when many systems and methods unattractive at earlier prices become feasible and desirable. Much can be done without changing lifestyles, and more can be done with some changes. Extravagance in personal consumption is no essential attribute of a free society; indeed, to trim unnecessary fat may have social as well as economic benefits. Economic incentive will provide the main motivation, but governments will have to set priorities for the use of energy, limit the consumption of certain goods, engage in planning, pass legislation, and vote funds in such fields as mass transit.

We should recognize that the consumption of energy cannot be expected or permitted to grow exponentially, as it has in the past, at a rate which would project a doubling of U.S. demand between 1970 and 1985, and a doubling again by 2000, and even higher rates of growth for Europe and Japan. Holding down demand for energy is one of the surest ways, within its limits, of coping with the problem of supply. It is also a method which gives rise to a minimum of international controversy and can induce habits of cooperation. Improvements in energy efficiency should be widely applicable in industry, transportation, housing, and electric power production, with much of the cooperation carried out by private firms and research organizations.

Obviously, demand cannot be cut in the same precise proportions in each country. Geographic, economic and social factors differ. Japan is under greater pressure to save energy than the United States or Canada, but has less margin for doing so. Ten percent saving from past levels of

consumption is within reach of all. Although formal international agreement on fixed standards of conservation would be hard to attain and probably not necessary, governments should nevertheless set generally agreed targets and roughly comparable levels of effort, without which it will be difficult to have an effective sharing of supplies in an emergency.

## 2. Assuring safe and adequate supplies

Here there is a double set of problems. The first involves measures to develop supplies within the Trilateral area itself and in areas deemed relatively safe from interruption. The second involves doing what is possible to assure the continued flow of oil from the principal exporting countries now members of OPEC. The two problems are related in that progress toward self-sufficiency and in broadening the base of supplies and narrows the market for OPEC oil/may increase the incentives for continuing to supply it. Yet economic bargaining power on the consumer side will still be limited owing to the quasi-monopoly position of the producers. The consuming countries should offer all the incentives they reasonably can, such as the sale of capital equipment and technical skills for development programs, or in investment projects outside national borders for those like Saudi Arabia with income-earning capacity surplus to their own needs for development.

Such arrangements cannot guarantee the continued flow of oil imports, especially if political developments in the Middle East bring Arab states once more to the use of the "oil weapon". The consumers will have the best chance of coping with all contingencies if they maintain solidarity among themselves both to set the framework of cooperation with the producing states and to face cutbacks and embargoes if and when they are imposed.

The producing states should know that to cause economic breakdown in the industrial countries by withholding supplies or by sky-high prices cannot be in their own interest, and that economic relations must be seen in the context of overall political and security interests on both sides.

In the interest of larger and more diverse supplies, the consuming countries, and in particular their oil companies, should look to the possibilities of exploration and development of oil and gas in such areas as offshore Asia, Africa, and South America, where the political hazards may be lower than in the Middle East. Joint projects involving a number of governments and companies, working with the sovereign local governments, might be the most promising approach. With Venezuela's consent, a major endeavor of this kind to develop oil from the Orinoco tar belt could be a boon to the world oil supply of the future.

Within the Trilateral area those countries with significant energy resources should develop them. There will be a common interest in having the United States move ahead with coal production, coal gasification and liquefaction, oil shale, and additional oil and gas; Canada with hydroelectric power, Arctic gas, and tar sands; Britain and Norway North Sea oil; Europe with coal and natural gas; and all with nuclear energy. Whatever increases the total supply should benefit the entire community. There will be a common interest also in pursuing some of these endeavors in joint projects involving, for example, European and Japanese participation in development of U.S. coal resources, or U.S., European, and Japanese participation in the development of Canada's tar sands.

The United States, Canada and Great Britain, primarily concerned with use of their resources in the light of their own long-term needs, may be reluctant to include others or to make commitments regarding future export of the product. Problems could arise also with respect to joint financing and the need for subsidizing the product when the world oil price is cheaper. But the fact of outside participation may be more significant than its actual quantity, and the hazards of collaboration are to be preferred to the resentments fed by unilateralism and dog-in-the-manger policies. The need for investment in all kinds of energy over periods up to 20 years is such that cooperation for reducing costs is essential, and joint planning is required to assure coordination of long-range policies.

One cardinal point in respect of supply is that the industrial countries, having made the decision to develop high-cost energy as the alternative to and eventual replacement for imported oil, have to stick with their decision. They cannot relax at times when the oil is flowing in, without heed for the morrow. Those who undertake the investments must have assurances that the projects will go on and the products will be marketed, even if the oil-producing states should drop their price below that level.

### 3. Sharing in an emergency

The experience in 1973-1974 showed that when an emergency occurs it is too late to establish an effective sharing plan. The private companies did well in the distribution of available supplies, but they did not seek that authority and do not want it in the future.

It is up to the governments concerned to agree on (a) the conditions which will constitute an emergency; (b) a stockpiling program; (c) emergency

production plans; (d) special conservation measures and (e) a plan for the allocation of supplies. The sharing plan should be based on need, taking into account both consumption and import patterns. If the emergency is marked by embargoes or other discrimination on the part of producing countries in supplying oil, the sharing plan should have the effect of spreading on an agreed basis the consequences of such unequal treatment, even at the risk of further measures limiting the total supply. That idea may be difficult to apply in practice, but it should be accepted as a guiding principle. If the opposite concept of go-it-alone prevails in this field of energy policy, it will surely prevail in others as well.

#### 4. The financial impact

Meeting the higher cost of imported oil is both an immediate and a long-term problem. It has no easily discernible solution. Short-term borrowing may get some importing countries through their immediate financial crises but merely puts off the day of reckoning. They cannot cut oil imports drastically to fit their pocketbooks because the shock to their economies would reduce still further their ability to pay. They will do what they can do to increase exports to producing countries, but even the most rapid increases of imports by OPEC countries must lag far behind the explosive growth of their oil income. In trade, as in the "recycling" of surplus funds through their investment in consuming countries, the money is not likely to flow back to the countries which need it most.

The unavoidable result of the present high price for imported oil is that many countries will be unable to pay for oil and their other needed imports over any extended period. At the very least they will be forced into nationalistic measures of import limitation, dumping, and currency devaluation, provoking retaliatory and competitive moves by other countries.

This is a situation of great urgency requiring common approaches within the European Community and between the Community, the United States and Japan. In the short and medium term the nations which are financially stronger will have to provide emergency help to those threatened with crisis, or all will in time be in crisis.

Individually and in concert, the Trilateral countries must do what they can to combat the effects of high oil prices by all possible measures of conservation and import substitution. Yet as long as the dependence on imports for a vital portion of energy requirements exists, the producing countries can more or less set the price they want. Wishing their oil reserves to last, they will have a continuing interest in getting more money for less oil. The possibilities of a retreat on the price lie in competition among producing states anxious to maximize income but unable to agree through OPEC on manipulating exports and prices to that end, or in a realization by the producers of the global consequences of depression and possible economic breakdown in the industrial countries.

In such circumstances some of the major producers might agree to lower the price of oil or to accept a scheme for deferral of a portion of the payments. But the only sure way to be relieved of paying tribute to the producers is to proceed seriously with development of alternative sources of energy. This will be high-cost energy, of course, but probably not far from today's prices for OPEC oil, and in time it should establish a ceiling above which oil imports would not go. The demonstration of serious intent could have an effect on prices before the new sources were actually producing in quantity.

### 5. Technology and research

The need for rapid progress in efficient use of energy, protection of the environment, and development of new resources will require a more extensive sharing of technology than is ordinarily possible. If there is solidarity in the distribution of scarcity, there should be solidarity in the distribution of new technology to overcome scarcity. It is comparable to a wartime situation in which allied governments, in developing new weapons and in mobilizing their economies, put science and technology to work where there are the best chances for achieving results. The United States, Canada, the E.E.C. and Japan should work out a detailed agreement.

Priorities have to be established on the main lines of research and development in new forms of energy and the division of labor for pursuing them. Past experience highlights the difficulties of predicting the rate of the development of nuclear power, but by 1985 it could be producing at least 15 percent of total energy consumption in the O.E.C.D. countries. Thereafter, the world will count on the increasing use of nuclear power, but on many aspects -- providing adequate fuel for nuclear plants, preventing diversion of fissionable materials, ensuring safety -- technology must be developed further and political-economic decisions have to be made. These matters cannot be adequately dealt with on the national level alone.

Looking further ahead to forms of energy to which scientific discovery has not yet brought us (nuclear fusion, solar energy for

electricity, hydrogen, and others), governments and research institutions will have to set priorities for the use of their talents and resources in accordance with a general plan, and to review and change those priorities as the march of science and technology goes forward.

### III. Relations with Other Countries

#### A. Oil-producing countries

The consuming countries must try, as indicated under the above recommendations on supply and on price, to build a continuing relationship with the oil-producing countries in which both sides have a stake and will not wish to disrupt. It is not easy to do so, given the atmosphere of the past year. The credibility gap is wide, but obviously the dialogue has to begin. Many of the producing countries' arguments are well taken and deserve a respectful hearing in the search for an accommodation of interests.

The new relationship, in any case, must take account of the legitimate desire of the producing nations to own and control their resources, to build industries to process those resources, to move rapidly ahead on the path of general development, and to make sound investments. It should accord to them a place in international economic councils commensurate with their increased economic status. The industrial states should be prepared to furnish technology and management skills to help them diversify their economies and prepare for the time when their oil resources will decline, for example, by joint research in the field of solar energy. Building refineries and petrochemical industries in the oil-producing countries will tend to increase dependence and to increase the cost of petroleum products for the consumers, but these industries are going to be built one way or another and the wise course is to help.

Solidarity of the consuming countries remains essential, as the alternative to a ruinous scramble for competitive advantage. This does not mean a confrontation of two monolithic blocs or a huge conference of consumers versus producers, but neither does it mean that the former should not use what bargaining power they possess. Bilateral contacts or approaches to producing countries on a regional basis (e.g. by E.E.C.) should not be ruled out and may indeed be beneficial, as long as they do not have the effect of tying up supplies or bidding up prices to the detriment of others, but they do tend to reduce the potential bargaining power of all consumers. The record of the oil-producing countries in keeping agreements, moreover, is not such as to give assurance that bilateral deals can be relied on to produce in fact the benefits they seem to promise.

American, European and Japanese firms will be competing in exports to the oil-producing countries, but here again the general interests of the Trilateral countries as a whole should set the framework. The more bilateral deals are expanded, the more those who make them are subject to political pressure. Unrestricted and uncoordinated bilateral projects also tend to work in the direction of wild and uneconomic investment in the oil-producing region as a whole, which is in no party's interest. International consortia may be useful for many development projects, especially for large and politically conspicuous ones. At the least, there should be an accepted practice of exchanging information and consulting in the O.E.C.D.

Similarly on political matters, a generally agreed overall approach to such questions as settlement of the Arab-Israeli conflict or arms sales to Middle East states would increase the chances of harmonizing oil

policy with political and security objectives. Our several governments would, of course, maintain their own respective interests and differing degrees of intimacy with the various Middle East states, but they must avoid the acrimony and cross purposes which characterized their mutual relations in the autumn of 1973. North America, Western Europe and Japan have common interests in the availability of Arab oil, in the survival of Israel, in Arab-Israeli peace settlements, a stable balance, and avoidance of a great-power conflict in the region. All have a political-economic role to play in that area in the years ahead.

Although the United States sees these problems more from a global viewpoint, and Europe and Japan see them in a more limited way, harmony on broad policy is necessary not only in the light of their own mutual relations, but also in bringing the Middle East states as well to see their policies on oil in the broader context of international security and cooperation. The political instability of the Middle East region holds dangers which menace the feasibility of development programs and the security of governments as well as the interests of Western consumers.

#### B. The Soviet Union and China

It is logical to explore possibilities of obtaining increased supplies of energy from the U.S.S.R. or China. Proposals presently under discussion by U.S. and Japanese companies with the Soviet Government seem to involve high costs and high risks, and should be weighed against comparable investments elsewhere. Vast Soviet reserves of energy, particularly of natural gas, may indeed prove to be a much needed source in the 1980s for the U.S.S.R. itself and for many other countries as well. Increasing the

supplies of Soviet gas to Europe appears to make more sense than costly and complex arrangements for shipment of liquefied natural gas to the United States. It is natural for Japan to diversify its sources of energy by looking both to the U.S.S.R. and to China, but in any arrangement it makes with one of them it has to weigh the political reaction of the other.

As for the general political aspects, Japan or European countries may be wise not to go into large-scale energy projects in the U.S.S.R. except in association with each other or with the United States. Cooperation in energy development with the Soviet Union or China could help to strengthen the trends drawing those countries more into the world economy, but vague political hopes should not outweigh the hard facts of cost, and none of the Trilateral countries should take the political risk of a substantial degree of energy dependence on the Soviet Union or China.

### C. Developing countries

As the Report of the Task Force on Relations with Developing Countries states, the effect of the rise in oil prices, together with increased prices for other essential products, on a number of the developing countries has threatened them with disaster. They require help both immediately and in the longer term.

Emergency aid must be furnished in the form of grants or soft loans, for there is little prospect that it can be repaid. The stronger industrial countries, especially those which have gained by the high prices of food, fertilizers and other goods needed by the developing countries, should maintain or increase current levels of aid despite their own troubles with oil payments, and the oil-producing countries should also contribute through existing international financial institutions or new arrangements such as have been proposed by Iran. It should be clear that this is not just the "north-south problem" in more acute form, for the oil-producing

states have both a heavy responsibility for the plight of the others and ample means to ease it.

In the longer run, the continuance of high-cost energy for all will create for many developing countries a situation of permanent inability to meet their fuel bills. As the developed countries increase their own production of energy, there should be more Middle East oil available on the world market, perhaps at a lower price. One way or another, the prices the poorer developing countries pay for oil and for food will have to come down, or arrangements for concessional aid on a more or less permanent basis will have to be established. Because this is a common obligation of the industrial and the oil-producing countries, it provides another facet of the cooperation which their own reciprocal interests in oil, trade and development will require them to build. And the urgent human considerations for doing so should be beyond dispute.

#### IV. Institutions

The Trilateral countries need adequate institutional arrangements to coordinate the many aspects of their joint and several approaches to the energy problem. There will have to be continuing consultation among governments, but regular diplomatic channels will not be adequate. If there is need for a general master plan or strategy setting the broad lines of policy, there is need for an organization where its adaptation to changing conditions and its translation into practice can be worked out.

The O.E.C.D., because of the character of its membership and its general function of setting and overseeing the rules of the game, provides the natural framework. An energy agency associated with the O.E.C.D.,

primarily a consulting body but with some delegated authority, would be a logical central institution for coordinating the tasks which have to be done, everything from current stockpiling to long-range plans for research. The important thing is not the label or the established procedures but the ability to get the job done. If the O.E.C.D. should be too cumbersome, the logical alternative would be a new energy agency representing Canada, the United States, the E.E.C., and Japan.

#### V. Conclusion

The energy crisis has propelled the industrial nations into a situation to which other factors were also bringing them though more slowly: a situation in which they have to set the lines of basic policy together or succumb to chaotic national competition and a destruction of the fundamentals of a rational world order. The real challenge of the energy problem is in how we deal, not with outside adversaries, but with ourselves both within and among our respective societies. Our peoples need a wartime psychology to fight against complacency and paralysis, and a determination -- because it will be a long war -- to stay the course.

Jimmy -

1/15/75

My very best  
wishes as you start  
out on a long, hard,  
pilgrimage - I feel  
that you are carrying  
the future of the Republic  
in your pockets -  
God bless you -

Most sincerely

Howard

Howard Bucknell  
425 Hill St.  
① Athens, Ga. 30601

*[Signature]*

ENERGY STATUS SHEET

13 JANUARY 1975

1. Severe energy shortages lie ahead even if Arab oil is not suddenly curtailed or cut off - UNLESS
  - a. Oil import capability is greatly increased and Arab nations agree to considerably "up" what they provide. Deepwater offshore "ports" are needed.
  - b. Serious conservation measures are taken.
  - c. Very energetic development of both hydrocarbon and non-fossil fuel energy sources is undertaken (Note: The effect of c. is only in the long term).
  - d. Government support of public utility expansion is given high priority (effect will also be in the long term).
2. Currently hydrocarbon resources are diminishing in the U.S.
  - Down 4 - 6 % for oil (annual rate)
  - Down 7 - 8 % for gas (annual rate)
  - Barriers erected against use of coal.
3. Impact of natural gas shortage -

55% of nation's homes are gas heated. Gas used as feedstock for petrochemicals and fertilizer. Most industries use gas for energy (about 5 million equivalent barrels of oil daily). National policy giving homes gas priority is beginning to result in a serious industrial slow-down *(eg. U.S. steel just laid off 1300 workers for this reason)*
4. Conservation is badly needed but it is not enough.

To make good the energy cost due to the dwindling natural gas supply, alone, would require the doubling of coal production in the next 6 years. But to open a new underground mine takes about 5 years. Strip mining of Western low-sulfur coal seems to be only answer.
5. Very Approximate Data -

Overall energy use in this country during 1974 ran at about 37 million barrels per day oil equivalent - down alot from 1973.\*

\* This data was suddenly contravened in early 1975 by F.I.E.A. figures showing ~~total~~ imports had risen to 7 million barrels per day and oil usage rates by mid-December had reached 18.7 million barrels per day against 17.7 million barrels per day in December 1973. *PEOPLE ARE CONVINCED OF AN ENERGY PROBLEM - Trouble ahead*

*Per. Fed has not emphasized it enough - CONVINCED OF AN ENERGY PROBLEM - Trouble ahead*

But during this year (1974) domestic oil and gas supplies decreased, Canadian oil imports did not increase, and imports from the OPEC nations increased. Politically we are now deeper in the Arabian oil quagmire. Economic conditions showed a down trend in industrial activity. This reduction and the concomitant reduction in energy use cloaked the fact that the numbers of energy uses are increasing and will continue to increase through 1985.

6. Organizationally the energy situation is improved.

We now have a Federal Energy Agency, an Energy Research and Development Agency, and a supra-department Energy Policy Council for crisis administration above and beyond matters handled routinely by the FEA. Also, for starters, the ERDA has been funded to the extent of 20 million dollars, but Rogers Morton who dominates the Energy Program (with President Ford's consent) is dead set against pooling industry and government development efforts.

7. Rapid development of gas and oil from coal will not come until developers are guaranteed against loss by the government.

Businesses still cannot "accept" the current price of oil because economically it doesn't make sense and should fall. But, for political reasons, it probably won't come down. In any case industry, on its own, does not have the capital resources to bring in a new energy age.

8. Most needed - a clearcut effective conservation system, a rapid stockpiling for a six month supply of oil, and a collective industry/government effort of great scale to develop new energy sources to the production stage.

12/15/74

NOTES ON THE  
CURRENT POLITICAL IMPLICATIONS  
OF THE ENERGY QUESTION

INTRODUCTION

Our energy situation, if left unresolved, will drive our economy to its knees. Arthur Burns in a recent New York Times article is quoted as testifying before Congress that petroleum prices must be brought down from the OPEC prices lest our world economic situation be destroyed. With others (Secretary William Simon, for instance) Burns infers that oil prices will come down if Free World demand is lowered through a cooperative effort amongst the Free World industrial nations. I use "Free World", an old "Cold War" expression, to indicate that we are heading rapidly towards a warlike confrontation situation. A failure to achieve control over our domestic situation could cripple us in the international arena and cause genuine chaos at home. The current administration is "wishing" for oil price reductions. They will not come. The White House is drifting dangerously towards a precipice.

ENERGY DEMAND IN THE U.S. HAS BEEN REDUCED\*

Many people point to the fact that our total energy consumption for 1974 is down a bit from the pre-Yom Kippur War consumption of 1973. (A consideration of rates of consumption is involved here).

To these people this reduction implies that the back of the previously exponentially rising national demand for energy has been broken and that the energy question is no longer a prime threat to our economy and general national and international well-being.

\* Year end consumption rates, however, have spiked. As of year end we were importing 7 million bbl's per day of oil (6 bn 1973) and using oil at the rate of over 12 m bbl/day as opposed to a rate of only 17 million in 1972.

This attitude fails to recognize that our population in the industrial and personal areas has responded to increases in price and has exhibited a form of patriotism not appreciated by administration and congressional leaders <sup>and is now about to give it up as unwarranted</sup>. This accentuates the importance of our demographic situation and emphasizes the dangers posed to political figures who fail to read the times perceptively.

Demographically, our prime energy consuming sector of the population (the 25-35 year old group) will continue increasing until about 1985 in spite of our now-lowered birth rate...because these young people are already born. The Chase Manhattan Bank estimates that the increase in that segment of our population between 1970 and 1985 will be on the order of 44% or 19 million people.

Clearly this says something about per capita energy consumption in the face of a reduced or even constant supply of energy. And energy controls our standard of living and the rate of employment.

Of even greater possible impact is the fact that while our domestic energy consumption is somewhat dampened, our import of petroleum continues to rise as domestic supplies dwindle. In the face of Canada's recent announcement concerning the future curtailment of her petroleum shipments to the United States, it follows that we are increasing our dependence upon Middle Eastern oil.

This dependence is of the first magnitude in its proportions and implications. The notion that the OPEC nations will respond to a classic supply/demand situation is without foundation. Their policies will continue to be dominated by political concerns. We do not have the ability to force these prices down.

## A NAVY SECOND TO NONE

While public men have declared that we must have a Navy "second to none", we have in fact reduced the size of our fleet from about 960 to 514 ships in commission during the period 1968 to 1974. By way of contrast, the Soviet Union has built its fleet up to over 1000 ships in active commission armed with homing guided missiles of such calibre as to render these ships superior to most of ours. The concept emerging from the House Armed Services Committee to the effect that our Fleet is still superior, because of its greater tonnage, to the Soviet Fleet is sheer hyperbole because the bulk of our "excess" tonnage is concentrated in a handful of huge aircraft carriers.

We have lost naval supremacy at the most inauspicious time. During the Yom Kippur War of 1973, the 60 odd ships of the U.S. Sixth Fleet assembled in the Eastern Mediterranean were quite literally "surrounded" by some 90 Soviet men-of-war. While we mounted a recent "show of force" in the Persian Gulf for a few days, the USSR maintains a standing naval force of considerably more powerful dimensions in the Indian Ocean. Without reference to the intercontinental exchange of weapons and the ensuing nuclear holocaust, which neither great nation can afford to contemplate...but must remain able to invoke...the Soviet Union has achieved the ability to face us down...or to destroy our forces...on distant station just as we demonstrated the ability to do to them during the Cuban Crisis of 1962. Our talk of "policing" the Arabs and protecting our seaborne commerce is entirely empty mouthings...or the result of a singular lack of military comprehension on the part of the administration (including Secretary Kissinger).

Either circumstance is dangerous. The Russians can now, at their will, stop our foreign war operations should they choose. In passing it may be noted that they can also forbid our resupply of troops in Europe.

The administration "talk" recently reported by U.S. News and World Report to the effect that the Soviet Union would "stand aside" should we invade the Middle Eastern oil fields because they would recognize that major national interests were at stake (just as we did (it is said) when the USSR invaded Hungary) is pure "twaddle". We had no means of interfering with the Hungarian invasion short of commencing a world-wide nuclear war. Today the Soviet Union can interfere with us without danger of intercontinental nuclear war. *Mr Ford and Mr Kissinger don't seem to realize this but, then, Soviet leaders probably have not yet fully accepted the premise.*  
WE MUST NOW TRADE ON THE OCEANS

Whereas formerly foreign trade across the oceans was of marginal importance to our overall well-being, the importance of overseas trade is now of vital (survival) importance. The balance of payments situation created by the extraordinarily high petroleum prices being exacted by the Arab nations (and the OPEC nations in general), apart from indicating the need for strictly enforced domestic energy conservation, also dictate the necessity of a huge oceanic commerce and distinctly competitive government assisted trading efforts. That this will place us in commercial confrontation with the other industrial nations is inevitable. It will color and perhaps drastically change their international alignments that we have, for so many years, taken for granted. The untoward (for us) aspects of this can only be minimized by our taking domestic steps towards regaining energy independence. We have the innate capability to do this and, for the time being, most of our friends and allies do not.

International agreements to "share the pain" of energy shortage (if occurring) are largely cosmetic unless, in the United States, they are matched by an obvious and vigorous program to develop new energy resources and to severely conserve what we have. Our energy consumption rate can and must be brought down.

THE FINANCIAL COMMITMENT DEMANDED \*

Brutally stated and in spite of the positions taken by leaders in the current administration, the financial capital requirements for a nominal U.S. independence in energy resources by 1985, considerably exceed the resources of the private industrial sector in this country. Other papers give detailed figures on this but the general gist is that something on the order of about \$50 billion a year for 10 years or 15 years is probably required to bring us into an era where coal gasification and liquefaction is operating on a large scale and where we are moving into a situation (through the development of new energy resources) that will liberate us (and through us, the rest of the world) from our present dependence upon "fossil fuels". Since, in a "good" year some \$60 billion to \$70 billion dollars represents the total net profit of U.S. industry after taxes, it can be seen that industry, on its own, cannot, without stopping everything else, swing the energy development program that is demanded by our national circumstances. Clearly, public money, in large amounts, must be brought into the national energy Research and Development Program. And, most probably, this can be achieved with the least waste and duplication by the coordinated joint efforts of industry and government. If this smacks of "nationalization" according to the Secretary of the Interior, Rogers Morton, it must be remembered that the great energy corporations themselves, such as Exxon, have already proposed

\* Tax money from energy consumption and profits from energy sales must be considered for use in our energy development plans.

such a scheme (albeit privately)...and they, certainly, are not proponents of "socialism". A great deal of pragmatism is needed and we must remind ourselves that the "American Democratic Experiment" is a continuing one. We may be warned by the present situation of democratic nations who are divorcing themselves from the use of the great psychic and capital formation energies of the Free Enterprise System...but we must evolve politico-economic concepts that are suitable to our national aspirations. This brings us to what is, philosophically, the most important aspect of our energy and general economic situation.

\*

ONLY A STRONG MIDDLE CLASS PERMITS DEMOCRACY

In shaping our energy policies we must be continually alert to the impact we make on the resources, values, hopes, fears, and ambitions of our middle class and of that mobile sector of our laboring class prepared to work themselves or their children into the middle class. And we must remember that "middle-class" in American terminology is not a social distinction. "Middle-class" in our country describes that segment of the population that is propertied enough, in one sense or another, to interest themselves in political action on any levels in order to protect and advance their personal individual and collective interests.

History teaches us that, in the brief experiences man has had with self-government, a strong, relatively large, and viable middle class is essential to the workings of Democracy.

What we do in the energy field will have great impact on our economic and social circumstances. The rich will, as always, manage for the most part to survive and, indeed, grow richer. The poor, other than those equipped to progress upwards, will remain with us

\* Automobile driving may not be as <sup>-6-</sup>price-sensitive as the Administration hopes. There are indications, because of the movement of business & industries out of the urban areas that workers may not be able to take advantage of mass transit schemes.

<sup>MUST</sup>  
and be protected. But if we take measures that unduly hurt the middle class we may be assured that this will work to the reduction of freedom for all of us.

#### THE POLITICAL LIABILITIES, PITFALLS, AND PROSPECTS

The American people have not been apprised of the real seriousness of our energy and military situations. The politician that does this first will be treated cavalierly; the bearer of ill tidings is always an unwelcome herald...particularly if he has no constructive program to offer.

For those politicians who are moving towards national prominence, influence, and power, it is essential that they consider the matter of timing. There are penalties for being too far out in front (our economic problems may deceptively grind along without dramatic change for quite a while...depending upon the USSR and the OPEC nations). There are, of course, the penalties of political oblivion for those aspiring to high public office who have not evolved a reasonable programmatic approach for the resolution and cure of our energy situation.

A good task at the present as 1974 wanes and 1975 arrives would be to make contact with industrial and military leaders who, although constituting a minority, have built-in responsibilities for the development of energy resources and the protection of our now essential sea-lines of communication. Although in full campaign a candidate, especially a Democrat, may necessarily take positions abhorrent or dangerous-appearing to these people; an earlier understanding and situation of <sup>mutual</sup> material trust and confidence will be of great background importance because while these people cannot, on their own, advance a political movement, they, nevertheless, have the resources to severely hamper such a movement if they choose.

## CONCLUSION

Our energy circumstances have placed us in the position where we are (and will be for over a decade) dependent upon oceanic commerce for our survival as a national economic, political, and social entity of our own choosing. We have lost, and must regain, the ability to protect this commerce on the high seas against a now-existing Soviet naval superiority. In achieving this goal we must realize that the use of tactical Air Force units and Army units abroad cannot be undertaken on anything approaching a sustained basis without control of the seas. The revitalization of our Navy is now of first military priority.

We must quickly devise acceptable and effective ways to coordinate the efforts of government, industry, and labor in a vast undertaking to regain nominal energy independence. This is not only necessary for our own survival; it is essential to the stability of the other industrial nations of the Free World.

While we bask in the sunshine of "detente" we must remember that now, unfortunately, we do so at the sufferance of Russian leaders who have achieved a great and bloodless strategic victory over us due to our own carelessness and lack of foresight and the ambitions of some very dangerous men. They will exploit this victory when it dawns upon their political leaders what a triumph Admiral Gorshkov <sup>(Smit CNO)</sup> has achieved *through his creation of a first-class Navy.*

Stern measures, and great discipline, and dedication are required to extract us from this precarious position. The American Public must be educated and conditioned to the current realities we face and this will be a consummately demanding political task for our leaders. Without fresh leadership we will simply fail and sink into Soviet dominated obscurity. *The road up to the 21st. Century should be climbed on a dedicated and inspirational basis. The next 10 years are critical.*

As we proceed back towards energy independence we must continually review the circumstances of the middle class. They are the true bastion of Democracy and it is their well-being and vitality which guarantees freedom for all of us.

- END -

# Nuclear Warships and the Navy's Future

By Admiral H. G. Rickover, U. S. Navy

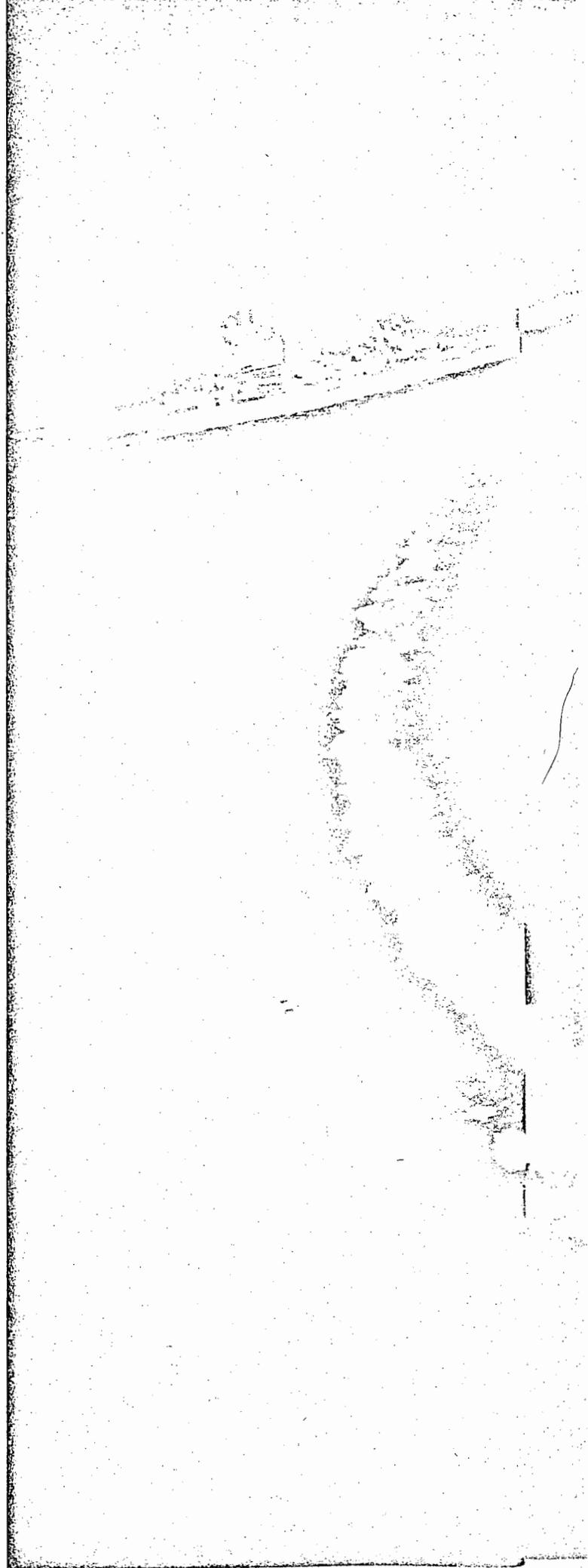
*As the Navy's three nuclear-powered surface ships, right, cruised in the Mediterranean during their 30,000-mile circumnavigation in August 1964, they were clearly tomorrow's warships. But tomorrow and tomorrow and tomorrow have passed and, in the ten years between Operation Sea Orbit and the approval of the legislation on the facing page, only two nuclear-powered surface combatants have joined the fleet.*

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Much has been said in recent months about the importance of naval power as it relates to contemporary international relations. For a country that is essentially an island nation, whose economic life is increasingly dependent on foreign resources, and the majority of whose allies are oceans away, the emergence of widespread national interest in our naval posture is long overdue.

Several important events are making clear the inescapable reality of our dependence on naval power. Among these are the national retrenchment following the long war in Southeast Asia, the development of a strong Soviet Navy, with warships particularly designed to destroy U. S. naval forces, and most recently, the Arab-Israeli conflict, with the resultant loss of oil supplies from the Mid-East.

The current lack of foreign oil has reminded us of our vulnerability to outside pressures. It has not been



## TITLE VIII—NUCLEAR POWERED NAVY

10 USC 7291  
note.  
88 STAT. 408  
88 STAT. 409

"Major combatant vessels for the strike forces of the United States Navy."  
10 USC 7291  
note.

Report to Congress.  
10 USC 7291  
note.  
64 Stat. 832;  
84 Stat. 1169.  
Department of Defense Five Year Program.

10 USC 7291  
note.

Short title.

SEC. 801. It is the policy of the United States of America to modernize the strike forces of the United States Navy by the construction of nuclear powered major combatant vessels and to provide for an adequate industrial base for the research, development, design, construction, operation, and maintenance for such vessels. New construction major combatant vessels for the strike forces of the United States Navy authorized subsequent to the date of the enactment of this Act becomes law shall be nuclear powered, except as provided in this title.

SEC. 802. For the purposes of this title, the term "major combatant vessels for the strike forces of the United States Navy" means—

- (1) combatant submarines for strategic or tactical missions, or both;
- (2) combatant vessels intended to operate in combat in aircraft carrier task groups (that is, aircraft carriers and the cruisers, frigates, and destroyers which accompany aircraft carriers); and
- (3) those types of combatant vessels referred to in clauses (1) and (2) above designed for independent combat missions where essentially unlimited high speed endurance will be of significant military value.

SEC. 803. The Secretary of Defense shall submit to Congress each calendar year, at the same time the President submits the budget to Congress under section 201 of the Budget and Accounting Act, 1921 (31 U.S.C. 11), a written report regarding the application of nuclear propulsion to major combatant vessels for the strike forces of the United States Navy. The report shall identify contract placement dates for their construction and shall identify the Department of Defense Five Year Defense Program for construction of nuclear powered major combatant vessels for the strike forces of the United States Navy.

SEC. 804. All requests for authorizations or appropriations from Congress for major combatant vessels for the strike forces of the United States Navy shall be for construction of nuclear powered major combatant vessels for such forces unless and until the President has fully advised the Congress that construction of nuclear powered vessels for such purpose is not in the national interest. Such report of the President to the Congress shall include for consideration by Congress an alternate program of nuclear powered ships with appropriate design, cost, and schedule information.

This Act may be cited as the "Department of Defense Appropriation Authorization Act, 1975".

Approved August 5, 1974.

easy for our citizens to accept the fact that this country is dependent on anyone or anything. Americans are proud of their self-reliance and self-sufficiency. That something as simple as heating a house or driving a car can be governed by conditions beyond national or individual control is for most of us a painful revelation. The smoothest generalizations are breaking up against the rough edges of recent events.

So far, the oil shortage has only been an inconvenience to the majority of our people. But a shortage of petroleum could have disastrous results on the ability of our oil-fired naval forces to fight in areas where fuel supplies are unavailable to us. This does not have to continue to be the case for future major U. S. naval combatants because we can build them with nuclear propulsion, if we exercise the foresight to do so.

With existing designs of naval nuclear propulsion plants it is possible to provide enough energy for ten to 13 years of ship operation without the need to refuel. And new reactor designs now under development will last 15 years. In contrast, oil-fired naval warships must be refueled every few days. The initial nuclear fuel for a *Nimitz* class aircraft carrier contains the energy equivalent of 11 million barrels of Navy distillate fuel oil, or enough oil to fill a train of railway tank cars, stretching from San Francisco to Los Angeles.

It was the concern for fuel for naval ships in time of war that led to establishment of the Naval Oil Reserves, which are now being considered as a quick source of additional oil during the present shortage. But even if this reserve is still available during a future war, it will also be necessary to have the oil at hand where it is needed, before it can be used. Of what value is an oil-fired warship if it is unable to get oil? It is the need for a reliable worldwide fuel distribution system, that is the Achilles' heel of our oil-fired Navy. The difficulty in obtaining foreign oil supplies to support recent operations in the Mediterranean and the Indian Ocean shows this vulnerability.

But from the very beginning of the nuclear power program there has been strong opposition in the Navy. Were it not for the Congress and the Atomic Energy Commission, we would not have nuclear submarines. In 1948, when the Navy opposed nuclear submarines, the Navy's systems analysts made a study. This study showed that a nuclear submarine would be worth 1.41 times as much as a conventional submarine, but would cost about twice as much. The analysts therefore concluded that nuclear power was not worthwhile. The Navy argued that if they built nuclear submarines they would only get half as many submarines each year. This argument was similar to a view held by the Navy at the end of the 19th century. President Theodore Roosevelt said that the Navy feared to push submarines lest

Congress withhold appropriations for building battle-ships. Fortunately, in the case of nuclear power, Congress prevailed and the *Nautilus* was built. In fact, the Atomic Energy Commission paid for the propulsion plants of the first two nuclear submarines. The *Nautilus* ushered in a revolution in submarine and naval warfare.

Although nuclear submarines have now been recognized as among the most vital warships we have, opposition to them has nevertheless continued for over a quarter of a century. For example, the Department of Defense at one point decided to stop building any more nuclear submarines after 1970, but they were overruled by Congress. In another case, just a few years ago, the systems analysts in the Defense Department suggested sinking ten of our Polaris submarines to save money. And, more recently, it had to be congressional action that increased the number of high speed *Los Angeles* class nuclear attack submarines in the shipbuilding program over what the Defense Department had requested. Such a reluctance to build submarines has continued even though the Soviets have surpassed us in numbers of nuclear submarines since 1971 and are outbuilding us by three to one; and even though they now possess three times our submarine building capacity and are still increasing that capacity; and even though they have introduced nine new designs in the past seven years as compared to two for us.

In nuclear powered surface warships, the opposition has been even more persistent. The five nuclear surface ships in service today came into being only after much pushing and shoving by Congress. The aircraft carrier

*Kennedy* was built with conventional power over the strong objection of Congress. One of the two nuclear-powered frigates which were authorized by Congress in fiscal year 1968 was not permitted to be built by the Defense Department, and the other was delayed for nearly two years. In 1971, the Navy scrapped a previously planned program to provide each nuclear-powered carrier with its required four nuclear frigates, and suspended indefinitely the nuclear frigate construction program. Yet this was the only type of new

combatant ship having a fleet air defense capability.

Central to the opposition to nuclear-powered ships has been the precept that we should not go to nuclear power until we can show it is no more expensive than conventional power. But why should we expect to get all the advantages of nuclear power at no additional cost? The cost of all other weapons has gone up as their capabilities have improved. For example, the M-16 rifle costs three times as much as the World War II M-1 cost; a modern machine gun costs nine times more than one from World War II; a C-5 transport plane is over 300 times as expensive as the World War II C-47; the airplanes the Navy flies today cost 20 to 25 times as much as World War II aircraft. Does that mean we should have only four or five planes on our carriers instead of 100?

Even so, the additional cost of nuclear powered warships is minimal when all factors are considered. First, nuclear powered ships are built to higher standards than conventional ships and have proved to be more reliable in the operation of their propulsion plants. These first line ships carry the most modern and complex weapons systems and have increased operational capabilities over their conventional counterparts—all of which naturally contribute to their higher initial cost. In addition, the construction cost of nuclear ships includes nuclear fuel for over ten to thirteen years of operation, whereas the initial cost of a conventional powered ship does not include the cost for oil.

Recently, oil costs have risen dramatically. It now costs close to \$25 a barrel to buy and deliver oil to Navy ships. At that rate, it would cost almost \$270 million to provide the amount of oil for a conventionally powered carrier equivalent to the nuclear fuel in the *Nimitz*. That is almost three times the cost of the nuclear fuel for this ship.

Nuclear and conventional ship costs should be compared on a lifetime basis. For example, compare lifetime costs for a nuclear carrier task group with those of a conventional task group. The nuclear carrier increases the task group cost about two percent. Each nuclear escort increases the overall task group cost one percent, so that four nuclear escorts increase the task group cost four percent. Therefore, the lifetime cost for a complete nuclear task group, consisting of a nuclear carrier and its four nuclear escorts, is six percent greater than that of a conventional carrier accompanied by four conventional escorts.

This is merely the peacetime cost. It does not take into account any of the advantages of nuclear power.

Nuclear-powered task forces are far less dependent on logistic support. When logistic supply lines are attacked during a real war the decrease in the requirement for ships' fuel for the strike forces will have a

compounding beneficial effect. The surviving fuel transportation and storage facilities can then all be concentrated on getting fuel for aircraft and other military vehicles to the forward areas. The escorts that would otherwise be required for the tankers which carry ships' fuel could then be assigned to assuring the safety of other supplies.

A major lesson of World War I, the first war in which fuel oil played a predominant role, was pithily expressed: "The Allies floated to victory on a sea of oil." In World War II also, the supply of oil was a controlling factor in most military operations.

Here is a statement about fuel, that points out how lack of oil was instrumental in the defeat of Japan. It is quoted from the *Strategic Bombing Survey* conducted after the war. This report, entitled "Oil in Japan's War," states:

"In every phase of the war, oil determined Japan's strategy and governed the tactical operations of its Navy and Air Force. The collapse of the Japanese war effort was the consequence of their inability to maintain their supply routes.

"The effect of oil shortage on Japanese Naval strategy became devastatingly apparent in the campaign for the Marianas and the Philippines. Japanese fleet units had to be dispersed between the Japanese Inland Sea and Singapore, owing to limited fueling facilities, and failure to achieve satisfactory coordination between the fleets contributed substantially to the Japanese defeat. Fuel shortage in the Home Islands deprived the Japanese naval forces fighting off the Philippines of the services of at least three battleships, which together with several aircraft carriers were taken out of service and assigned to duties as port and anti-aircraft vessels because they consumed too much oil."

There are numerous examples where oil shortages have been a critical factor in military operations, examples that appear now to have been forgotten. Unfortunately, history has a way of taking revenge for forgetfulness.

Take the carrier task force again. In the case of a conventional carrier with four conventional escorts, one third of the fuel is used for the carrier, one third for the conventional escorts, and one third for the aircraft. By doing away with the need for the fuel for the carrier and its escorts; by making them nuclear powered; only one third the amount of propulsion fuel—that used by the aircraft—is needed. Further, we design our nuclear carriers with the capacity for almost twice as much aircraft fuel and 50% more aircraft ammunition than the latest conventional carrier. This reduction in logistic support becomes especially important when our

naval forces are operating away from home, during a real war, when they are subject to enemy attack.

When a nuclear carrier is substituted for a conventional carrier, the range of a carrier task group with four conventional escorts is doubled. When two of the four escorts with the nuclear carrier are nuclear, the range of the carrier task group is doubled again. When all the escorts are nuclear, the range of the carrier task group is essentially unlimited.

For these reasons a nuclear task force is at least 50% more effective than a conventional task force.

I am sure you know the maxim learned through the bitter lessons of war that: "The art of war is the art of the logistically feasible." It is the elimination of the requirement for a continuous supply of propulsion fuel that makes nuclear-powered warships so valuable.

The areas I have just mentioned represent a tremendous increase in military effectiveness. In my opinion, this effectiveness far outweighs the six percent higher lifetime cost for the all-nuclear carrier task force.

There are many examples where the value of nuclear propulsion for surface warships has been demonstrated in real terms, in everyday operational missions of the Fleet. I frequently receive letters from the commanding officers of our nuclear warships telling me of some of these advantages. As one of many examples, for 13 days during July 1971, the *Truxtun*—the frigate that Congress changed to nuclear propulsion in the 1962 program—provided an excellent demonstration of the capability of a nuclear-powered ship to perform truly independent missions, free of the fuel oil umbilical cord.

While on a special mission, the *Truxtun* steamed 8,600 miles at an average speed of advance of 28 knots, traveling from Subic Bay in the Philippines to Perth, Australia, and crossing the Indian Ocean twice en route. This is the longest period of such high-speed operation ever sustained by any ship. This high speed could have been continued for an essentially indefinite period, had there been a need. At the conclusion of her mission, the *Truxtun* was fully ready to undertake protracted combat operations.

In contrast, our most modern oil-fired frigate would have had to refuel at least three times during such a transit, and would have arrived at her destination with close to minimum fuel reserves, unable to conduct extended combat operations. And, of course, there are no tankers normally available in the middle of the Indian Ocean from which to refuel. From a practical standpoint, no non-nuclear ship could have performed the *Truxtun's* mission—in peace or in war—because of the fuel support needed.

Also to be considered in comparing nuclear-powered

to conventionally powered ships is the availability of fuel reserves during war. I mentioned that the Naval Oil Reserves are now being considered as an emergency source of fuel. These reserves are, therefore, not guaranteed.

The situation is different when we have nuclear fuel as a reserve. What limited our industrial output, and therefore our fighting capacity in World War II was the labor supply. But we can employ labor now—in peacetime—to manufacture nuclear fuel for our nuclear

Navy, and we can store the fuel in a small area. We would then be assured of having a nuclear fuel reserve for a long war, and we would not need labor, during the war, to manufacture nuclear fuel.

There are events in a nation's history that, to use Thomas Jefferson's phrase, are like "a fire bell in the night." The recent conflict in the Mid-East was such an event. For the first time, we were in a situation where the Soviet Fleet in the Mediterranean outnumbered the U.S. Sixth Fleet.

Had the Soviet Mediterranean Fleet been ordered to challenge the Sixth Fleet, who would have won? From the limited information available to me, I do not think the answer is entirely clear. Would such a question have been seriously asked ten years ago? Perhaps this thought will give you an inkling of the change that has taken place in the balance of naval power over the past decade.

This change underscores the urgent need we, as an island nation, have to build a Navy strong enough to protect our national interests, and our economic and political survival. To me, it is clear that the striking force ships we build for such a Navy must have nuclear power.

Yet, despite its demonstrated superiority, there is no firm long-range building program to convert our major combatant forces to nuclear power.

I suppose that, to some people, any rate of transition to nuclear power, or to any other new weapon, is unreasonable. But many have taken a stand against nuclear power for the Navy before they even investigated it. Their tendency has been to fit facts into their

preconceptions. They have failed to see that the essence of all progress is a shedding of preconceived ideas and accustomed ways of doing things. In the past, this failure has prolonged military ideas beyond their time.

Changes in the Navy often come at a distressingly slow pace. It took two-thirds of a century for our Navy to change from sail to steam. In 1814, Robert Fulton designed and built for our Navy the world's first warship propelled by steam. It was named *Demologos*. Over the next 20 years the United States built some 700 steam merchantmen while the U. S. Navy built only one steam vessel.

It might interest you to know that in 1869, 55 years after the *Demologos*, the Navy Department issued a General Order requiring all warships to carry a full set of sails. The concern over cost was so great that specific instructions were issued as to when the steam engines could be run. The order warned naval commanders that: "They must not be surprised, if they fail to carry out the spirit of this order, if the coal consumed is charged to their account."

After conversion to steam had become a reality we went through another period when there was great reluctance to shift from coal to oil. At the beginning of the 20th century it was generally accepted that oil-fired warships offered substantial military advantages over coal-fired warships. But since they were more expensive, there was great resistance to building them. It took Winston Churchill's command decision as First Sea Lord to give Britain's Royal Navy the position of world leadership in converting warships from coal to oil. As it later turned out, this was a significant factor in Britain's naval superiority in World War I. Churchill said:

"Shocked at the expense, the Admiralty had reverted for two years to 27-knot coal-burning flotillas. It was too late to stop the last bevy of these inferior vessels, but I gave directions to design the new flotilla to realize 35 knots speed without giving up anything in gunpower, torpedoes or seaworthiness. Build slow destroyers? One might as well breed slow race horses!"

When one talks about the delay by the Navy in going from sail to coal, or from coal to oil, everyone today agrees that those responsible were stupid not to make the change faster. As Goethe said: "It is the truth, but not for us." With hindsight they can easily see the traps their predecessors fell into, but they cannot recognize that a generation hence they themselves will be classed along with the other shortsighted leaders who refused to go from sail to coal, and from coal to oil.

Inertia seems to be endemic to naval development.

Curiously, the lethargy is most often felt by the nation which has the greatest navy. On 4 March 1858, the French, on one day, laid the keels of three frigates. These ships were to have iron plates bolted to their sides to protect them against shot and shell—they would be far better than anything the more powerful British Navy possessed. In June of that year a high British naval official reluctantly admitted that his country had to accept the challenge. He said:

"Although I have frequently stated it is not in the interest of Great Britain, possessing as she does so large a navy, to adopt any important change in the construction of ships of war which might have the effect of rendering necessary the introduction of a new class of very costly vessels until such a course is forced upon her by the adoption by foreign powers of formidable ships of a novel character requiring similar ships to cope with them, yet it then becomes a matter not only of expediency but of absolute necessity."

Half a century later, however, another responsible British official argued that his country was wrong to build the *Dreadnought*—the all big-gun battleship which made all other battleships obsolete. He said: Britain "ought never to lead in ship construction, but always to follow with something better."

For a leading navy such an attitude appears to have some merit. It coincides with all the natural instincts to preserve a familiar and comfortable way of life—a way which recalls hard-won victories of the past. Also, this attitude can be defended upon economic grounds

because it keeps costs down by preserving existing ships, equipment, and naval skills. But development never ends. To believe that advances can be deferred and that a nation can make up lost ground can be fatal. Such a cast of thought is what Mahan recognized when he wrote: "Finality never will be reached in anything save death. . . ."

In each of the instances I have mentioned, change was demanded of an organization; change in leadership and in training. The fault was inertia—a comfortable

faith that lessons and ways of the past will hold in the trials of the future. In its broadest sense this is an undemanding mental attitude which is opposed to change. It is a vested interest.

Those outside the professional ranks, such as the press, citizens, and Congress can recognize the danger of such blindness—if they but know the facts.

You might properly ask why I, an engineer, am the spokesman for nuclear warships. The answer is that there are two roads which must be traveled to accomplish change in our military: the road of action and the road of words. I would prefer to devote my energies entirely to engineering. But since no one in the Navy was devoting his effort to the words, I was forced to do both. This was true in 1946; it is still true today. Perhaps, by the next century, the Navy itself will finally realize the importance of nuclear power, but this is not yet the case. It should have come in the 1950s. This is a sad commentary on the lack of foresightedness of all but a few of our naval leaders over the past quarter century.

I would like to suggest that we must—from the standpoint of national safety—avoid proving again the old adage that, "history repeats itself." Congressional concern in this regard has been clearly indicated by a House Armed Services Subcommittee on the Middle East. In its December 1973 report the Subcommittee stated:

"The Committee on Armed Services has in the past consistently urged nuclear propulsion for naval vessels because of its operational advantages—the virtually unlimited range such power gives a ship. Now nuclear propulsion has become a must because of logistic realities. In addition to the danger of a shortage of oil for ships, the rising cost of oil, when available, has made scrap paper out of past comparative cost estimates for nuclear and conventional power.

"The wisdom of the committee's past position has been borne out by time, and the committee should question carefully the construction of further oil-powered ships where the technology exists to make them nuclear-powered."

What must be done? We need a permanent program to build nuclear-powered ships—a program that will not be drastically changed every year or two as has happened in the past. Admiral Moorer, former Chairman of the Joint Chiefs of Staff, and for many years an eloquent proponent of nuclear power for our striking forces, agrees with me that we must build these first line ships during peace.

The excuse for not building better ships is always that they are "more expensive." But all weapons of war are expensive. Cheap weapons will not win us a war. And if we cannot win a war, there is no sense in spending money on weapons at all.

Rarely in naval history have the leaders looked far enough ahead. They generally build ships that they consider to be adequate for the present. That is why, frequently, naval leadership has been replaced when war broke out.

We should be planning now for war that may erupt 15 or more years from now. Therefore, it is time to establish a firm program for making all new major combatant ships for our striking forces nuclear-powered. It is a matter of national priority.

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Admiral Rickover graduated from the U. S. Naval Academy in 1922. He had consecutive duty on the USS *La Vallette* and the USS *Nevada* until April 1927. In December 1929, he received the degree of Master of Science in Electrical Engineering from Columbia University. Between 1930 and 1933 he served on board the USS *S-9* and USS *S-48*, becoming qualified to command submarines in August 1931. From July 1933 until April 1935 he was attached to the Office of the Inspector of Naval Material, Philadelphia. Service as Engineering Officer aboard the battleship *New Mexico* followed. In the fall of 1937, he assumed command of the USS *Finch* on the Asiatic Station. Upon selection for Engineering Duty, he was transferred to the Navy Yard, Cavite, Philippine Islands, serving there until June 1939. In August 1939, he reported to BuShips, later serving as Head of the Electrical Section there. In 1945 he was assigned as Industrial Manager, Okinawa, with further duty as CO of the Naval Repair Base, Okinawa where he was in charge of building the base and facilities. In December 1945, he reported as Inspector General, Nineteenth Fleet, with headquarters at San Francisco, California, remaining there until May 1946 when he was assigned to the Manhattan Project at Oak Ridge, Tennessee. From September 1947 to February 1949, he had duty in connection with nuclear ship propulsion at BuShips. He next reported for duty with the Division of Reactor Development of the A.E.C. with additional duty at BuShips. Admiral Rickover is now the Director, Division of Naval Reactors, U. S. Atomic Energy Commission, and Deputy Commander for Nuclear Propulsion, Naval Sea Systems Command.

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## Delays in Tapping Energy Sources

The public continues to enjoy adequate supplies of energy, but severe shortages lie ahead. Consumption of energy goes on unabated in spite of a recession, higher prices, and presidential appeals. But domestic reserves of hydrocarbons are being depleted rapidly and the stage is being set for empty gasoline pumps, cold homes, and large-scale unemployment unless there is a drastic change in attitudes soon. A major factor is the long time span involved in creating new sources of energy.

This country's experience with nuclear energy is an example of the time necessary to develop a major new source. The first reactor went critical in December 1942. In 1973, nuclear energy accounted for only 1 percent of the nation's energy consumption. Ten years from now, nuclear energy will meet at most 7 percent of the nation's needs. Moreover, the energy will be made available as electricity and not in forms that will be in short supply. Prospects for quick, large-scale utilization of geothermal energy, fusion, and solar energy are even dimmer than those for nuclear energy.

Thus, for at least the next decade, energy horizons will be limited by oil, natural gas, and coal. But available domestic supplies of oil and gas are diminishing, at the rate of 4 to 6 percent per year for oil and about 7 to 8 percent per year for natural gas,\* and barriers have been erected to obtaining more oil or gas and to the use of coal.

Perhaps the most serious and certainly the least recognized problems lie in the supplies of natural gas. It heats 55 percent of the nation's homes, is widely used as a feedstock for petrochemicals, including fertilizer, and is by far the largest source of energy for industry. The energy content of the natural gas used daily by industry is equivalent to that of about 5 million barrels of oil. National policy accords priority to residential demand for natural gas, taking it away from industry. Already, shortages have caused layoffs. During the period August 1974 to August 1975, industry will use 400 million additional barrels of oil because of gas curtailments.† The rate of decay of supplies is such that by 1980, with a few exceptions, industry will be prevented from using natural gas. This would have enormous effects on the economy.

In large measure, although not entirely, future natural gas supplies will be tied to those of petroleum. There are good reasons to believe that onshore and undiscovered gas reserves of the 48 contiguous states are comparatively small.‡ New supplies could come from the outer continental shelves and from Alaska. At best, 4 to 6 years will elapse before these can be made available. However, at the present pace of resolving environmental disputes, supplies will be much longer in arriving.

An important aspect of the decaying position is that the kind of conservation that was achieved in 1973 and 1974 would make only a small dent in the problem. Then the public cut its use of natural gas by 6 to 8 percent, that is, 3 to 4 percent of total consumption. If the public spent many billions of dollars on storm windows and added insulation, 1 year's decay in the supplies of natural gas might be compensated for.

Conservation is not enough. To make good the energy deficit due to decay of natural gas alone, a doubling of coal production during the next 6 years would be required. But to open a new underground mine requires about 5 years. The quickest path toward relief is expansion of surface mining of low-sulfur coal in the Rocky Mountain States. But with various delays connected with changeovers from gas or oil to coal and with environmental controversies, heaven only knows when this country will emerge from the years of travail and discontent that it is now entering.—PHILIP H. ABELSON

\* *Oil and Gas Journal*, 4 November 1974. † *Oil and Gas Journal*, 25 November 1974. ‡ R. Gillette, *Science* 185, 127 (1974).

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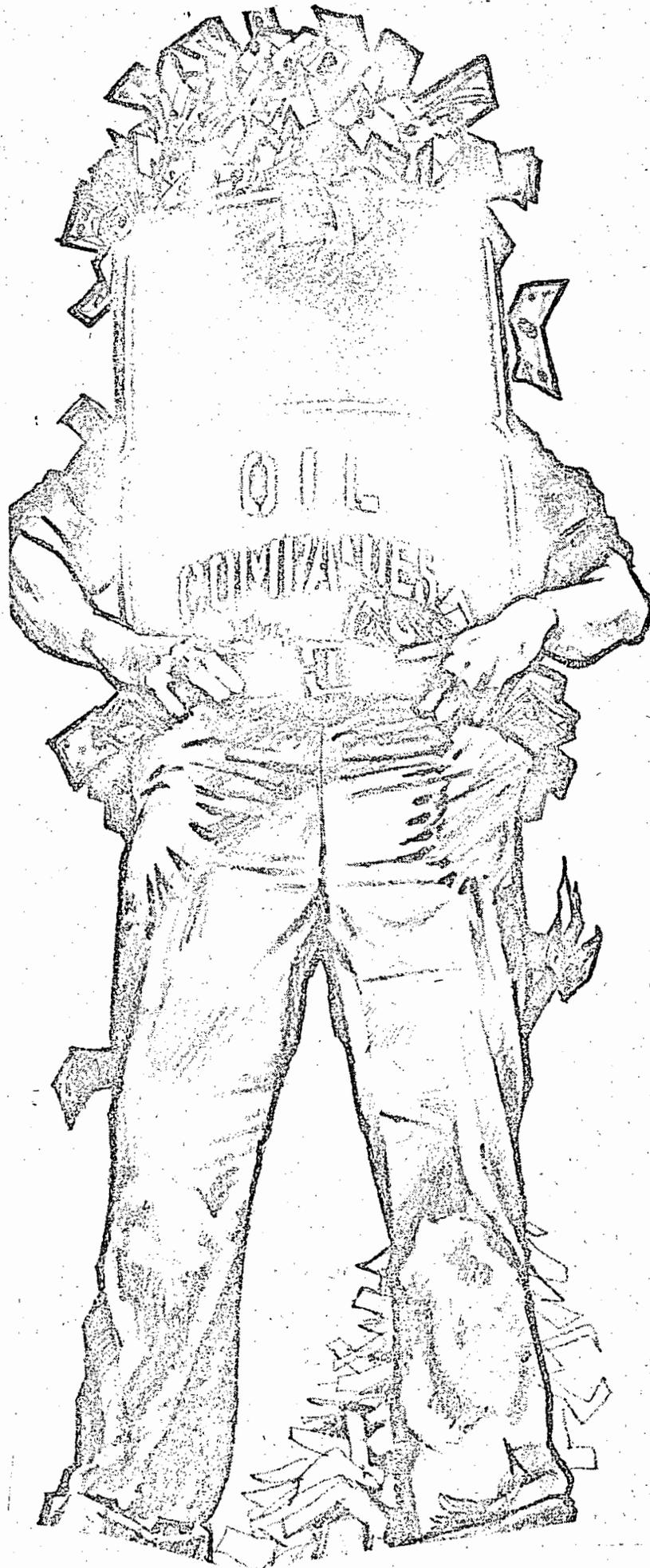
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*For the Week Ending* JANUARY 18

A Big Bonanza  
For 'Big Oil'

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2



By Michael T. Malloy

**OIL PROFITS.** They are big. They are controversial. Some even say they are "obscene." When the new Congress gets rolling, there will be a burst of talk about windfall-profits taxes, new price ceilings, a Government-owned oil company, excess-profits taxes, and even nationalization.

The charges and countercharges will be hard to follow because the actual size, origin, and disposition of the oil industry's profits are clouded by the very complexity of the business that generates them. We will nevertheless make a stab here at trying to answer these questions about "Big Oil's" big profits:

Just how big are they? Why are they less than they may seem? How much profit is in a barrel of oil? What do the companies do with all that money? What about those tax loopholes? What are some implications of public policy—present and future? Why should you be skeptical of everything that's written in this story?

#### How big are those profits?

Plenty big. Enormous. Some 27 big American oil companies made almost \$11 billion in the first nine months of last year. That's about one-fifth of all the profits made in that period by all the thousands of other corporations in the United States.

Most of that \$11 billion went to just six mammoth companies. These giant multinational corporations—not the proverbial Texas wildcatter with a wide-brimmed hat and lavish spending habits—make up Big Oil. These six companies absorbed perhaps 10 per cent of all profits earned last year in corporate America.

Exxon is the biggest. It cleared \$2.3 billion after taxes in the first nine months of 1974. That's five times as much as was earned by General Motors in that period, six times as much as Du Pont. From the heights of Exxon, an executive looked down last month and referred to "these minimajors . . . your Standards of Indiana and Shells and so forth." Yet

3

Shell made more money than U.S. Steel in the last reported financial quarter, and Standard of Indiana boasts that it is the 12th largest industrial company in the United States.

Giant investments are supposed to yield giant returns. But oil-industry critics are especially upset at the speed with which oil profits are becoming even more gigantic. Profits of 27 major companies followed by the Oil & Gas Journal were up 98.5 per cent in the first nine months of 1974, compared to the like period of 1973. For five of the Big Six companies, profits in those nine months were higher than in all of the previous year. For some middle-sized companies — ARCO, Conoco, Sun, Phillips, Getty, Occidental, and others — profits were coming in at a rate more than 100 per cent ahead of 1973.

And this was the second year of explosive growth. Compare the first nine months of 1974 with the like period of 1972, and you get Exxon up 120 per cent, second-ranking Texaco up 130, third-ranking Mobil up 120, and so on down the line. It is this galloping prosperity, when most everyone else is feeling an economic pinch, that makes critics such as Washington state's Democratic Sen. Henry Jackson call oil profits "obscene."

Or worse. Critics are suspicious of the oil companies' welter of joint ventures and subsidiaries and are baffled at the way corporate bookkeeping practices vary from country to country, so these critics often conclude that profits are higher but hidden.

"You don't know how much the real assets are. You don't know how big the profits are. . . . You do know there have been efforts this year to hide reported profits," says Sheldon Bierman, a former Securities and Exchange Commission attorney who spent most of last year trying to unsnarl the oil-profits picture for the Cornell (University) Energy Industry Study in Washington, D.C. "Profits on joint ventures,

Please Turn to Page 14, Column 1

# 'Big O

4

Continued From Page One

if they're less than 50 per cent owned, may never appear on the [parent company's] books until they are passed along as dividends. Income on tankers doesn't show up in the annual report until it comes home. You can hide profits in oil better than in other businesses."

## Why these profits may not be as big as they seem

"We aren't hiding anything," objects Archie Monroe, Exxon's controller. A lot of oil-company critics got started by protesting the industry's tax breaks, and Monroe says they have confused what's not on companies' income-tax returns with what's made public in their annual reports. It's true that corporations don't have to pay taxes on the earnings mentioned by Bierman until the money is brought back to the United States. But Monroe says the income from Exxon's tanker fleet is nevertheless lumped into the total profits shown on the company's annual report as are most earnings from Exxon's share of partly owned subsidiaries. In fact, oil men say that officially reported profits aren't misleadingly low but the other way around.

For the stockholders who own the oil companies, the important thing about profit is the return it brings on their investment. From that point of view, the recent upsurge only makes up for what the rest of us remember as the good old days of cheap oil. Oil prices didn't even keep up with inflation for a decade or so, and the industry's rate-of-return lagged a little behind that of business in general. A study by the Federal Energy Administration (FEA) shows that oil-company stockholders would have been better off in soap making, publishing, or a host of other businesses.

## Profit Jump

Most studies show that the oil industry in the decade before 1973 earned an average of 11 or 12 per cent on the money invested in it. This was about the same percentage, or a little less, as earned by business in general. The big profit jump of 1973 boosted this return to about 15 per cent, but business generally enjoyed the same upsurge. It is only in the last year or so, with oil's return touching 20 per cent on the average and more than 30 per cent for some companies, that the oil business has become so much more profitable than other industries.

And those profits are rather slippery. A chunk of 1973's gains came because the U.S. dollar was devalued. That meant income earned in marks or yen or whatever showed up on the multinationals' books as higher dollar profits even though it might not be worth a penny more in the country of origin. A bigger chunk of income consisted of "inventory profits." Amid the soaring prices of the last two years, oil that was worth, let's say, \$4 when it went in the company storage tank might be sold for \$6 when it came out again. That dipping into inventory brought a real profit, but no joy when the company then had to pay a Middle East nation \$8 a barrel to fill the tank again.

Indeed, oil men are fond of insisting that long-run profit levels may not be high enough yet to attract the investment they will need to meet the energy demands of the 1980s. This is partly because such huge sums will be required, but partly for other reasons too.

## Money Tied Up

Monroe, for instance, says industry expansion into hard-to-develop areas like the ocean and the Arctic means the companies' money must be tied up much longer before it generates any return at all. It will be nine years from the time the project started, he says, before Exxon gets anything out of its oil development in California's Santa Barbara Channel. It will be 1977 before the industry gets a drop of oil from the billions of dollars it has invested in Alaska's North Slope.

And the risks may be higher too, now that rising oil prices have made the oil companies so unpopular. The producing countries are nationalizing the oil fields, the consuming countries have price controls, and the U.S. Federal Trade Commission has sued to break the companies up. Investors don't put money in a riskier-than-average venture unless they can get a higher-than-average return. Monroe thinks 16 to 18 per cent would be all right.

Investors are the ultimate judges of whether profits are too high or too low because they put up the money and take the risks. Lately their judgment has been that they are on the low side. As Big Oil's profits have soared, the prices of its companies' stocks have plummeted, sometimes to fractions of their former values. It's true that most other industries' stocks have gone down too, but Exxon, Texaco, and Mobil, the three biggest members of Big Oil, all fell a little faster last year than the Dow Jones industrial average.

## Where do profits come from?

In setting Government policy, this may be more important than the sheer size of the companies' profits. The corporate members of Big Oil dig coal, mine uranium, sell real estate, sail ships, sell tires, own department stores, manufacture chemicals, and fifth-ranking Gulf inquired last year about buying a circus. If the companies make a killing in chemicals, that hardly justifies an excess-profits tax on oil. If they lose their shirts overseas, that doesn't excuse rip-off prices in America. If the profits come from refining and retailing, it would be pointless to try to restrict them by tinkering with the price of crude oil.

Big Oil is not very helpful about this. The companies' public reports don't break down their incomes into segments like refining, marketing, and so forth. Many things, like that tanker in-

3

come, are just lumped mysteriously together. But here are some broad outlines that are widely agreed upon.

Until 1973, the growing flood of very cheap Middle Eastern oil kept prices relatively low for oil and gasoline. These prices were further held in check, at home, by Government price controls that were imposed in 1971, and checked abroad by American import quotas that limited the market where Mideast oil could be sold. By 1972 the oil industry's rate of return had fallen to its lowest level in more than a decade. The number of drilling rigs at work in the United States had fallen to less than half of what it was in the late 1950s as operators despaired of making money on the oil they might find.

#### Everything Changed

But 1973 changed everything. A world-wide boom had already set demand soaring for oil, and New Year's Day marked the take-over by several Arab countries of a one-fourth interest in their oil production, the first step in a process demonstrating that the oil producers had gained the whip hand over the buyers. Then dwindling U.S. production forced the United States in the spring to abandon its oil-import quotas, adding another batch of potential customers to those already scrambling for Middle East production. And finally the Arabs halted oil shipments during the Arab-Israeli war.

The result was a price panic as companies and nations scrambled for oil and tankers to haul it in. Prices soared to undreamed-of levels, especially in Europe, where almost all oil must be imported. The Chase Manhattan Bank's figures for wholesale prices, based on bargeloads of oil in Rotterdam, rose during the year to about 48 cents from 12 cents for gasoline, to 58 cents from 12 cents for heating oil, and to 46 cents from 8 cents for boiler fuel. On top of this lay the U.S. dollar devaluation and a convoluted price structure that tended to increase oil-company profits every time the oil-producing nations raised their prices.

As you might expect, Big Oil made its biggest 1973 profits overseas. The 30 companies that Chase Manhattan regularly analyzes had made 53 per cent of their disappointing 1972 profits in the United States; they made only 37 per cent of their big 1973 profits here. Individual companies showed the same pattern. Exxon says its 1973 earnings from oil and gas rose 16 per cent in the United States, 48 per cent in the rest of the Western Hemisphere, and 83 per cent in the remainder of the world.

#### Refining Is Profitable

Another rough index can be made by comparing profits of international majors with those of companies more concentrated in the United States: Multinationals Exxon and Texaco were up 59.5 per cent and 45.3 per cent respectively. Comparative stay-at-homes Shell and Standard of Indiana gained only 28.1 and 36.3 per cent. Oil companies made quite a point of telling American audiences that the profits came largely from overseas operations.

There was also a change in the profitability of the different processes that oil goes through between the well and your gas tank. Traditional wisdom suggests that companies make most of their money by producing crude oil—which is where the tax breaks are—and less by refining and marketing it. Demand for the refined "product," in fact, was long so soggy that an entire industry of "independent" gas stations grew up to sell the surplus gasoline the big companies couldn't unload. But 1973 tightened demand for gasoline, sent product prices soaring, pushed the independents to the wall, and made refining profitable indeed.

The majors can't or won't break down their profits on a process-by-process basis, but you can get an idea by looking at two big refiners with only negligible crude-oil production. Profits of Clark Oil & Refining rose 266 per cent in 1973; those of Commonwealth Oil Refining rose about 1,000 per cent.

But 1974 changed everything again. The Persian Gulf states, for one thing, began to alter the complex pricing system there in a way that shifts the profit on their oil from the companies' pockets to their own. The world-wide boom turned into a world-wide bust with demand falling so much that surpluses have begun to appear. Those Rotterdam wholesale prices plunged from the 40-cent and 50-cent level last winter to barely half as much last September.

In the United States, however, price controls had been lifted in late 1973 on "new" domestic crude oil—that from sources developed since May 1972—and its average price has shot up since then to almost \$11 a barrel. The price ceiling on "old" oil increased during 1973 to \$5.25 a barrel from less than \$4 a barrel. These events took place too late to have much effect in 1973, but made 1974 a bonanza year for U.S. oil.

#### Earnings Not So High Abroad

Exxon made almost as much profit in the first three quarters of last year as in all of 1973. Its president reported in December that earnings had grown "more so in the U.S. than abroad." The 27 companies followed by Oil & Gas Journal also made more money in those nine months than in all of 1973. The European multinational, the Royal Dutch/Shell Group, said "oil business outside North America gives cause for serious concern," but American subsidiaries helped keep over-all earnings high.

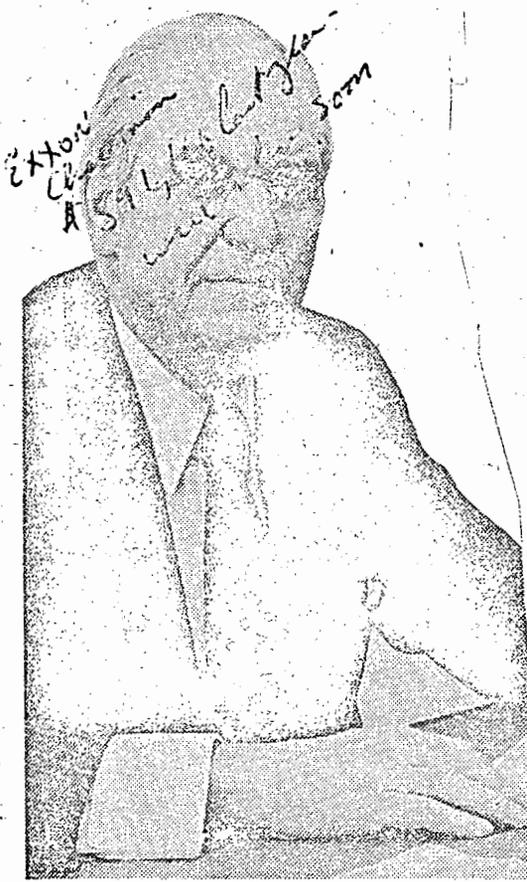
Compare the multinationals and stay-at-homes again, and for the first nine months of last year, you'll find Exxon's and Texaco's profits up 38 and 70 per cent respectively, Indiana Standard's and Shell's up 104 and 82 per cent. There is much less talk now about inventory profits and the like. Exxon's president said the big jump in U.S. oil and gas earnings was "due mainly to higher prices for domestic crude."

The big jump in refinery profits also seemed to reverse itself. The many 1973 announcements of soon-to-be-built refineries were replaced late last year by announcements that many of them won't be built after all. Refiners began to pay much higher crude prices after controls on "new" oil were lifted, but they remain under price controls themselves. Buyer resistance made it impossible to raise "product" prices anyway.

The industry is said to have "banked," or held back until a future date, between \$1 billion and \$2 billion in price rises that are legal under price controls but above what the market will pay. All 25 other companies followed by the Oil & Gas Journal through the first nine months of 1974 had rising profits, except refiners Commonwealth and Clark. For the last reported quarter, they both had losses running into the millions.

6

Okay, so profits now seem to be coming most heavily from production of crude oil in the United States for use by Americans. Are Americans being overcharged? How much profit is



### How much profit in a barrel?

The harder you look the more elusive it gets. Price doesn't tell you much. Some cheap-to-produce "old" oil is very profitable at a price-controlled \$5.25. Uncontrolled oil from declining "stripper wells" or disappointing new fields can lose money at a "new" oil price of almost \$11 a barrel. Yet this confusing area is where much of the controversy lies. Some critics want to roll oil prices back to a price per barrel that will yield a "reasonable" profit. Others want a windfall-profits tax to be levied on each barrel of oil that sells for more than a "reasonably profitable" price.

There are different ways of looking at that profit. Let's take an unusual and revealing auction that was held by the Government in October. Instead of asking companies to offer competitive cash bonuses for the right to drill for oil, the Government had the companies compete over the size of the royalties they would pay for the oil they might find on 10 tracts of sea bottom off Louisiana. The winning bids promised royalties to the Treasury of as much as 82 per cent of the oil.

You can look at this and say the companies are running on a paper-thin profit margin. To give up 82 per cent of the oil at the present price of almost \$11 leaves less than \$2 a barrel for offshore drilling, laying pipeline to the well, making up for the risks of not finding anything, and paying interest while all this money is tied up. Only a fraction of \$2 would be left for taxes and a profit.

### New Oil and Old Oil

You can also look at this and conclude that the companies are making enormous profits on all the similarly situated oil leases they have accumulated in the past. If today's prices make it possible to give up 82 per cent of the oil and still make a reasonable profit, what kind of return must these companies now make on older leases where the royalty may be only about 17 per cent, and the cash bonus was keyed to a market price of less than \$4 a barrel? It would seem that profit makes up most of the price of some new oil and even some old oil.

Both of these ways of looking at it are probably correct. There is certainly a "windfall" to be earned now from oil that would have been profitable when the price was only \$3.80 a barrel. Former Treasury Secretary George Shultz calculated last year that this additional profit would be \$1.7 billion for the industry if prices averaged \$6.50 per barrel for domestic oil in 1974, and \$5.6 billion if they averaged \$10. The average now is about \$7 for new and old oil combined. But there is a constant erosion of that windfall as companies invest money in oil that would have brought no profit at all under the old prices.

So profit per barrel is a kind of moving target, and the size of any windfall will depend as much as any-

there in the average barrel of American crude? Inquiries to a variety of oil companies, several officials of the Federal Energy Administration, and some trade associations, don't turn up such a figure. Archie Monroe says he knows how much it is for Exxon, but he won't tell. It's "a little more," he says, than his company's world-wide average profit of 92 cents a barrel.

# Bonanza

thing upon the speed with which investment is diverted into producing high-cost oil. This is why Shultz's proposed windfall tax (still languidly supported by the Administration) at first would have siphoned \$3.65 out of each barrel of \$10 oil, and gradually reduced this tax over three years to only \$1.53 a barrel.

## Where is the money going?

To hear them tell it, the oil companies are pouring everything they've got into drilling for oil to make us independent of Arab supplies. And they certainly have put a lot of money into that kind of thing. But there is a severe shortage of drilling rigs, drilling pipe, and other equipment that went into relative disuse when the business was in the doldrums. So the companies can't put all their current profits into American oil exploration even if they want to.

Drilling for oil has increased at a record pace, but it is still up less than 25 per cent over last year, if you measure by the number of drilling rigs in use. This pace will pick up, however, because the companies are willing to pay as much as two or three times last year's prices for some oil-field equipment. Production of heavy drilling rigs is expected by the Commerce Department to reach 104 this year; only 54 were produced in 1973. The oil companies are bidding feverishly for land to use them on. October's offshore auction brought in \$1.4 billion in conventional bonus payments for Government oil leases. Three previous auctions brought in more than \$5 billion.

But the companies are also spending their big new profits in other ways. Some have gone shopping for coal mines. The sixth largest oil company,

Oil workers' union wants a piece of the profits too.

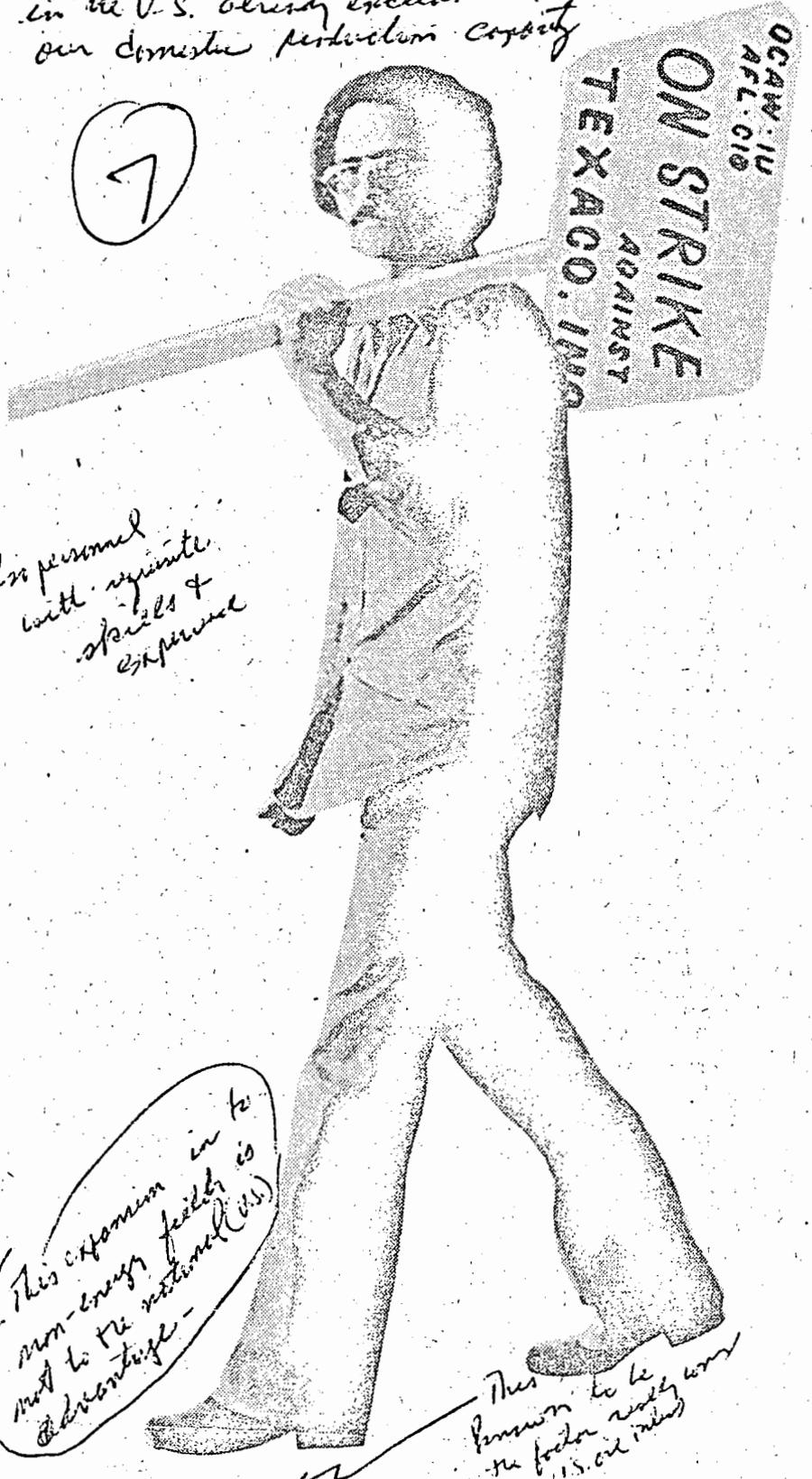
*Note that our refining capacity in the U.S. already exceeds our domestic production capacity*

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*also personnel with requisite skills & experience*

*This expansion in the non-energy fields is not to the national (U.S.) advantage -*

*This expansion to be the factor really won't U.S. oil industry*



(8)

Standard of Indiana, is trying to buy up the 11th largest, Occidental Petroleum. It cost Mobil the equivalent of less than nine months' profits this September to buy control of Marcor (Montgomery-Ward and Container Corp. of America). Exxon in 1973 almost doubled its hoard of cash and securities to \$3.1 billion. That's more than the governments of Sweden or Austria have in their reserves.

The companies are also investing a lot of their profit overseas. Exxon says it has increased the proportion spent in this country, but it still is putting more money into foreign-country investments than into the United States. This seems generally true. Last year's petroleum investment in the United States is estimated by the Commerce Department at \$7.8 billion. A separate Commerce Department study estimates American companies' petroleum investments overseas at \$8.6 billion last year and \$10.4 billion in 1975.

#### 'Arab Blackmail'

For all the talk about freedom from "Arab blackmail," American oil investment in the Middle East is expected to hit \$1.8 billion this year, twice the 1973 amount. There's nothing necessarily nefarious about this. Only increased oil production can hold prices down—and maybe break the foreign oil cartel—and oil can only be produced where you know it exists.

Production costs can be astronomical. Monroe says the rule of thumb used to be that it took \$700 to \$1,000 of investment to produce one barrel a day of additional oil. That was when development was mostly on solid ground, around the edges of known fields. Now, he says, development in the North Sea will cost about \$6,500 of investment to produce a daily barrel of oil. Others have reckoned \$2,000 in investment per daily barrel for the Outer Continental Shelf, \$20,000 for shale oil.

All of which brings us back again to the price and profit in a barrel of oil. How high must the price be to justify all this investment? The FEA's "Project Independence" study suggested that \$11 a barrel and the right Government programs could make the United States self-sufficient in oil by 1985. Exxon questions whether we could be self-sufficient at any price. A 1972 study now haunting the oil-industry trade group that made it suggests that American oil production could be increased significantly at prices of less than \$4 a barrel. President Fred Hartley of the Union Oil Co. said early last year that \$5.25 for old oil and \$7.90 for new oil should be sufficient.

#### Windfall Profit

Again, there are different ways of looking at this. No matter what the price—\$7 or \$9 or \$11 a barrel—it will mean at least a temporary windfall profit on oil that costs much less to produce. Ralph Nader's FEA watchdog, Gary DeLoss, calculates that some higher priced oil may cost \$280 a barrel, if you reckon what the consumer must pay for all the other barrels of oil whose price must rise to make this new oil profitable. There is also a question whether any price can make self-sufficiency safe or profitable for the multinational oil companies. If expensive investment made the United States independent of high-priced Arab oil, the multinationals that produce it for them would have fewer places to sell it. If

If the oil-producing nations lowered their prices, it would make that U.S. investment worthless.

One thing the companies are not doing with their profits is lavishing them on their stockholders. While their profits more than doubled from 1972 through 1974, the three biggest companies raised their dividends by less than 30 per cent. Executives did better. Figures collected by the Oil, Chemical, and Atomic Workers union show chief executives of 28 big companies received average raises in 1973 alone of 32 per cent, to \$269,750 from \$223,178. Exxon's top 62 executives made \$7.8 million in salary and bonuses that year, including \$596,666 to chairman J. K. Jamieson.

#### What about those taxes?

The notorious tax benefits that the oil companies enjoy, and which the newly elected Congress is likely to stamp out, do not have much effect on long-term profits. Investment in higher-cost oil tends to rise until the profit left after taxes is about the same as if there were no tax breaks at all.

According to Thomas Field of Taxation with Representation, a citizen's lobby that has criticized the tax breaks, the main result of these breaks is to increase the money the oil companies are willing to pay landowners for drilling rights and to reduce the price at which they sell gasoline and other products. Lately the biggest beneficiaries of this have been the governments that own the offshore and Alaskan oil fields. The main objections of informed critics to these tax breaks is that they subsidize oil consumers at the expense of taxpayers in general, and that they attract investment into the oil business at the expense of industries that have to pay a fuller tax load.

## Some policy implications

Price controls keep the price of oil down in the United States but have the effect of subsidizing the Mideast oil producers and making us more dependent on their cartel. "We buy [their oil] at \$12, mix it with price controlled oil, and sell it for \$9," complains Gerard Brannon, professor of economics at Georgetown University and supporter of a windfall tax. Controls also encourage waste, he says. "If a guy drives a gas guzzler he gets twice as much benefit from price controls as a guy who drives an economy car."

A windfall-profits tax levied on high-priced oil would inhibit investment in high-cost sources such as oil shale. If such a tax emerges from Congress this year, it is likely therefore to have a "plow back" provision remitting to the companies the tax from income that is plowed back into new oil development. Some observers conclude this will guarantee the big oil companies a monopoly of shale and other exotic fuel sources to add to their growing control of coal, gas, and uranium. Potential competitors from the mining industry could not compete with oil companies using plow-back dollars that, in effect, cost nothing because they would otherwise be taxed away.

Oil companies bid higher for equipment and drilling rights when they see or expect a rise in the price of oil. "If you expect a price of \$10 per barrel, you're willing to pay up to \$8 a barrel to acquire the land," says Arlon Tussing, economist for the Senate Interior Committee. So price-control advocates say industry predictions of higher costs may be self-fulfilling prophecies unless prices are held down. "If the industry expects the price of oil to be \$10," Tussing says, "then you'll find the costs will rise to almost \$10."

Becoming independent of Arab supplies may require more than spending huge sums to develop energy

sources in the United States. A self-sufficient America would diminish the world market for Mideast oil, and very possibly push down its price from its current level. Then some scheme of consumer or taxpayer subsidy would be needed to prevent the collapse of a "self-sufficient" American industry producing oil for \$7 or more. It's uncertain whether taxpayers would be willing to heavily subsidize the unpopular oil business, or if consumers would be willing to pay \$10 a barrel if the Arabs are willing to sell oil for \$5.

All the talk of taxing away the oil companies' "windfall" or eliminating it with price controls assumes a principle that is new to our economic system—that good luck belongs only to the Government. If Government is to take away the earnings of exceptionally good years in the oil business, equity would seem to require that other industries and individuals be penalized for unusual good fortune.

## Is skepticism still in order?

Don't take any of this too seriously. "Any time you add up two companies' results, you've told a lie," says Sheldon Bierman, explaining how companies keep their books in different ways.

Take LIFO and FIFO, accountants' terms for two ways to keep track of inventories. During an inflationary period like ours, FIFO tends to exaggerate the profits that appear on a company's books. A switch to LIFO can reduce them. Texaco switched from high-profit FIFO to low-profit LIFO on Jan. 1. Monroe says Exxon has used LIFO in the United States since 1940, but adopted it in the Netherlands only last year. "It's changing all the time," he says.

No mention of the concept of putting this money into a joint Govt/industry program for energy independence -

REND

## Expense or Investment

Take "successful efforts" and "full cost." These are two different ways in which extractive industries account for the exploration expenses that can make up 30 or 40 per cent of the cost of producing a barrel of oil. One way makes profits appear lower but the long-range rate of return seem larger. The other way produces opposite results. Most big American oil companies use "successful method" accounting and this, say their accountants, makes the industry's rate of return seem higher than it really is. "The investor is not to compare the relative success of an oil company [by] looking at the financial statements alone," concludes a partner in the accounting firm that handles Exxon.

Take "transfer prices." A lot of oil business consists of Exxon selling to Exxon and Gulf selling to Gulf. There is a lot of suspicion that profits are created and hidden away by having the right hand charge unrealistic prices to the left. The FEA has been investigating transfer prices, it has rewritten the reporting rules, and it is working up a new generation of forms for the companies to fill out quarterly in reporting the prices they charge themselves. "There probably are a few cases of significant abuse, but my impression is that it's not on a large scale," says an FEA official who is working on this. "In a couple months you'll have a much fuller story."

But by then oil-company profits may have turned around. We've already noted declining wholesale prices in Europe, "banked" price rises in the United States, profit pinching by the Middle East nations, and the hostile attitude of the incoming Congress. Chairman Jamieson of Exxon last month said that refining, tanker traffic, and world-wide production were all running at less than capacity and that a drop was likely in the industry's historic growth rates. The profits may no longer look so high when Congress gets around to dealing with them.

# Modern Realities in Naval and Foreign Affairs

By Captain Howard C. Bucknell, III, U. S. Navy (Retired)

*The traditional interdependence of the military and the State Department—as was smilingly reflected in the faces of Robert McNamara and Dean Rusk in a 1962 meeting of the Senate Foreign Relations and Armed Services Committees—has become increasingly subject to barriers which threaten the vital rapport between soldier and statesman and lead, predictably, to militarily unsupportable commitments.*

In an earlier and more simple day, Pennsylvania and Constitution Avenue were not very far apart. It was possible for a Foreign Service officer to stroll down Seventeenth Street and, in the course of an afternoon, to arrange with a naval officer for the loan of some Fleet broadcast time, some communications ratings, a few meager pieces of equipment—and practically in the time required for the telling—thus to initiate through command interest and personal relations a daily radio information service to our embassies and legations abroad.

For one reason and another, while global distances have been foreshortened by the technology of our times, Washington distances have not been similarly affected. It is no mean stroll, after all, from the new State Department Building to the Pentagon and the effort alone would probably not suffice to establish productive relations; for there are greater barriers in existence today to the meaningful exchange between "State" and "Navy" than mere distance.

All of this is something of a pity because, at this time more so than ever before in our century, we may discern the need for the closest sort of liaison, understanding, and mutual support, between these two branches of our government.

The Navy finds itself in a dilemma of historic implications. It has arrived at a complicated sort of crossroads. Practically speaking, its size, that is to say its number of ships, and its very nature, are being re-decided. The vast bulk of the ships in service in 1966, with the exception of the Polaris fleet, were obsolescent. The various artifices of renovation and modernization had already about run their course. But the answers to the inexorable questions of replacement on a very large scale or progressive abandonment were deferred in the face of Vietnamese war requirements. Even in 1966, replacement in kind was not perceived as a simple alternative to abandonment. There was then, and there is even more cogently today, the very in-

volved matters of functional warship types to choose, a wide variety of mutually exclusive equipments and weapons to consider and, of greatest importance, the decision as to nuclear propulsion or no. All of these questions are operative against a backdrop of great change in our international and domestic situations. The Navy, in common with her sister services and the Foreign Service, has been drastically affected by the proportionate share of the budget now available for other than internally oriented affairs.

A specialized aspect of the Navy's problem, additionally, derives from having been forced since World War II to specialize to an extraordinary degree in its officer corps because of far-reaching technological changes. It has been urged, within the profession, that officers reaching a given level of seniority go about the business of dispensing with their "wings," "dolphins," and (presumably) "black shoes," and rise above parochial outlooks as aviators, submarine officers, or destroyer men, in assessing the various means applicable to given ends.

It is obvious, nevertheless, that apart from the Navy's internal problems and the general problem of money, the question of "how large" and "what kind of" a navy should not be answered without detailed correlation with operational foreign policies—in addition to correlation with broader national strategies resting, in turn, on basic aspirations of our people to the extent that they can be perceived and articulated—principally by the President. The policies to be evolved will not be viable in their turn unless correlated with, and supported by, an adequate and suitable military establishment—including most specifically an appropriate Navy.

*The Interdependence of Military and Foreign Affairs.* It is by no means the function of the military establishment in this country to prescribe the foreign policy of the United States. It has been traditionally beneficial, however, for each of the military services to study closely this policy in order to anticipate, if possible, its military demands on the foreign scene. This has been a necessary adjunct to the military responsibility for the defense, in fact, of our homeland. It has been reflected, for the most part, by persistent, if not equivalent, interest on the part of the State Department and its Foreign Service officers as to the realities of our various military capabilities. This interaction is an extraordinarily useful ingredient in the complex business of adjusting operational foreign policies to available forces and to the more serious business (in a long range sense) of *evolving* forces to support sustained (or sustainable) policies. It takes place at the professional level among the officers concerned even though the formal aspects of consideration and decision take place in the

rarefied levels of the National Security Council and its offspring committees.

For many years, the intermediary between the State Department and the Navy was the ubiquitous naval attaché assigned to the various embassies and legations abroad. Today, this officer is often a product of specialized intelligence training rather than "of the Fleet." In any case, whether because of the technical specialization mentioned earlier, a possible tendency of the attaché to identify himself with the large U. S. military "communities" to be found abroad, or because of the increasing propensity in our government to treat all intelligence matters—and the people connected—as something "apart" from any other operational field, the naval attaché provides less and less often, from first-hand experience, the broad education on current naval affairs that his predecessor was able to transmit to our Foreign Service officers of an earlier era.

In a rapidly fluctuating international situation, it is of vital importance that operators in the foreign policy field have the most sensitive and accurate picture of the *actualities* of our military situation in various parts of the world—as opposed to the "official" position of the government, assumed when discussing the condition of military forces with the P.P.P. (Patriotic Popular Press). A failure to achieve this sort of perception (which comes from sustained interest and association between professionals) can result eventually in the unsupportable commitment to a Suez-type venture by the super-levels of government. Recently in our country the importance of conventional forces was reaffirmed by one President who then promptly stressed this theme by its application in, as we now perceive, a rather unlikely concept of combat. High-level pronouncements as to the newly discovered importance of this or that mode of warfare are diverting enough for the press on a slow news day but it should not be supposed by professionals that the mere statement of policy at even the highest executive level causes long-neglected capabilities to spring into being overnight. To do so in the making of foreign policy decisions is to invite being unmasked in reality as a "paper tiger"—which was, essentially, the unhappy lot of Great Britain and France following Suez. In our country, no military system (conventional or otherwise) of practical and sustained import can be brought into being and maintained in a viable state today without a substantial and long-term commitment of the art, treasure, science, and manhood of our nation. Thus the substantial reduction of our Navy which we are witnessing today cannot, in sober fact, be recouped in the short term. The reconstituted Navy that will appear must be tailored to those foreign policies resting on the most secure of national convictions. The importance of *sustained* asso-

ciation between "soldier" and "statesman" during this period of reappraisal and adjustment rests on the fact that in a changing technological environment, lessons learned a generation ago are seldom entirely appropriate in detail to the exigencies of the moment or the predictable requirements of the future.

*The Defense Complex.* To avoid leaving the full responsibility for a breakdown in communications on the hapless attaché, however, it must be recognized that several other factors have contributed to the schism between "State" and "Navy" (and probably the other services) in recent years.

For one thing, since World War II, we have engaged in sustained occupations of various foreign territories. These occupations have, in general, been conducted under military pro-consulships—responsive actually to the President, the Pentagon, and the Senate, rather than to the Secretary of State.

For another, the creation of the Department of Defense removed all military services from cabinet representation. As interpreted in practice, the Reorganization Act of 1947 requires that sustained contact with the upper echelons of the State Department by all military services be conducted through the Office of the Secretary of Defense—notably through the Assistant Secretary of Defense for International Security Affairs (ISA). There is considerable economy in this arrangement and it is by no means to the Navy's credit that, for a number of years, it, for all practical purposes, stood sullenly in the wings complaining instead of joining the new order with its best people.

Finally, the division between the Defense Department's responsibilities for National Defense through the coordination of military procurement and technical support of the Armed Forces, and the State Department's responsibility for the manipulation of foreign policy, was often more than blurred on occasion during our last administration by the personal ambassadorial duties assigned by the President to the Secretary of Defense. The President of the United States is free to choose any individual in our nation to represent him personally and to "trouble-shoot" for him as he deems necessary or expedient. But, when this individual happens also to be the Secretary of Defense, whose "weight in council" reflects the approximately 50% of our national budget at that time accepted as the military's "lot in life"—more than simple and transitory side effects could be expected to and did occur in the field of Defense's impact on foreign affairs. Some of these effects were as they should be. Some were not.

But, without reference to the problems inherent in the Defense Department's practice of operational diplomacy abroad, each of the military services in its own peculiar sphere of cognizance has a legitimate and

sustained individual need (above and beyond that served by the Joint Staff and the Office of the Secretary of Defense) to counsel State Department operational personnel and, in turn, to receive their advice.

For the Navy's part, this mutual need is a product of factors such as: our national geographical situation; the Navy's fortuitous "marriage" to a magnificent Marine Corps; the vigorous existence of a specialized naval air arm; the unique adaptability of currently vital weapons systems (such as Polaris) to the Navy's natural habitat—the sea; the continuing importance of sea-lift in world affairs; and the acute current dependence of the world's modern nations on oil.

Concerning these factors, the general tendency is to forget the Marine Corps and to ignore oil.

As to our relations with the Marines, one may say that it is not unusual for a husband to overlook on occasion the possibility that his welcome in high circles may be owing to his talented wife rather than solely to his own sterling attributes. On the other hand, the Marine Corps' espousal to the Navy, beset as it may be with marital "ups and downs," is not likely to be terminated by the Marine Corps. Not when "she" is confronted daily with the example of what happens to other "widows" bereft of their own tactically controlled air power.

As for oil, we must discuss it at further length.

*Survival Without Nuclear War.* One of the most important revelations of the last 15 years has been that the threat of nuclear war is not necessarily paralyzing. Life does go on. And as it does so, it becomes ever more apparent that there are great incentives for the successful pursuit of policies aimed at avoiding or preventing nuclear war. During these same years, however, we have also had evidence that for the United States these policies must be complete national expressions in their own right. They cannot be supine or emasculated policies of retreat or pacificism. Nor, we have learned more recently, can they be single-minded and rhetorically over-postulated determinations to interfere everywhere at all cost. It has been demonstrated that a policy of avoiding nuclear war carries with it the need to ensure our government's ability to wage other sorts of war (within reason)—and to retain, absolutely, the ability for waging nuclear war in the last resort. It may be said, however, that it is also becoming more clear that this last resort is postponed or avoided in almost direct proportion to the number of peaceful *and warlike* alternatives available. The Navy is as inherently suited to this task of providing—and of ensuring—alternatives as the Army, in conjunction with the Air Force's Tactical Air Command, is suited to the job of "making them stick."

The general reasons for this inherent adaptability of

the Navy to a wide spectrum of action have already been touched upon. The underlying key to the Navy's peculiar "rapid response" application to foreign policy support in our present age, however, is found in oil and its transport by sea.

*Oil and Antisubmarine Warfare.* Modern industrial nations can neither produce, nor feed, nor transport, nor defend themselves without oil. Nations seeking adulthood in our current civilization are forced, first and foremost, to acquire oil. Yet only a relatively few nations, industrialized or not, possess this precious commodity in sufficient quantity within their own borders. And, in general, few of these nations are members of the Free World (maritime) alliance system. It may be said that this fact is found at the root of most of our foreign alliances (or entanglements, depending upon the viewpoint). In practically all of these alliances, somewhere, lies the need—the desperate need—of some nation for oil. Articulated recognition of this point, typically, has only occurred as energy demands on this continent and in Europe begin to overrun fuel capacities.

How long this excruciating dependence on oil will persist is a matter for technological advances as well as gas and oil exploration to decide. But it would be a self-delusion of the first magnitude to ignore its tremendous importance at the present time and probably through this decade.

A substantial proportion of the same 70-odd foreign nations with whom we have contracted either treaties or agreements for military assistance obtain their oil from outside their own borders; mostly by sea. Lest at this point the reader conclude that it is good that a merciful Providence chose to make oil-by-sea dependence a problem for our friends (whom we can help if we want), reference should be made to Figure 1—which apart from highlighting the oil dependence of our friends—also reveals some sobering aspects of the U. S. dependence.<sup>1</sup> All in all, however, it can be acknowledged that whereas important interests are involved for our country, the real issue at stake for our maritime friends is their absolute survival as national entities. It is, of course, a fact that the loss of these friends would drastically curtail the social, economic, and political options of our children.

For many years, our Navy was the only force in the world intrinsically capable of safeguarding this bloodstream of civilization. One hesitates to say simply "capable" of performing this task because of its extraordinarily far-flung nature (in view of the multiplicity

of our commitments) and because of the fact that the most apparent threat to its integrity lies in the existence—and continuing modernization—of the four Russian submarine fleets. Succinctly stated: *tankers are a submarine's "meat;"* and, where there may be some basis to the perennial professional naval argument as to the submarine vulnerability of this or that man-of-war, no one has ever argued the point with respect to tankers. And each single tanker today may carry approximately the quantity of oil carried by an entire convoy in World War II!

Antisubmarine warfare has long been acknowledged by our Navy as being one of its major "problems." Unequivocal action toward its solution, however, has not necessarily been a major preoccupation of the Navy until very recently.

The end of World War II left the Navy endowed with a tremendous capital investment in carrier warfare. To understand the real extent of this heritage it must be realized that it comprised not only many large and expensive ships plus vast armadas of aircraft, but also great numbers of officers and men skilled in their use and confident of their wartime value. Too, there were extensive shore-based estates supporting the maintenance and training requirements of this huge fleet, a well-integrated supporting block in domestic industry, and the far-flung administrative apparatus to tie all of these factors together. Such an endowment is not lightly nor prudently cast aside. More than naturally it has been the Navy's subsequent propensity to build largely upon this basic edifice of naval aviation and to adapt it, wherever possible and feasible, to the various requirements that became apparent thereafter—in short, to hang the Navy on whatever strategic peg might seem capable of bearing the traffic.

On occasion, this effort, as applied to antisubmarine warfare at any rate, has had a somewhat makeshift appearance, as was the case toward the end of the decade of the 1950s when naval leaders implied in their testimony to the Congress that our Attack Carrier Striking Forces were in fact the strong right arms of our antisubmarine capability inasmuch as they could be thus used in the attack of enemy submarine bases. This sort of hyperbole has been largely dropped in more recent years because of the increasing understanding that, in view of nuclear warfare's catastrophic probabilities, nations possessing atomic weapons would, by such possession, be foolhardy to strike *in any fashion* at the homeland of any other nation similarly equipped. This realization that it is, after all, better to fight abroad—or *at sea*—than to burn at home is undoubtedly the genesis of the atomic weapon proliferation urge which is exhibited by various nations around the world today.

<sup>1</sup>Today over 50% of total East Coast petroleum product requirements and almost 100% of crude oil requirements in this sector are provided by sea-borne transport.

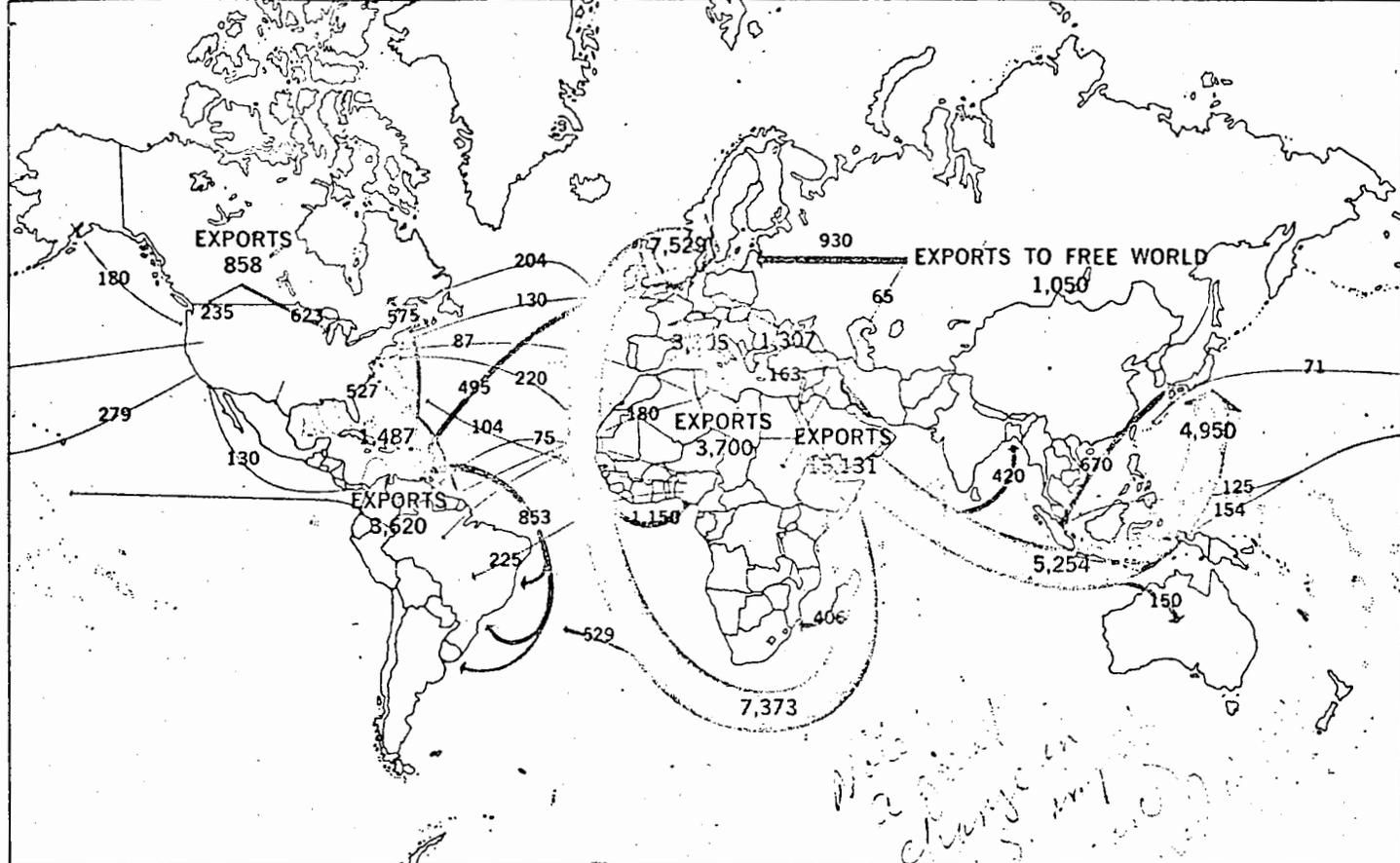


Figure 1 Free World International Flow of Petroleum 1971 (thousands of barrels daily)

U. S. DEPARTMENT OF THE INTERIOR

There is no intention whatsoever of decrying here the value of naval aviation—nor, specifically, the merit of carrier warfare. This mode of naval warfare is peculiarly necessary where any substantial naval commitment (including antisubmarine warfare) is to be made in the vicinity of enemy air power.<sup>2</sup> It has proven extraordinarily efficacious in the destruction of enemy surface units and shore installations alike. Furthermore it has been developed to its present heights primarily through American tactical innovations (with notable technical contributions by the United Kingdom's Royal Navy, plus a Japanese lesson) and there is no doubt that our combined genius exhibited so far in this field will result in further progress of great variety and military benefit. It is, after all, extremely valuable to the designers and manipulators of our foreign policies to have at their beck and call the naval capacity to strike, to blockade, to convoy, to search, and to land on short notice—all under self-provided air cover.

Nevertheless, as things stand today, although obscured occasionally by the well-meant efforts of Navy public information specialists (whose glasses are of roseate hue), the bulk of our aging fleet is ill-adapted

to modern antisubmarine warfare—and it is essentially oil-fired.

These two factors combine to spell out the unpleasant truth that, while our Navy is not badly off in being able to support a wide miscellany of projects in the national interest—ranging from the Polaris Strike Fleet to the government-sponsored transport of food or medicines overseas—it is not yet attuned to the preservation of the one element currently essential to what we term the "Free World"—namely, the unrestricted flow of oil. And, of extreme importance, this superannuated fleet and many of our new ships under construction are themselves almost completely dependent upon the sustained availability of oil.

It is useful here to pause a moment while considering the implications, in more or less concrete terms and in specific areas, of the apparition that we have evoked. We describe a sphere of influence whose national entities are essentially dependent upon the sustained availability of oil; we postulate a threat to this availability in terms of the Russian submarine fleets; and we indicate that the military agency at our disposal for countering this threat is (a) obsolescent and not particularly shaped to the task and (b) itself readily susceptible to immobilization by loss of a sustained fuel oil flow.

Let us deal with the last statement first. The real dependence on oil of our present-day ships may be

<sup>2</sup>An aberration of this point of view led to the situation where our surface escorts and cruisers are individually outranged by the surface-to-surface missile equipped ships of the Soviet fleet. Rectification of this error, since carriers cannot be omnipresent, is of great urgency.

made clear to the landsman by saying that, in the case of a destroyer—a typical antisubmarine ship—sustained speeds of over 15 knots cannot be maintained without at least weekly refueling. As these ships operate with carriers, for instance, where higher sustained speeds are often necessary due to aircraft launching and to coincident departures from a given track to seek favoring winds, sea aspects, and so forth—the refueling rate approaches that of twice weekly. The quantities of oil involved are stupendous—the uninterrupted shuttling services of several large tankers being required for the operation of a single carrier task group. Our Navy's critical bondage to oil is a very real thing. Wholesale conversion to nuclear power is of the utmost urgency and is a matter yet to be faced realistically by either its technical proponents or operational naval officers.<sup>3</sup>

Concerning the adaptation of the existing fleet to the containment of a submarine threat, we have already touched upon the rationale associated with our efforts to apply naval air power in this direction. It should be noted that against submarines normally operated on the surface—diving only in daylight to initiate (or escape) attacks—the great mobility and search potential of the naval aircraft made it an ideal antisubmarine weapon. Against the next generation of submarine which exposes itself on the surface only periodically by extending a small tube (snorkel) to recharge its batteries, the aircraft diminished somewhat in intrinsic effectiveness. By dint of magnificent flying on the part of truly dedicated officers and men, however, and with the commitment by the Navy of a very considerable supporting technical effort, naval aviation has retained a demonstrable level of usefulness in this area. But against the true submersible (of the nuclear-powered genre, for instance) the naval aircraft tends to suffer a severe loss of *unilateral* effectiveness. Its continued antisubmarine application in this case is justified by its susceptibility to coordination by antisubmarine ships, submarines, and shore bases, by its capacity for quick reaction against submarines who must surface to launch missiles, and by the desperate need for numbers imposed by the shortage of ASW ships in a navy primarily oriented toward aviation.

The truth of this becomes apparent when it is pondered that many devices created to help the aircraft find its submarine prey are essentially expensive modifica-

tions of tools otherwise more profitably employed on a ship—or another submarine. On top of all this we are becoming uneasily aware that any basic scientific breakthrough that we may achieve in the general area of ASW, besides not being exclusive to the United States, may well end in proving more advantageous to the submarine itself than otherwise. The appalling fact is that without reference to a nuclear holocaust, we are very likely faced, at sea, for the third time in this century, with a situation where if war comes, numbers and brute strength must be repelled by numbers and brute strength *plus* whatever scientific resources we can muster. The need for a firm and viable system of ASW-oriented maritime alliances under these conditions is painfully obvious.

*Geography, Oil, and the Russian Submarine Fleets.* When we come to an assessment of the Russian submarine fleets we are struck by a facet of geography which is, on the whole, peculiarly advantageous to us. By turning a mercator projection of the world on its side (See Figure 2) we perceive that the deep water exits available to the U.S.S.R. are guarded, in all cases except possibly one, by narrows susceptible to the establishment of prohibitive cordons of varying types (and varying effectiveness). The possible exception, Petropavlovsk, stands on a remote peninsula and falls into a special (and vulnerable) category of its own as concerns the affairs of the Pacific Ocean area—Petropavlovsk's access to the Pacific is nonetheless directly affected by our situation in the Aleutian chain. The importance of the southern tip of Africa and Cuba are obvious.

The international political atmosphere which makes feasible the establishment of cordons in these pregnant narrows of the world—as well as the prior acquisition of contiguous and advantageous repair and replenishment bases so helpful to the mounting of escort systems necessary in the sustained prosecution of an ASW campaign—is just as much a valid function of our Foreign Service as is the winning of friends and the influencing of peoples in the course of generally advancing man's lot while improving our "national image."

Turning again to the question of oil, the U.S.S.R. might one day find itself impelled to unleash its submarine fleets against the seaborne oil lines of the Free World, say of Western Europe, in a manner which we have not elected to do in our embargo of Cuba. If this were to occur, what, briefly, would be the consequences?

Militarily, one might calculate with some degree of refinement how many days guns could be fired, missiles launched, aircraft flown, or troops moved—including, especially, those flown over as an emergency measure—*sans* fuel supply.

<sup>3</sup>This question of whether the U.S. Navy "should or should not" take advantage of its lead in nuclear power ship propulsion has finally been overtaken by the argument over whether it "can or cannot afford" to maintain this advantage. The monetary price tag of nuclear propulsion figures in this argument but not largely in the minds of knowledgeable men. More attention is now being paid to the matter of whether or not we can meet the stringent personnel quality requirements that have very necessarily been placed on the operating crews for these ships.

Politically, however, a naval officer cannot assess with any hope of exactitude how long allies deprived of fuel would continue as allies—nor, for that matter, what unilateral arrangements otherwise staunch friends must contemplate if threatened by the loss of oil.

The Navy is quite capable of working out the nature and extent of forces (including those of potential ASW allies) required for the containment of the Soviet submarine fleets. It is also capable of providing to the State Department, for operational reference, specifics of the geographic necessities for the implementation of such forces.

But, besides being instrumental in acquiring allies with ASW forces or suitable bases, *only* the State Department (assisted by the CIA) has the facilities and the background to evaluate the vital question of *time* in the ASW syllogism of naval force, geographic position, and time available. The import of time here revolves about the question of how long, in the event of a struggle—since ASW is neither a one-day nor a single-avenue affair—would the temper and vital interests of our allies permit the outcome of such a war to remain undecided?

That this question is not one of idle curiosity becomes obvious when it is considered that this factor of "time available" fundamentally decides the number in being of ASW forces required (as opposed to the mere nature of such forces). Primed with this time-available information the naval planner could be equipped to examine the validity (or nonvalidity) of a number of mobilization schemes supporting "standing" forces. And, finally, using this information within the context of overall Defense Department financial estimates, we would be able to provide the Secretaries of the Navy and of Defense, and, through the latter, the National Security Council and the President of the United States, some now-badly-needed, reliable indices of where our foreign policies and homeland defense requirements are, or are not, mutually complementary. Obviously, in the larger course of events, with all services participating, that is just the picture that must eventually emerge at the Presidential level. Such a picture would show whether our economic, foreign, and defense policies, taken together as a national posture, supported our people's long-term determination to survive as a political, social, and economic entity of their own choosing.

In the case of each military service, close professional relations with State Department officers must lay the groundwork for this examination. In the Navy's case, ASW offers as good an example as anything else upon which to base our discussion since *upon this mode of naval warfare is predicated not only our ability to hold allies—but also the ability of any of the other services to operate overseas.*

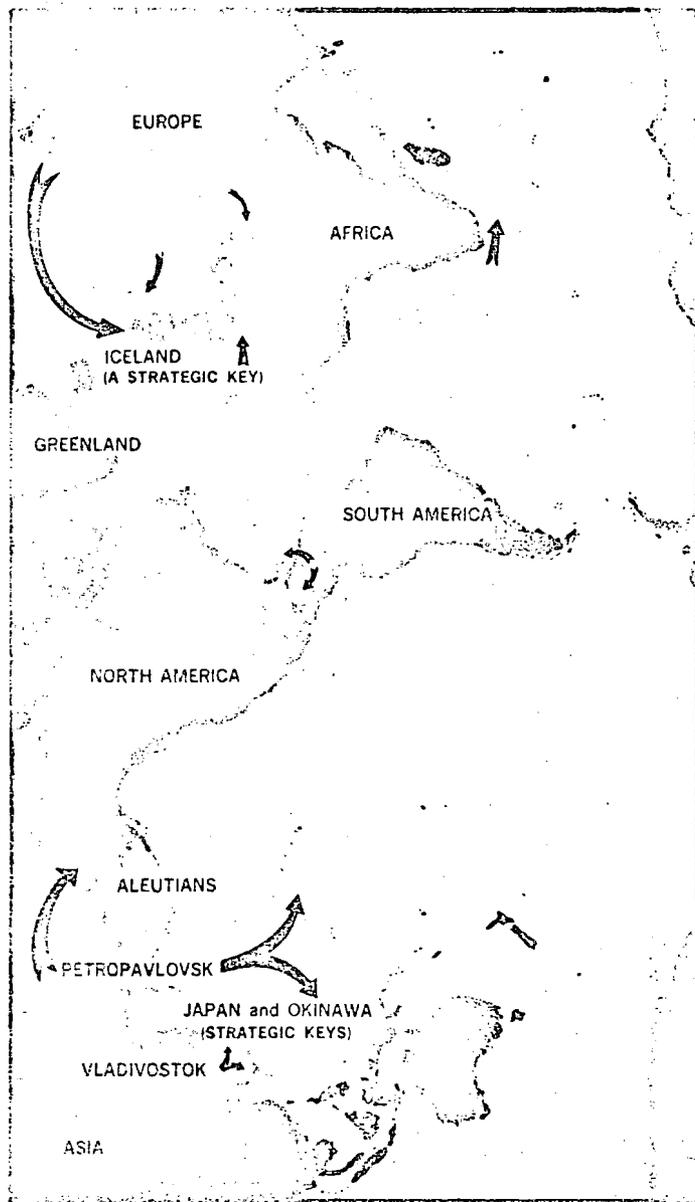


Figure 2

*By turning a mercator projection of the world on its side, we see that, with the possible exception of Petropavlovsk, all the deep water exits available to the Soviet Union are guarded by narrow seas which are susceptible to the establishment of prohibitive antisubmarine cordons.*

To postpone further the re-establishment of professional contact and the detailed reappraisal of military and diplomatic ways-and-means abroad could be disastrous. For the Navy's part, it might act to prolong the perilous circumstances where we build too few misarmed ships, of not necessarily the right type, needlessly bonded to oil, in order to implement possibly unsupportable, and not necessarily vital, foreign policies. For the State Department's part it might act to continue a dangerous euphoria where it is accepted as a matter of course that any U. S. foreign policy can necessarily be supported by the Navy or, in any case, at least the Air Force, if not the Army.

As a nation, we are rich and powerful, but we are neither so rich nor so powerful that we can recoup, for an indefinite period, from a failure to take first things first.

*Conclusion.* At the beginning of this essay, reference was made to the parochialism of the intra-Navy rivalry which, in its convolutions, periodically reaches peaks of intensity and recrimination that would lift even the heart of any city editor sated with hackneyed stories of inter-service squabbles. Our internal Navy differences usually, however, are based on considerably more than dreams of personal aggrandizement, urges for empire building, or gross intellectual lethargy. They spring from deep-seated differences in opinion, based on fundamental differences in outlook—made inevitable by complete differences in personal service experience. The bitterness with which these differences occasionally find expression is very largely the product of a devotion to the United States which the naval officer (and, for that matter, the Foreign Service officer) understandably finds difficult to put into words. As a young man the commissioned officer takes a solemn oath to . . . "support and defend the Constitution of the United States against all enemies, foreign and domestic . . ." For the remainder of his adult life, this officer seeks to carry out this promise, and grows each day in his understanding of its implications. He becomes vested with, and conscious of, a personal responsibility for the safety of the United States which is shared by few of his fellow citizens. In the final analysis, when faced with decisions of fundamental import, the commissioned officer, like any responsible man, is forced to rely upon his best personal judgment—which is, inevitably, colored by his personal experience. Responsibility, if it does not make us cowards, certainly tends to encourage conservatism. We are forced to concede the aptness of the British General (then Colonel)

J. F. C. Fuller's words, . . . "an improvement in weapons is due to the energy of one or two men, while changes in tactics have to overcome the inertia of a conservative class." To "tactics" we may add "attitudes."

Yet, we find that, in our time, the record shows that the professional officer corps of the U. S. Navy is capable of facing facts and making logical and far-reaching decisions on a basis far removed from any petty considerations and limitations of personal experience.

Admiral Arleigh Burke and his immediate associates of the time were uneducated as to missiles and, for all practical first-hand purposes, knew next to nothing about the operation of submarines or the intricacies of nuclear power propulsion. And yet they were able to make, and to follow through on, the decision to establish the entire Polaris system. The true magnitude of this decision can be grasped, perhaps, when it is realized that for an aviation-oriented navy—headed, for the most part, by officers specialized in flying—the commitment to the Polaris system represented approximately the capacity to replace completely our 15 first-line attack aircraft carriers of that day. But any half-hearted commitment short of this—any attempt to "hedge"—would have resulted in no real strike capability at all.

We have every reason to believe, then, especially with new and vigorous naval leadership, that the next major decision as to the composition and extent of our Fleet will be made with maturity and firmness. The *aptness* of this decision to our vital national needs, however, will largely be determined by how well the career professionals in "Navy" and "State," as well as their leaders, are able to make contact and to achieve and maintain a genuine meeting of minds.

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A graduate of the U. S. Naval Academy in 1944 as a member of the class of 1945. Captain Bucknell served in LSMs and LSM(R)s and commanded the USS *LSM(R)-514* in 1946. Subsequently, he served as a Gunfire Support School instructor and entered the submarine service in 1948. He served in the USS *Cusk* (SSG-348) as one of the first shipboard guided missile officers. Between 1952 and 1954, he acted as a technical aid for underwater ordnance in the Office of Naval Research. After serving as executive officer of the USS *Poufret* (SS-391), he commanded the USS *Remora* (SS-487) in 1956, and in 1960 was commissioning captain of the nuclear-powered attack class submarine USS *Snook* (SSN-592). He commanded the USS *Theodore Roosevelt* (SSBN-600) from 1963 to 1967, and then became Chief of Nuclear Operations and Safety Branch on the Staff of CinCPac. From 1969 to 1970, he was Assistant Chief of Staff for Administration to the Commandant, Fourteenth Naval District. At the time of his retirement in October 1971, he was Director of Research, School of Naval Warfare, Naval War College, Newport, R.I. He is presently a graduate student of Political Science at the University of Georgia.

# ENERGY

## *U.S. Becomes World Trader*

### *By Necessity*

Captain Howard Bucknell, III  
United States Navy (Retired)

On 7 November 1973 the President of the United States announced publicly that the country was in the midst of a severe energy crisis. The Arab states of the Middle East, by withholding a portion of the oil they sell to this nation, had accomplished what the facts of the matter, private and public predictions, and the testimony of experts had not been able to do — make the reality of our energy deficiency clear to both the administration and the public.

The thrust of the President's energy speech was to announce the emergency and to direct and propose measures to reduce its severity in the short term. The emergency bill, which one hopes will be enacted in the present Congressional session, will represent a compromise between proposals made by Senator Jackson on the 18th of October 1973 and the generally less far-reaching provisions proposed in the President's speech. It will implement a conservation program felt by many to have been sorely needed even before the impact of the Middle East war.

The latter part of President Nixon's speech addressed longer range measures necessary to return the country to a self-sufficient status vis a vis energy through the development of a capability to use resources other than oil — primarily coal, shale, and an expedited use

of nuclear power for the generation of electricity. The President expressed the view that such measures, under the general title of "Project Independence", would place us in the position, by 1980, where we would "be able to meet America's energy needs from America's own energy resources".

In terms of increasing energy demands spurred by the requirements of an inherently expanding national economy, there are signs that the conservation program now to be undertaken will by no means prevent acute shortages of energy overall in the short term — and, in particular, on a regional basis due to the peculiarities of our oil distribution and refinery systems which are heavily tied to deliveries by sea on the Eastern seaboard.

All other factors being considered, our national situation demands, and will continue to demand, increased imports of oil on a larger scale. The absolute dependence of the country on imports and the necessity for their facilitation (by the building of deep water ports for supertankers, for instance) was not addressed by the President in his speech. Clearly he expects, through diplomatic efforts, to regain access to the Arabian oil sources. As his experts will doubtless have informed him, the *other* sources of

our imported oil (which provide on the order of 30% of what we consume) are already close to peak production, mirroring the case of our own domestic fields with the exception of the relatively small (160,000 barrels per day) out-put expected from congressional authority to produce from the heretofore sacrosanct Naval Petroleum Reserves.

In terms of energy dependence, it is a far cry from 1973 to 1980 and, in any event, even should "Project Independence" be promptly implemented through Congressional and Administration compromise, plus strong private industrial support, it can be expected that its 1980 results, in most cases, would be "pilot efforts" and not a comprehensive national industrial ability to meet our energy demands. In general, it can be expected that our substantial liberation from acute dependence on oil, *and this now means imported oil*, will persist well into the 1990s. Win, lose or draw — the United States has become a trading nation overnight.

#### THE SHIFT IN OUR TRADING STATUS

The import and export of goods on a

large scale has long been characteristic of economic and commercial life in the United States due to her large size and pluralistic society.

Foreign trade, however, has, until recently, not been a matter of first order priority for the United States.

Now, very suddenly the U.S. has seen her trading role shift from that of the "casual trader" to that of the "trader-by-necessity". This situation, as we have indicated, has been brought about by the change in the United States' import situation vis a vis petroleum.

A net exporter of the petroleum through World War II, the U.S., following that time, as a matter of convenience and frugality, gradually increased the import of oil. During President Eisenhower's administration the amount of this import of relatively cheap foreign oil was deemed to be menacing to the health of the domestic industry. There was, furthermore, the national defense question involving the wisdom of relying unduly upon the importation of oil — particularly when it was available from domestic sources. A system of mandatory "quotas" was set up in 1959 to regulate and restrict the import of oil.

Today the United States must import about 6 million barrels of oil per day which is about 35% of the steadily rising 17 million barrels per day she consumes. (Oil usage accounts for about one-half of our total national energy consumption.)

The necessity for this large scale importation now denies the United States her once cherished option of "going insular"; of disengaging herself from the international scene; and of reverting to a "Fortress America". We have arrived thus at the situation in this country where we *must export vigorously* in all possible categories of agricultural, industrial, and service commodities in order to achieve even a nominal "balance of payments". We *depend now upon foreign trade for our national survival as an economic, political, and social entity of our own choice.*

How did this situation arise and how long will it persist — given the point that it is undesirable, possibly dangerous, and, in any event, far removed from our traditional position of substantial economic independence?

## THE ENERGY CONCEPT

Reference to "energy" per se instead of specifically mentioning coal, oil, gas, hydro- or nuclear power is a new vocabulary approach. It was in the days following World War II, during the planning involved in the development of the Marshall Plan, that the concept of reviewing a nation's *total* energy resources became prevalent. It was recognized that the recovery of the general European economy was based largely on the ability to acquire large sources of energy. It became apparent that this was a fundamental point of political economics. From Marshall Plan experience, the concept of assessing a nation's energy consumption (and resources) became common. During the fifties and sixties each time it appeared that we ourselves might encounter an energy shortage, our domestic oil and gas resources, upon reassessment, proved more than adequate to our demands. During the Suez crisis, for instance, we were even able through export, to make up the losses in Europe occasioned by the temporary loss of Arab oil. This situation not only delayed a thorough evaluation of our future energy needs, it also made it politically difficult to voice real concern over our energy situation. In the meantime, we experienced an unparalleled, and generally unexpected, increase in our energy consumption.

## THE ENERGY SITUATION IN THE UNITED STATES

In February 1970 a Cabinet Task Force on Oil Import Control, appointed earlier by the President, presented their findings and recommendations on the oil import question. They reported essentially to the effect that complete abandonment of import controls at that time would not be consistent with the national security. They advocated a tariff system as a preferred alternative to the existing quota system. The emphasis was still on protecting our domestic oil firms against the inroads of cheaper foreign oil. The Secretary of the Interior, the Secretary of Commerce, and the Chairman of the Federal Power Commission issued a dissenting report. No changes in the quota system were undertaken by the administration at the time. In reviewing available statistics to support their report, the Task Force assumed that the United States would remain essentially self-sufficient in oil.

It projected a domestic demand in 1980 of around 18.5 million barrels per day and assumed that of this, only five million barrels per day would need be imported — and that mostly from the Western Hemisphere.

As pointed out by Ambassador James E. Akins in the April 1973 edition of *Foreign Affairs*, these projections were "spectacularly wrong". Total imports for 1973 will now be about six million barrels per day — well above the level predicted for 1980. Imports from the Eastern Hemisphere alone will reach about 12% of a 1973 consumption rate of a steadily climbing 17 million barrels per day.

On April 18, 1973, in the face of increasing petroleum product scarcity, President Nixon, by proclamation, removed all tariffs and quotas affecting the import of oil.

As President Nixon indicated in his April 1973 proclamation, although our oil production is inadequate to our needs, our energy reserves, mostly in the form of shale and especially coal, are enormous. They are certainly sufficient to meet our needs, if they can be utilized, until that time in the future when energy sources other than fossil fuels are universally available. Why, then, don't we use the coal and shale?

Gasoline, as a petroleum product, is ideally suited to transportation involving the use of the internal combustion engine. Internal combustion engines which have been modified to reduce atmospheric pollutants burn more gasoline. Natural gas burns "clean" and our reserves are being rapidly depleted. A large number of electric utilities have converted from coal burning to gas or oil in order to meet ecology requirements. "Strip" mining, to which environmentalists object, is the most economical way to get at our coal and shale reserves.

The position of the ecologists regarding our atmospheric pollution situation from coal and gasoline burning no longer (in the case of major cities) involves only a "desirable" against an "undesirable" condition. As pointed out by Ward and Dubos in their U.N. commissioned book *Only One Earth*, our larger urban concentrations, in some cases as in other industrialized nations, have already arrived at the air pollution point where increases in pollution could entail serious, massive and direct adverse

health effects. In other words, their atmospheres are not too far from being lethal and the resumption of coal burning proposed for electric power producers in the President's 7 November 1973 speech will necessarily be effected most gingerly and on a case-by-case basis. In the longer term, production of oil from shale and gas from coal rather than its direct burning is vital to our health and economy.

Nuclear power, it has been estimated, in less than jocular terms, produced less energy in the United States last year than was produced by the burning of wood. What happened to the predictions of the fifties that nuclear power would dominate our energy producing system by 1975? An unreasonably low price for oil, gas and coal generated electric power, ecological objections to "thermal pollution" of cooling water sources for the nuclear plants, a failure on the part of the Atomic Energy Commission (AEC) to fully test various emergency cooling safety devices — are all responsible. Heavy emphasis on the safe building of nuclear plants is very much a requisite of our emerging energy picture for the seventies, eighties and nineties of this century. President Nixon has recommended that the AEC hasten the licensing of new plants in the next six months without public hearings. This shouldn't, however, obscure the point that we are still some ten years from the situation where nuclear power can absorb a sizeable proportion of our national demand for electricity.

Plants designed for the extraction of oil from shale must be built and land restoration after surface stripping must be included as part of the price.

Plants designed to produce "pipeline quality" gas from coal must be built. The basic process for this is well known. The technique (as yet unmastered in quantity production) is to produce gas of a high enough BTU quantity to warrant its long range distribution by pipeline — this is the meaning of the term "pipeline quality". The development of these plants rapidly, and on a scale reflecting our national needs, cannot be undertaken on a purely commercial basis. The costs and problems involved indicate, as Senator Jackson has pointed out in various proposed bills, a joint federal-commercial undertaking at least on the scale of the Manhattan Project. Large energy corporations have indicated their willingness

to undertake this joint effort, but time is rapidly passing.

None of these efforts will come to fruition in the next few years. Additionally, it can be safely predicted that large scale application of the more esoteric energy producing systems, such as solar and "breeder" reactors, for instance, (although vital to our future) will probably not make a really substantial impact on our national energy situation during this century.

For the present, and possibly the next twenty years, we will be acutely dependent upon oil and even with vastly increased production from our off-shore areas (which must be pushed) we will remain, in the final analysis, *dependent upon oil imports from abroad.*

#### WHAT ABOUT OTHER COUNTRIES?

Clearly the United States is by no means the only industrial nation involved in an energy crisis. The growth in energy demands in Western Europe and Japan have been on the order of 12% per annum as compared to 6% in the United States.

Western Europe is dependent for over 80% of her energy requirements on Mid-Eastern oil. Japan's dependence on the same source far exceeds 90%. As pointed out earlier, it is only the Arab oil fields that can meet increases in our own and allied energy demands for the time being.

These factors, together with what is predicted as an intensive export effort on the part of the United States will, it appears, combine to introduce a sharp competitive edge to U.S.-Common Market-Japanese trading relationships. That this will be reflected in political relationships would be entirely natural. A strong case can be made for superior trade cooperation and diplomatic mutual assistance in our relationships with these countries. Perhaps basic to our ability to arrive at viable quid pro quo understandings will be the demonstration of the United States' determination to eliminate waste in our uses of energy.

Not too long ago the cutback of Arabian oil to the Western European nations would have been the occasion for moral protest and popularly supported sharp military action against the Arabs who, as it has been said, "cannot drink their oil". Indeed, at one

stage the United States might have undertaken such action on a unilateral basis.

We seem to have passed the point where military action could be justified in the face of world opinion. More to the point, however, is that the Soviet Union now maintains a naval presence in the Indian Ocean close to the oil rich Persian Gulf, and is presently operating ships in force, with naval infantry embarked, in the Mediterranean. The USSR's position in the area of energy is still to be unfolded. Western European nations are now reaching to her for access to the oil under her control and, in this country, we speak of importing liquified Russian natural gas. There are some indications also, that barring the discovery of substantial new fields, the Soviet Union itself may in the next ten years or so, become dependent upon imports of petroleum.

#### CONCLUSION

The President has proposed international cooperation in the development of synthetic fuels (e.g., gas and oil from coal). It is clearly to the advantage of all nations heavily dependent upon Arabian oil to foster such a program. It will not reach fruition overnight nor, in the final analysis, will Arabian oil become less valuable. With continuing advances in such diverse petroleum-based industries as plastics, medicines, and animal feed it can be predicted that we will eventually look upon oil as a commodity too precious to burn; but we must have other substantial sources of energy before this comes to pass. The spur to our efforts must be that petroleum is irreplaceable on our planet.

The Western industrial world and Japan, not just the United States, are in the midst of an energy crisis. It can probably be most readily solved through international cooperation. The United States now enters into an era in which she must perform largely as a trading equal to the other nations or blocs of nations. This simple fact will heavily influence our lives in this country for perhaps in the next twenty years.

Captain Howard Bucknell is a retired naval officer presently studying as a graduate student in political science at the University of Georgia.

*(This article does not necessarily reflect the views of the Secretary of the Navy or the Navy Department.)*

*Tr. Lat*

**THE TRILATERAL COMMISSION**

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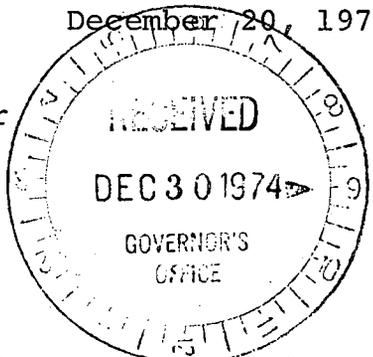
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The Honorable James E. Carter  
Governor  
State of Georgia  
State Capitol  
Atlanta, Georgia 30334



December 20, 1974

Dear Jimmy:

I thought our Executive Committee meetings in Washington December 8-10 went particularly well. Not only did we have really good discussions at the meetings among ourselves, but there was also real substance rather than just "politesse" in the meetings with the President, Henry Kissinger, and Rogers Morton and also, though more briefly, in the meeting with the Senate Committee on Foreign Relations. The President and also the Secretary of State in discussion and in their answers to questions alleviated considerably some of the concerns of our European and Japanese colleagues about U.S. foreign policy, and especially on the question of cooperation rather than confrontation with the OPEC countries. I also feel that our emphasis on the complementary - and not conflicting - character of the French and U.S. positions on energy was of some relevance to the outcome of the subsequent Ford-Giscard meeting in Martinique.

I feel our meetings have now answered clearly one of the principal questions we had when we started the enterprise: whether a group of men and women of very different backgrounds and experience and from three different regions of the world could, in fact, reach conclusions specific enough to be meaningful. In this connection, I am enclosing the Resolution adopted by the Trilateral Commission's Executive Committee at the end of its meetings. The Committee also approved issuance of the enclosed preliminary report on relations with the developing countries as well as of a slightly revised version of the energy report which was previously sent to you for comment and of which you will later receive a printed copy.

**JAPANESE OFFICE**

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The most interesting recommendations in the reports and resolution, in my opinion, are the following:

- (1) a new bank for fund recycling with equal control by producers and consumers. If this could be created, it would not only further the necessary process of cooperation between consumers and producers, which the Executive Committee felt to be so important; but it would also mean that producers and consumers would share any bad debts, rather than having most of them borne by the United States and West Germany;
- (2) a recommendation that the annual growth of energy consumption be held below two percent in North America, three percent in Europe, and four percent in Japan;
- (3) a new international development agency to borrow \$3 billion a year from 1976 to 1980 from the OPEC countries at eight percent, and to make it available to the most needy developing countries at three percent. The total cost of the necessary interest subsidy from 1976 to 1980 would be \$900 million a year, of which the U. S. share might be about \$170 million, a sum small enough so that it should be politically feasible;
- (4) a Middle East peace settlement guaranteed by the United States and the Soviet Union.

I hope these will interest you.

We have very much appreciated your support, and if you have any questions on this material or any other aspect of the Commission's work, I shall be glad to try to answer them.

Sincerely,



Zbigniew Brzezinski

TRILATERAL COMMISSION  
Executive Committee  
Resolution

December 10, 1974

The international system is undergoing a drastic transformation through a number of crises. Worldwide inflation reflects, transmits and magnifies the tensions of many societies, while the difficulties produced by the abrupt change in oil prices are accompanied by the entry of major new participants onto the world scene.

Confrontation in an attempt to maintain the underlying assumptions of the old system could lead to a general breakdown. On the other hand, creative policies to adapt it to the new partners and conditions could extend the area of effective cooperation more widely than ever before.

Such cooperation must be based on the principle of equality. This is the core of any future political understanding.

This applies notably to the most urgent challenge, the one posed by the funds being accumulated by the oil producers. These could dislocate the system if they are not properly absorbed. Cooperatively used, on the other hand, they are a potentially massive new source of investment in a world which will be in desperate need of capital.

In view of the proposals which have been put forward for cooperation between the oil consuming countries, and the need for cooperation also with the oil producers, the Executive Committee

of the Trilateral Commission calls on the major oil consuming countries to approach the OPEC countries in order to find out if they would consider:

- Setting up a new Bank for Fund Recycling, with subscription of an equal amount of capital and joint control by oil consumers and producers. Such parity is essential to create confidence and stability, enabling the bank to borrow funds from the OPEC countries on an acceptable debt instrument.
- Creating a new international agency associated with the World Bank to supply the extra \$3 billion a year urgently required by the most needy developing countries. This agency should borrow \$3 billion a year at 8% interest from OPEC countries and lend it to low income countries at 3%, in loans with 20-year maturities and four-year grace periods, in each of the years 1976-1980. The total cost of the interest subsidy required for these loans would amount to \$900 million a year for the years 1976-1980, a sum small enough so that it should be politically feasible to raise it among the OECD and OPEC countries.

These short term solutions are complementary to the need simultaneously to develop a longer term framework for international cooperation. The Executive Committee believes that this should involve a

tripartite global structure in which the oil producers are encouraged to invest in low income areas by joint guarantees with the highly industrialized countries. To prepare the necessary long term framework for cooperation, a tripartite conference, or series of conferences, should be organized, involving some of the highly industrialized countries from each of the three trilateral regions, some of the oil producers and some of the low income countries.

The solidity of the long term framework also requires that the major oil consuming countries cooperate on energy policies.

The Executive Committee welcomes the agreement on an International Energy Agency able to organize crisis cooperation and hopes that other countries of their regions will join the group.

It also endorses the recommendations for joint action contained in the report on "Energy: A Strategy for International Action" submitted to it and particularly the proposals for (i) the reduction of dependence on imports, (ii) holding the annual growth of energy consumption below 2% in North America, 3% in Europe and 4% in Japan, and (iii) cooperation in developing the extensive energy reserves, actual or potential, of the trilateral area.

The success of measures to rejuvenate the international economic system are umbilically tied to successful progress towards a lasting peace in the Middle East. Such a peace settlement must be guaranteed by the United States and the Soviet Union; other countries, especially the European states, should be ready, if required, to associate themselves with them.

The Executive Committee has discussed means by which the Trilateral Commission could in <sup>the</sup> future further the proposals in this resolution. Also, it has initiated a trilateral policy program on a Renovated International System, to be completed by 1976.

The Commission will hold its first Plenary Session in Tokyo in May 1975.

TRILATERAL TASK FORCE ON RELATIONS

WITH DEVELOPING COUNTRIES

OPEC, the Trilateral World, and the Developing Countries:

New Arrangements for Cooperation, 1976-1980

Richard N. Gardner  
Saburo Okita  
B.J. Udink

December 1974

This report has been prepared for the Trilateral Commission and is released under its auspices. The authors, who are experts from North America, Western Europe and Japan, have been free to present their own views. The Commission will utilize the report in making any proposals or recommendations of its own. It is making the report available for wider distribution as a contribution to informed discussion and handling of the issues treated.

## THE TRILATERAL PROCESS

The following contribution to the second report of the task force on relations with developing countries has been prepared by Prof. Richard N. Gardner on the basis of prior consultations with Dr. Saburo Okita and Dr. B.J. Udink. The final draft of the second report will be presented to the Executive Committee meeting in Kyoto in May 1975.

The rapporteurs have been aided by consultations with a wide range of experts. A number of these individuals were consulted at a meeting chaired by Prof. Gardner and Dr. Okita in Washington in late September, just before the Annual Meeting of the World Bank and International Monetary Fund. Several others were consulted in discussions held by Prof. Gardner and Dr. Udink in Europe in early November. In each case, the consultants spoke for themselves as individuals and not as representatives of any institutions with which they are associated. Those consulted included the following:

Michel van den Abeele, Chef de Cabinet of Henri Simonet, Vice-President of the Commission of the European Communities  
C. Fred Bergsten, Senior Fellow, The Brookings Institution  
Zbigniew Brzezinski, Director, The Trilateral Commission  
Jacques Alain le Chartier de Sedouy, Chef de Cabinet of Claude Cheysson, Member of the Commission of the European Communities  
Claude Cheysson, Member of the Commission of the European Communities  
Richard N. Cooper, Professor of Economics, Yale University  
Gamani Correa, Secretary-General of UNCTAD  
William B. Dale, Deputy Managing Director, International Monetary Fund  
Count Etienne Davignon, Director of Political Affairs, Belgian Foreign Ministry  
Guy Erb, Overseas Development Council  
Clyde Farnsworth, European Economic Correspondent, The New York Times  
George S. Franklin, North American Secretary, The Trilateral Commission  
James Grant, President, Overseas Development Council  
Joseph Greenwald, United States Ambassador to the European Community  
Ravi Gulhati, Director, Development Economics Department, International Bank for Reconstruction and Development  
Nurul Islam, Deputy Chairman of Planning Commission, Government of Bangladesh  
Attila Karaosmanoglu, Chief Economist, Europe, Middle East, and North Africa Regional Office, International Bank for Reconstruction and Development  
Abderahman Khene, Secretary-General of OPEC  
Israel Klabin, Klabin Irmaos & Cia., Rio de Janeiro  
Emile van Lennep, Director-General of OECD  
Joseph Luns, Secretary-General of NATO  
Robert S. McNamara, President, International Bank for Reconstruction and Development  
Benedict Meynell, Director, External Relations Division, Commission of the European Communities

Cecilio J. Morales, Manager, Economic and Social Development  
Department, Inter-American Development Department  
Enrique Perez-Cisneros, Special Representative, Europe, Inter-  
American Development Bank  
J.J. Polak, Director of Research Department, International  
Monetary Fund  
Raúl Prebisch, Special Representative of the Secretary-General for  
the United Nations Emergency Operation, United Nations  
Gustav Ranis, Director, Economic Growth Center, Yale University  
Mohamed Shoaib, Vice-President, International Bank for Reconstruction  
and Development  
A. Maxwell Stamp, economic consultant, London  
Ernest Stern, Director, Development Policy, International Bank for  
Reconstruction and Development  
Ernest Sturc, Director, Exchange and Trade Relations, International  
Monetary Fund  
Anthony F. Tuke, Chairman, Barclays Bank International, Ltd.  
Kaye Whiteman, Information Office, Development Cooperation Directory,  
European Commission  
Maurice Williams, Chairman, Development Assistance Committee, OECD

OPEC, THE TRILATERAL WORLD AND THE DEVELOPING COUNTRIES:  
NEW ARRANGEMENTS FOR COOPERATION 1976-1980

Summary

An extra \$5 billion a year in Official Development Assistance (ODA) will be needed in the period 1976-80 to assure a 2% growth rate in per capita income in the approximately 30 low-income developing countries containing one billion of the world's people. Although it will be tempting to "write off" these countries as the economic and political crises deepen in the Trilateral region, such a policy would be politically unrealistic as well as morally unacceptable. Moreover, a joint Trilateral-OPEC initiative that brings forth more aid from the OPEC countries would serve some very immediate Trilateral country interests. In a time of stagnant growth and rising unemployment, it is obviously advantageous to move funds from OPEC countries which cannot spend them on Trilateral country exports to developing countries who will.

Knowledgeable officials estimate that ODA from OPEC countries might reach \$2 billion a year in the 1976-80 period. In these same years, the Trilateral countries should increase the size of their own ODA (about \$9.4 billion in 1973 dollars) to keep pace with inflation. This will still leave \$3 billion a year of ODA to be found.

To meet this need, it is proposed that a new international agency associated with the World Bank should borrow \$3 billion a year at 8% from OPEC countries and lend it to low-income countries at 3%, in loans with 20 year maturities and 4-year grace periods, in each of the years 1976-80. This would require an annual interest subsidy

of \$900 million, of which \$100 million could be raised from World Bank earnings, \$500 million from Trilateral countries, and \$300 million from OPEC countries.

The \$3 billion-a-year fund should be managed by a tripartite governing body, with representation and voting power equally shared between Trilateral countries, OPEC countries, and other developing countries. Moreover, to facilitate OPEC participation in the regular activities of the Bank and Fund, OPEC quotas and voting rights should be raised from the present 5% to between 15 and 20%.

OPEC, THE TRILATERAL WORLD AND THE DEVELOPING COUNTRIES:  
NEW ARRANGEMENTS FOR COOPERATION 1976-1980

In its report entitled "A Turning Point in North-South Economic Relations" the Trilateral Commission Task Force on relations with developing countries proposed a special effort of cooperation between the Trilateral world and the OPEC countries to meet the emergency needs in 1974-75 of some thirty low-income countries of the "Fourth World" who have been particularly hard hit by skyrocketing costs of oil, food, fertilizer and industrial goods. It also outlined some basic concepts that might provide a framework for cooperation between developed and developing countries in the period beyond the short-term emergency. The task force promised to present a specific program to strengthen the multilateral development system in a second report to be issued in the spring of 1975.

To meet the emergency needs of the "Fourth World" in 1974-75, our first report envisaged an emergency program of \$3 billion in extra concessional aid, one-half from the Trilateral world, one-half from the OPEC countries. In the six months since our report was issued, the proposed Trilateral-OPEC negotiation to produce this shared effort of collaboration has not occurred. Nevertheless, the United Nations has made some progress with its emergency program, launched by the General Assembly at the special session of March-April 1974, to help the most severely affected developing countries.

As of November 1, commitments of emergency assistance to the most severely affected countries amounted to \$2.7 billion, compared with the total of \$4.6 billion estimated by the UN to be needed in 1974-75. (The deteriorating economic situation, together with a somewhat broader definition of concessional aid and of severely affected countries, caused the UN's estimate to be higher than that in our report of last June.)

Of the \$2.7 billion in commitments to the emergency program, OPEC commitments account for about \$2 billion, Trilateral commitments for about \$700 million. The European Community has made a commitment of \$150 million, with a promise of an additional \$350 million (not counted in the \$2.7 billion total) provided appropriate contributions are forthcoming from other donors. Japan has committed itself to a "minimum contribution" of \$100 million. The United States has made no specific commitment, but has indicated its intention to increase food aid substantially above previously budgeted levels.

Were the U.S. to increase its food shipments in 1974 and 1975 by \$250 million each year over 1973 levels, were the Japanese government to increase its commitment to the emergency fund by another \$200 million, and were the European Community to provide the additional \$350 million it has promised on a conditional basis, the target of the emergency operation would be quite close to being met. Implementation of the decisions taken at the World Food Conference for additional food and fertilizer aid and for an agricultural development fund to be subscribed by OPEC and Trilateral countries would also help to

assure the success of the emergency program. However, it would still be necessary to assure that the committed funds were actually disbursed in 1974-75 and that these funds were distributed among the eligible recipients in accordance with their estimated needs. This latter problem will be particularly difficult since the bulk of the \$2.7 billion that has been committed is in the form of bilateral aid and only \$224 million is "free money" committed to the Secretary-General's special account. (Details on the estimated needs of the most severely affected countries, on the commitments to the emergency program, and on commitments to the special account are provided in Attachments 1-3 at the end of this paper.)

The problem of North-South cooperation in development beyond the emergency period is even more formidable. In his address to the annual meeting of the Board of Governors of the World Bank Group on September 30, 1974, Robert S. McNamara estimated that unless ways are found to increase the present level of Official Development Assistance (ODA)<sup>1</sup> in terms of real purchasing power rather than just in money terms the billion people in countries with average incomes under \$200 million per capita will face a decline in their standard of living amounting to 0.4% per capita per year between now and 1980. To make possible a 2.1% annual growth in their per capita GNP -- a modest rate of growth by any standard -- would require an increase in ODA, in terms of 1973 dollars, from \$9.4 billion in 1973 to \$13.5 billion in 1980, an increase of about \$4 billion. At present rates of inflation, the level of ODA would have to reach \$24 billion by

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1. Official Development Assistance is defined as aid with at least a 25% grant element as compared with commercial loans.

1980 in terms of then-prevailing prices. Taking account of anticipated inflation, not to mention a further deterioration in the world economy aggravating still further the problems of the low-income countries, an increase in ODA by \$5 billion a year for the years 1976-80 at then existing prices is the very minimum that seems to be required. (McNamara's detailed estimates on ODA requirements are set out in Attachment 4.)

The case for supplying that additional \$5 billion per year of ODA for the one billion people in the low-income countries is based on the considerations set forth in the first report of our task force. As we noted there, the Trilateral countries need the developing countries as sources of raw materials, as export markets and, most important of all, as constructive partners in the building of a satisfactory world economic and political order. The world's interrelated crises of population growth, environmental deterioration, mass poverty, mounting unemployment, growing social and political instability, proliferating nuclear and conventional weapons, and escalating terrorism and international conflict cannot be solved without attention to the needs and priorities of the developing as well as the developed world.

It will be increasingly tempting to "write off" some of the low-income developing countries in the Indian subcontinent and Africa if the economic and political crises deepen in the Trilateral world. But it is doubtful if the people of the Trilateral countries would find such a policy to be either morally acceptable or politically realistic if the moment ever came to carry it out. In terms of the

long-term interest of the Trilateral world, it would prove ultimately self-destructive.

To these considerations there can now be added another very practical argument. In a time of stagnant growth and rising unemployment, it is clearly in the interest of the Trilateral countries to move funds from OPEC countries which cannot spend them on Trilateral country exports to other developing countries who will. To the extent that aid contributions from the Trilateral world bring forth additional aid contributions from the OPEC countries, they have a multiplier effect on exports, employment and income, also helping the balance of payments. Indeed, we need to think in terms of a second type of "Trilateralism" -- by which OPEC countries transfer a portion of their liquid balances in the Trilateral world into long-term loans to the LDCs, who in turn spend the proceeds on Trilateral country exports.

Assuming this case for increasing ODA is sound, two central questions remain to be addressed: First, where is the extra \$5 billion a year to come from? Second, what changes in the structure of multilateral development institutions seem to be required?

#### The Financing Problem

A solution to the question of long-term financing is clearly going to require a major act of cooperation between the Trilateral countries and the OPEC countries. To be sure, the OPEC countries have already taken a number of initiatives to increase the flow of concessional aid. Kuwait and Venezuela have substantially increased

their existing aid programs. Iran and Iraq are selling large amounts of oil to India on concessional terms. Saudi Arabia has set up its own Development Fund and has made large commitments of aid to Egypt and other Arab countries. Libya, Abu Dhabi, and the Emirates are increasing their bilateral efforts. In addition, some major multilateral ventures among OPEC nations have been announced -- a \$200 million Special Arab Fund for Africa, an Arab Bank for Industrial and Agricultural Development in Africa with an initial capital of \$200 million, an Islamic Bank with an authorized capital of \$2 billion, and an OPEC Fund. The capital of the already-operating Arab Fund for Economic and Social Development is expected to be increased substantially. While it is difficult to make precise estimates of what all this is likely to mean in actual aid disbursements, conversations with knowledgeable officials suggest that total OPEC disbursements of ODA are likely to reach \$2 billion a year in the 1976-80 period. This will still leave a shortfall of \$3 billion from the \$5 billion of additional ODA each year that is estimated to be required to achieve minimum development goals.

It is highly unlikely that this additional \$3 billion a year can be raised between Trilateral and OPEC countries by any of the traditional aid-giving methods. ODA is already in deep trouble in the Trilateral world. During the ten year period 1963-73, while the real income of citizens of the countries who are members of the OECD's Development Assistance Committee was growing by 60 percent, the real value of ODA supplied by these countries was actually declining by

seven percent. During the past year, a number of Trilateral countries have further reduced their ODA in real terms. If the Trilateral countries are to have any credibility in aid discussions with the OPEC countries and the rest of the developing world, they should agree at a minimum to maintain the real value of their ODA for the remainder of this decade, applying an automatic upward adjustment of bilateral and multilateral financial flows to keep pace with inflation. Just to do this will require a formidable effort of political leadership. It is hard to envisage the Trilateral countries increasing their existing programs to cover any substantial portion of the \$3 billion a year ODA shortfall that will still remain.

The prospect of securing the \$3 billion shortfall in ODA from the OPEC countries is not much better. This shortfall is already estimated on the basis of a \$2 billion annual ODA effort of the OPEC countries through their own bilateral and regional programs. A \$2 billion annual aid program would represent over 1% of the combined GNP of the OPEC countries (a good deal more for individual OPEC donors like Iran and the Persian Gulf states) compared to average aid levels of .30% of GNP for Trilateral countries. To put it differently, the combined GNP of the OPEC countries (exclusive of Nigeria and Indonesia, whose income of around \$100 per capita even with increased oil revenues will exempt them from any substantial aid-giving) is forecast by the World Bank at only 6% of the combined GNP of the Trilateral countries as late as 1980. If the OPEC countries give \$2 billion a year of ODA in the years 1976-80 and the Trilateral

countries maintain the real value of their existing aid levels, the ODA of OPEC countries will be about 10-15% of Trilateral levels during this period. If they are challenged to increase their ODA substantially to take up all or even half of the \$3 billion shortfall, they are likely to reply that they are already doing much more than their share in terms of conventional burden-sharing formulae. Indeed, they will probably make the further argument that additional ODA burdens for them are particularly inappropriate, since they involve financial transfers from a resource base of oil that is being depleted, whereas the Trilateral countries can finance ODA from an industrial base whose output renews itself and even grows with each passing year.

The conclusion seems inescapable that an agreed sharing of the \$3 billion in extra ODA per year is unlikely to be found except through a wholly new approach. Such an approach would start with the recognition that the relevant characteristics of the OPEC countries differ so fundamentally from those of the traditional aid donors that an attempt to share ODA on the basis of percentages of GNP will neither produce a sense of rough justice as between the Trilateral and OPEC groups or the necessary volume of financial flows. The Trilateral countries represent an annual GNP of over 2 trillion dollars, but as a group cannot generate large amounts of foreign exchange. The OPEC countries represent \$150-200 billion of GNP but are accumulating surplus foreign exchange at the rate of \$60 billion a year. A new approach would proceed on the basis that the OPEC countries, being

highly liquid but not yet rich, should provide a disproportionately large amount of the extra financial flows with a disproportionately small concessional aid element, while the Trilateral countries, being still very rich but not very liquid, should supply a disproportionately small amount of the extra financial flows with a disproportionately large amount of concessional aid element.

One of the most politically attractive ways of combining OPEC and Trilateral resources along these lines would be through an interest subsidy, subscribed mainly by Trilateral countries, to transform large amounts of lending from OPEC countries on commercial terms into ODA on terms suitable to low-income countries. To be specific: a new international agency associated with the World Bank could borrow the \$3 billion estimated to be required each year from OPEC countries at an interest rate of 8% and could lend the money to low-income countries at 3% (very easy terms at present rates of inflation).

According to studies by the World Bank staff, it requires a subsidy fund of 23.45% of the face value of a loan to subsidize a 5% interest differential for project lending (slow disbursement) and a subsidy fund of 34.61% of the face value of a loan for program lending (more rapid disbursement), assuming loans to low-income countries with 20-year maturities and 4-year grace periods. The required subsidy fund increases, of course, if easier repayment schedules are permitted. But lending on the basis described above could meet the needs of the low-income countries in view of the fact that the present rate of inflation reduces the burden of repayment and of the fact that the IDA would continue its own more concessional

lending program of 50 year loans with 10 year grace periods and only a 3/4 percent service charge. Given a blend of project and program lending under the new \$3 billion program, the subsidy needed would be about 30% of the annual lending or about \$900 million a year. (For calculations of the subsidy required under different assumptions of interest-rate differentials, maturities and grace periods, see Attachment 5.)

Some \$100 million of this amount could be provided each year from the profits of the World Bank's regular loan operations. Of the remaining \$800 million a year, \$500 million might be provided by the Trilateral countries, \$300 million by the OPEC countries. Since the Bank's profits are mainly attributable to resources made available by the Trilateral world, the effective division of the subsidy fund would be two-thirds Trilateral, one-third OPEC.

The most obvious political advantage of this proposal is that comparatively small amounts of additional resources would be required from any one country. For example, based on the burden-sharing formula used in the fourth IDA replenishment, the United States share of the subsidy fund would be \$170 million a year. An American President could point out to Congress that this relatively small sum, supplemented by contributions from other Trilateral countries, was moving \$3 billion of extra OPEC funds to the low-income countries. Further in support of the proposal it could be argued that moving \$3 billion from OPEC countries unable to spend it to low-income countries who can do so would stimulate employment and income in

the Trilateral world. Based on the fact that about one-third of procurement from World Bank group lending has been in the U.S., the \$170 million U.S. contribution would add about \$1 billion to U.S. exports. Other Trilateral countries could enjoy a similar "multiplier-effect" on their exports from their contributions to the interest subsidy.

With all proposals of this type, one is tempted to ask what the "catch" is. How is it possible for such a modest subsidy fund to finance such large amounts of capital flows? The answer is that if the subsidy fund is made available each year in the specified amounts only a small portion will actually be needed to cover the interest payments and the remainder of the subsidy fund can be invested at commercial rates (8% is assumed in the estimates given above). Moreover, and this point should be faced frankly, the estimates assume, in accordance with normal World Bank group lending experience, that there is some lag each year between the new money being made available by OPEC and the actual disbursements of the new agency. Thus there is an 8% interest cost only on that portion of the \$3 billion annual borrowing that is actually disbursed to the low-income countries. In short, the only "catch" in the proposal is that the traditionally slow disbursement schedule of multilateral lending agencies means that something less than the full \$3 billion will be coming to the low-income countries in the first years of the plan.

*Certainty  
of  
repayment?*

To take care of this problem, some increased short and middle term lending might be needed from the IMF recycling facility. To facilitate IMF lending to the low-income countries at rates well below the 7% IMF rate, another much smaller "subsidy fund" might have to be contemplated. This could be financed from modest sales of IMF gold holdings on the private market. (Such gold sales could not be used to supply the \$900 million subsidy needed each year for the long-term lending program without unduly depressing the free market gold price and quickly depleting the IMF's gold holdings which are now \$6-1/2 billion at the official gold price.)

#### The Restructuring Problem

The problem of institutional restructuring is directly related to the financing problem. The OPEC countries are unlikely to participate in the kind of multilateral venture described above unless they come in as equal partners with the Trilateral countries, with voting and other arrangements reflecting the financial contributions they are being asked to make. In the Fund and Bank as they are presently organized, the OPEC countries have quotas and voting rights equal to 5% of the total. The Arab members of OPEC have quotas and voting rights equal to 2% of the total -- roughly the share of Belgium. The OPEC countries are not likely to regard these arrangements as satisfactory in any new venture in which they are asked to put up the bulk of the financial resources. (The distribution of quotas and voting rights in the IMF is given in Attachment 6. The quotas and voting rights in the World Bank are substantially the same.)

One approach to this structural problem would be to increase the quotas and voting rights of the OPEC countries in the Fund and Bank to reflect their new economic power. In the quinquennial review of Fund quotas that is now underway, those close to the negotiations envisage an increase of the total OPEC percentage to about 9-10% of the total. This would be less than half of the voting power presently enjoyed by the United States alone or by the countries of the European Community as a group.

A larger increase in the OPEC share seems to face opposition for several reasons. First, the traditional "objective" indicators relied on most heavily in these quota reviews (GNP and trade statistics but not including foreign exchange reserves) do not justify a larger increase. Second, and clearly more important, there is great resistance on the part of most Fund members (developing as well as developed) to accept reductions in their percentages to make possible more than modest OPEC increases. The United States, in particular, which now has 20.80% of the votes in the Fund, is reluctant to lose its present veto power on amendments to the Fund Articles, which require three-fifths of the members with 80% of the voting power. Third, there appears to be some fear that a more substantial increase in the OPEC share -- to 15% or more, for example -- would raise the spectre of an "OPEC veto" on important financial questions (such as the issuance or cancellation of SDRs, which require an 85% vote).

The general interest of the membership of the Fund and Bank, including that of the Trilateral countries, would seem to indicate a more forthcoming attitude toward increases in the quotas and voting rights of OPEC countries. Traditional indicators used in previous quota reviews are simply not sufficient guides in the radically new situation in which the world now finds itself, where the OPEC countries will soon dispose of at least half the world's monetary reserves and where they are being asked to make major financial contributions to IMF recycling plans and to the purchase of World Bank bonds. In the light of these considerations, an increase in the OPEC share to between 15 and 20% in the Fund and Bank would seem more appropriate than the 9-10% now envisaged. The larger quota increases would mean more OPEC funds available for the Fund and Bank's regular operations. The increased voting power of OPEC would pose no real threat of an "OPEC veto" over SDR issuance and IMF amendments since the OPEC countries have not voted as a bloc on such matters and are not likely to do so. In the World Bank, similar "veto" problems do not arise -- the voting majority required for the approval of loans is 50% (actual votes are very rare). As major contributors, OPEC countries are likely to be prudent in their judgment of loan proposals. In any event, a 15-20% OPEC voting share would not fundamentally alter the balance of power in the Bank's Executive Board; the Trilateral countries would still have about half the votes on a weighted-voting basis.

Yet even a 15-20% share for OPEC countries in the Fund and Bank's regular operations would not solve the problem of providing

them with an equal voice in the management of the \$3 billion-a-year program for the low-income countries that has been proposed above. Putting the \$3 billion in the hands of the World Bank's "second window," the International Development Association, would not be the answer either: voting in the IDA is related to cumulative contributions. Since IDA began operations at the beginning of the 1960s, the OPEC countries would have an even smaller voice than under the 15-20% share proposed for them in general Fund and Bank management. What seems to be required, therefore, is a "third window" for the \$3 billion-a-year fund with its own special management arrangements.

These special arrangements could be modelled after those suggested by the Shah of Iran at the beginning of 1974. The Shah proposed a special fund associated with the World Bank which would have a governing body composed equally of representatives from developed countries, from OPEC countries, and from other developing countries. The governing body would choose an executive board from a list of qualified persons nominated by the Bank and Fund. This tripartite approach would seem to be a reasonable one, considering the very large OPEC contribution to the special concessional aid operation here proposed (all of the \$3 billion each year plus \$300 million of the \$900 million annual subsidy), and considering also the legitimate interest of other developing countries in the management of the special aid program. The actual administration of the aid program would be carried out by the officers and staff of the World Bank group, which represents a concentration of experience and technical skill that would not be easy to duplicate.

More than changes in voting arrangements and formal managerial structures may be required, however, to provide the OPEC countries, and particularly the Arab members of OPEC, with confidence in the World Bank group and its new "third window." The adoption of Arabic as one of the working languages of the Bank and Fund would help, as would greater attention to Arab sensibilities in the scheduling of meetings (this year's annual meeting was scheduled on Ramadan). Special courses, some of them in Arabic, should be organized by the Bank's Economic Development Institute in a major effort to train bright young leaders from OPEC countries for service with the World Bank group or for comparable responsibilities in their own governments. Gradually, the top management of the Bank and Fund ought to include a larger number of OPEC country nationals, including nationals from Arab countries.

Such a restructuring of the world's major international financial institutions will not be easy -- no major adjustment of established organizations ever is. It will provide a major test of the willingness of the Trilateral world to come to terms with new economic realities and to share power with those whose cooperation is now essential to preserve a working world economy. Both the Trilateral countries and the OPEC countries, it should be remembered, have a shared interest in facilitating the latter's participation in multilateral development institutions. The Trilateral countries benefit because the multilateral institutions secure the increased resources they need to function effectively

and to avoid being gradually eclipsed by OPEC institutions with aid programs that are not only geographically limited but often politically linked. The OPEC countries benefit by being able to invest in the obligations of multilateral institutions backed by the guarantees of the rest of the world's economic powers; they also get a "buffer" between themselves and low-income developing countries who might prove difficult when it comes to repaying loans or using aid effectively. Both sides also get a chance to develop a working partnership in the financial field that may eventually lead to more satisfactory negotiations in other areas, including energy questions and oil prices.

#### Other Questions

There are a number of other questions that have not been considered here that should be examined in the second report of our task force. Among them are the following:

1. Trilateral-OPEC aid coordination. Even with a major new effort of multilateral cooperation along the lines proposed above, the bulk of Trilateral and OPEC aid efforts will continue to be through bilateral and regional channels. It would be useful to have a forum in which the Trilateral and OPEC countries could examine their aid programs with respect to levels and types of assistance and distribution among recipient countries. Possible forums to be considered for this purpose are the new IMF/IBRD Development Committee, which includes recipient developing countries; the Development Assistance Committee of the OECD, which includes only Trilateral countries, but

which could be broadened to include OPEC donors; or some new Trilateral-OPEC forum to be specially created. Pending the decision on such a forum, OPEC countries could be encouraged to participate on an ad hoc basis in OECD and World Bank consortia and consultative groups. Moreover, if the mandate of OPEC could be broadened to include aid questions, useful cooperation could be developed between the OECD and World Bank staffs, on the one hand, and the OPEC secretariat on the other.

2. The special problems of the "middle class" countries.

There is a real danger that in concentrating on the approximately 30 low-income countries of the "Fourth world" we will neglect the very real problems of the new "middle class" -- countries like Mexico, Brazil, Turkey, Malaysia and Korea. These nations have made rapid progress in the past, but they are likely to face serious financial problems in the future due to the higher cost of food and fuel, particularly if slow growth in the Trilateral world dims prospects for their exports. Substantial amounts of financing in between commercial lending and ODA may be needed if the recent gains of these countries are not to be jeopardized. Should this take the form of conventional World Bank lending, loans from an IMF "oil facility," or something else?

3. Soviet participation. In our first report, we emphasized the desirability of including the Soviet Union in multilateral efforts, not only in the interest of detente and global solidarity, but because

the Soviet Union has substantial economic capabilities and has benefited from the increase in raw material prices. Full Soviet membership in the Fund and Bank system seems unlikely, but could the U.S.S.R. be induced to participate in the interest subsidy for the \$3 billion fund in the World Bank's "third window"? If not, could the U.S.S.R. be persuaded to contribute to some parallel UN effort under the auspices of the General Assembly, whose activities could be coordinated with those of the World Bank group? Or should the Soviet Union simply be urged to expand its own bilateral aid programs?

## Attachment 1

Most seriously affected countries: balance of payments projections, 1974 and 1975, as at 1 September 1974  
(Millions of dollars)

|                                  | Projected over-all deficit <sup>a/</sup> |       | Current account deficit <sup>a/</sup> |                  | Net inflow of capital <sup>b/</sup> |       | Projected deficit as percentage of imports (c.i.f.) <sup>a/</sup> |      |
|----------------------------------|--|-------|---------------------------------------|------------------|-------------------------------------|-------|---|------|
|                                  | 1974                                     | 1975  | 1974                                  | 1975             | 1974                                | 1975  | 1974  | 1975 |
| Bangladesh .....                 | 375                                      | 407   | 612                                   | 657              | 237                                 | 250   | 28.3  | 30.0 |
| Central African Republic .....   | 19                                       | 25    | 39                                    | 49               | 20                                  | 24    | 21.6  | 25.0 |
| Chad .....                       | 16                                       | 30    | 68                                    | 80               | 53                                  | 50    | 10.1  | 17.1 |
| Dahomey .....                    | 9  | 14    | 23                                    | 30               | 14                                  | 16    | 5.5   | 7.7  |
| Democratic Yemen .....           | 45                                       | ...   | 70                                    | ...              | 25                                  | ...   | 12.2  | ...  |
| El Salvador .....                | 48                                       | ...   | 78                                    | ...              | 30                                  | ...   | 10.0  | ...  |
| Ethiopia .....                   | ...                                      | ...   | ...                                   | ...              | ...                                 | ...   | ...   | ...  |
| Ghana .....                      | 23                                       | 82    | -7                                    | 85               | -30                                 | 3     | 3.6   | 10.9 |
| Guinea .....                     | 21                                       | -10   | 92                                    | 70               | 71                                  | 80    | 13.9  | -5.8 |
| Guyana .....                     | 16                                       | 16    | 74                                    | 48               | 58                                  | 32    | 5.9   | 5.2  |
| Haiti .....                      | 8  | -8    | 50                                    | 67               | 42                                  | 75    | 7.4   | ...  |
| Honduras .....                   | 33                                       | 44    | 84                                    | 104              | 51                                  | 60    | 8.9   | 10.2 |
| India .....                      | 820                                      | 880   | 1,919                                 | 2,270            | 1,099                               | 1,390 | 16.8  | 15.7 |
| Ivory Coast .....                | 57                                       | 77    | 153                                   | 203              | 96                                  | 126   | 5.7   | 6.7  |
| Kenya .....                      | 84                                       | 137   | 197                                   | 274              | 113                                 | 137   | 8.9   | 12.3 |
| Khmer Republic .....             | ...                                      | ...   | ...                                   | ...              | ...                                 | ...   | ...   | ...  |
| Laos .....                       | ...                                      | ...   | ...                                   | ...              | ...                                 | ...   | ...   | ...  |
| Lesotho .....                    | ...                                      | ...   | 87 <sup>c/</sup>                      | 95 <sup>c/</sup> | ...                                 | ...   | ...   | ...  |
| Madagascar .....                 | 32                                       | 25    | 88                                    | 82               | 56                                  | 57    | 10.3  | 7.6  |
| Mali .....                       | 42                                       | 32    | 53                                    | 46               | 11                                  | 14    | 30.9  | 24.6 |
| Mauritania .....                 | 17                                       | 16    | 26                                    | 28               | 9                                   | 12    | 9.6   | 8.3  |
| Niger .....                      | 30                                       | 22    | 31                                    | 23               | 1                                   | 1     | 21.1  | 19.6 |
| Pakistan .....                   | 155                                      | 78    | 485                                   | 513              | 330                                 | 435   | 8.6   | 3.8  |
| Senegal .....                    | 69                                       | 67    | 133                                   | 109              | 64                                  | 42    | 13.0  | 11.5 |
| Sierra Leone .....               | 31                                       | 20    | 70                                    | 62               | 39                                  | 42    | 14.8  | 8.7  |
| Somalia .....                    | 27                                       | 29    | 56                                    | 59               | 29                                  | 30    | 18.6  | 18.7 |
| Sri Lanka .....                  | 69                                       | 100   | 152                                   | 185              | 83                                  | 85    | 9.7   | 13.0 |
| Sudan .....                      | 46                                       | 30    | 90                                    | 122              | 44                                  | 92    | 8.5   | 4.9  |
| United Republic of Cameroon .... | 25                                       | 42    | 43                                    | 67               | 18                                  | 25    | 5.6   | 8.2  |
| United Republic of Tanzania .... | 120                                      | 124   | 229                                   | 218              | 109                                 | 97    | 16.4  | 16.5 |
| Upper Volta .....                | 10                                       | 17    | 82                                    | 73               | 72                                  | 56    | 7.4   | 12.6 |
| Yemen .....                      | 11                                       | ...   | 54                                    | ...              | 43                                  | ...   | 5.0   | ...  |
| TOTAL <sup>d/</sup>              | 2,257                                    | 2,293 | 5,044                                 | 5,524            | 2,787                               | 3,231 |   |      |

Source: United Nations Emergency Operation, based on data and analysis supplied by the staffs of FAO, IMF, UNCTAD and IRRD.

a/ Minus sign indicates surplus.

b/ Minus sign indicates net outflow.

c/ Balance on trade account.

d/ Sum of listed amounts, excluding Ethiopia, Khmer Republic, Laos and Lesotho.

Source: United Nations Doc. A/9828, 6 November 1974

## Attachment 2

Summary of emergency assistance officially reported as at 1 November 1974

| Contributors   | Total commitments                      | Grants     | Loans      | Intended disbursements in the year ended 30/6/75 | Observations  |
|--|--|------------|------------|--|---|
|  | (In millions of United States dollars) |            |            |  |   |
| <b>I. Countries:</b>                                     |  |            |            |  |   |
| 1. Algeria   | 51                                     | 43         | 8          | 51   | In addition to \$107 million contributed to Arab regional funds and African Development Bank  |
| 2. Australia   | 49                                     | 49         | 0          | 49   | Excluding contribution to Papua New Guinea  |
| 3. Canada  | 101                                    | 85         | 16         | 101  | Excluding contribution to Jamaica   |
| 4. Denmark   | 1                                      | 1          | 0          | 1  | In addition to the share in the European Economic Community (EEC) contribution  |
| 5. European Economic Community                           | 150                                    | 150        | 0          | 150  |   |
| 6. Finland   | 11                                     | 0          | 11         | 11   |   |
| 7. Iceland   | -                                      | -          | -          | -  | \$40,000 paid into the Special Account  |
| 8. Iran  | 1,577                                  | ...        | ...        | 380  | Intended disbursements by the end of 1974   |
| 9. Japan   | 100                                    |            |            | ...  | Represents minimum contribution   |
| 10. Kuwait   | ...                                    | ...        | ...        | ...  | Has contributed \$65 million to Arab regional funds and over \$500 million bilaterally  |
| 11. Netherlands  | 16                                     | 16         | 0          | 16   | In addition to the share in the EEC contribution  |
| 12. New Zealand  | 9                                      | 9          | 0          | 9  |   |
| 13. Norway   | 17                                     | 17         | 0          | 17   |   |
| 14. Saudi Arabia   | 30                                     | 30         | 0          | 30   | Has contributed \$90 million to Arab regional funds   |
| 15. Sweden   | 37                                     | 34         | 3          | 37   |   |
| 16. United Arab Emirates                                 | 127                                    | ...        | ...        | ...  | In addition, assistance is given to drought and flood stricken countries  |
| 17. United Kingdom of Great Britain and Northern Ireland | 48                                     | 19         | 29         | 48   | In addition to the share in the EEC contribution. Emergency assistance disbursed prior to 30 June 1974 amounts to \$36.4 million  |
| 18. United States of America                             | ...                                    | ...        | ...        | ...  | Non-project assistance for fiscal year 1974 was \$628.3 million and for fiscal year 1975 is planned at \$689 million subject to Congressional approval                      |
| 19. Venezuela  | 100                                    | 80         | 20         | 100  |   |
| 20. Yugoslavia   | 7                                      | 3          | 4          | ...  | In local currency   |
| <b>II. International agencies:</b>                       |  |            |            |  |   |
| 1. African Development Bank                              |  |            |            |  | Intended disbursement \$86 million provided Arab Fund for alleviation of the effects of high oil prices is transferred to the Bank as requested by OAU Council of Ministers |
| 2. Arab Fund for Economic and Social Development         | 72                                     |            |            | 72   | Intended disbursements by the end of 1974 from the Organization of Arab Petroleum Exporting Countries (OAPEC) special account   |
| 3. International Development Association                 | 100                                    |            |            | 68   |   |
| 4. League of Arab States                                 | 121                                    |            |            | ...  |   |
| <b>TOTAL</b>   | <b>2,724</b>                           | <b>...</b> | <b>...</b> | <b>...</b>                                       |   |

Source: United Nations Doc. A/9828, 6 November 1974

## Attachment 3

Secretary-General's Special Account as at 1 November 1974

| Contributors                           | Commitments<br>in 1974 | Receipts<br>to date | Observations  |
|--|------------------------|---------------------|---|
| (In millions of United States dollars) |                        |                     |   |
| 1. Algeria                             | 20                     |                     | Of which \$10 million is earmarked for specified countries              |
| 2. European Economic Community         | 30                     |                     |   |
| 3. Iceland                             | 0.04                   | 0.04                |   |
| 4. Iran                                | 20                     |                     |   |
| 5. Netherlands                         | 16.35                  | 6                   | \$10.35 million allocated for the purchase and transport of fertilizers |
| 6. Norway                              | 2.8                    |                     |   |
| 7. Saudi Arabia                        | 30                     | 30                  |   |
| 8. Sweden                              | 11.41                  | 11.41               |   |
| 9. United Arab Emirates                | 10                     | 10                  | \$500,000 earmarked for Honduras  |
| 10. Venezuela                          | 80                     | 30                  | \$50 million promised for early 1975                                    |
| 11. Yugoslavia                         | 3.2                    |                     | In local currency   |
| 12. Private donations                  | -                      | -                   | Received \$100  |
| TOTAL                                  | 223.80                 | 87.45               |   |

Source: United Nations Doc. A/9828, 6 November 1974

## Attachment 4

**Flow of Official Development Assistance  
Measured as a Percent of Gross National Product<sup>a</sup>**

|                            | 1960 | 1965 | 1970 | 1971 | 1972  | 1973  | 1974  | 1975  | 1980 <sup>d</sup>      |         |
|----------------------------|------|------|------|------|-------|-------|-------|-------|------------------------|---------|
|                            |      |      |      |      |       |       |       |       | Required for<br>Case I | Case II |
| Australia                  | .38  | .53  | .59  | .53  | .59   | .44   | .53   | .54   |                        |         |
| Austria                    |      | .11  | .07  | .07  | .08   | .13   | .13   | .13   |                        |         |
| Belgium                    | .88  | .60  | .46  | .50  | .55   | .51   | .56   | .62   |                        |         |
| Canada                     | .19  | .19  | .42  | .42  | .47   | .43   | .51   | .51   |                        |         |
| Denmark                    | .09  | .13  | .38  | .43  | .45   | .47   | .49   | .50   |                        |         |
| France                     | 1.38 | .76  | .66  | .66  | .67   | .58   | .55   | .51   |                        |         |
| Germany                    | .31  | .40  | .32  | .34  | .31   | .32   | .30   | .28   |                        |         |
| Italy                      | .22  | .10  | .16  | .18  | .09   | .14   | .10   | .08   |                        |         |
| Japan                      | .24  | .27  | .23  | .23  | .21   | .25   | .24   | .24   |                        |         |
| Netherlands                | .31  | .36  | .61  | .58  | .67   | .54   | .61   | .65   |                        |         |
| New Zealand <sup>b</sup>   |      |      |      |      | .23   | .27   | .36   | .47   |                        |         |
| Norway                     | .11  | .16  | .32  | .33  | .41   | .45   | .63   | .65   |                        |         |
| Portugal                   | 1.45 | .59  | .67  | 1.42 | 1.79  | .71   | .47   | .42   |                        |         |
| Sweden                     | .05  | .19  | .38  | .44  | .48   | .56   | .69   | .70   |                        |         |
| Switzerland                | .04  | .09  | .15  | .11  | .21   | .15   | .15   | .15   |                        |         |
| United Kingdom             | .56  | .47  | .37  | .41  | .39   | .35   | .34   | .32   |                        |         |
| United States <sup>c</sup> | .53  | .49  | .31  | .32  | .29   | .23   | .21   | .20   |                        |         |
| GRAND TOTAL                |      |      |      |      |       |       |       |       |                        |         |
| —ODA \$ millions           |      |      |      |      |       |       |       |       |                        |         |
| (current prices)           | 4665 | 5895 | 6832 | 7762 | 8671  | 9415  | 10706 | 11948 | 16760                  | 24400   |
| —ODA 1973 prices           | 7660 | 9069 | 9346 | 9976 | 10059 | 9415  | 9391  | 9452  | 9259                   | 13480   |
| —GNP \$ billions           |      |      |      |      |       |       |       |       |                        |         |
| (current prices)           | 898  | 1340 | 2010 | 2218 | 2550  | 3100  | 3530  | 4100  | 8200                   | 8200    |
| —ODA as % GNP              | .52  | .44  | .34  | .35  | .34   | .30   | .30   | .29   | .20                    | .30     |
| —ODA Deflator              | 60.9 | 65.0 | 73.1 | 77.8 | 86.2  | 100.0 | 114.0 | 126.4 | 181.0                  | 181.0   |

<sup>a</sup>Countries included are members of OECD Development Assistance Committee, accounting for more than 95% of total Official Development Assistance. Figures for 1973 and earlier years are actual data. The projections for 1974 and 1975 are based on World Bank estimates of growth of GNP, on information on budget appropriations for aid, and on aid policy statements made by governments. Because of the relatively long period of time required to translate legislative authorizations first into commitments and later into disbursements, it is possible to project today, with reasonable accuracy, ODA flows (which by definition represent disbursements) through 1975.

<sup>b</sup>New Zealand became a member of the DAC only in 1973. ODA figures for New Zealand are not available for 1960-71.

<sup>c</sup>In 1949, at the beginning of the Marshall Plan, U.S. Official Development Assistance amounted to 2.79% of GNP.

<sup>d</sup>Case I leading to a -0.4% change in GNP per capita per annum in countries with incomes of under \$200 per capita would require ODA of \$16.7 billion (.20% of DAC GNP) in 1980; Case II with 2.1% growth in GNP per capita would require \$24.4 billion (.30% of DAC GNP) in that year.

Source: Robert S. McNamara, address to the Board of  
Governors of the World Bank Group, September 30, 1974

Attachment 5

SUBSIDY FUND REQUIRED  
 (% of face value of loan)

| <u>LOAN TYPE</u>                         | <u>MATURITY</u><br>(years) | <u>GRACE</u> | <u>INTEREST PAID BY</u> |           |           |
|--|----------------------------|--------------|-------------------------|-----------|-----------|
|  |                            |              | <u>SUBSIDY FUND</u>     |           |           |
|  |                            |              | <u>3%</u>               | <u>4%</u> | <u>5%</u> |
| PROJECT                                  | 20                         | 4            | 14.07%                  | 18.76%    | 23.45%    |
| PROGRAM<br>(more rapid disbursement)     | 20                         | 4            | 20.77%                  | 27.69%    | 34.61%    |
| PROJECT<br>(extended grace period)       | 20                         | 7            | 15.33%                  | 20.44%    | 25.55%    |
| PROJECT<br>(extended maturity)           | 35                         | 4            | 21.40%                  | 28.54%    | 35.67%    |
| PROJECT<br>(extended grace and maturity) | 35                         | 10           | 22.36%                  | 29.81%    | 37.26%    |

Source: World Bank staff study

## Board of Governors · 1974 Annual Meeting · Washington, D.C.



## INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Information Bulletin No. 1

VOTING POWER AND SUBSCRIPTIONS  
OF MEMBER COUNTRIES

(As of September 30, 1974)

(four pages)

| Member                      | Voting Power          |                         | Total Subscription |                         |
|-----------------------------|-----------------------|-------------------------|--------------------|-------------------------|
|                             | Number<br>of<br>Votes | Per Cent<br>of<br>Total | Amount<br>★        | Per Cent<br>of<br>Total |
| Afghanistan                 | 550                   | .19                     | 30.0               | .12                     |
| Algeria                     | 1,359                 | .47                     | 110.9              | .43                     |
| Argentina                   | 3,983                 | 1.39                    | 373.3              | 1.46                    |
| Australia                   | 5,921                 | 2.06                    | 576.1              | 2.22                    |
| Austria                     | 2,554                 | .89                     | 230.4              | .90                     |
| Bahamas                     | 421                   | .15                     | 17.1               | .07                     |
| Bahrain                     | 335                   | .12                     | 8.5                | .03                     |
| Bangladesh                  | 1,317                 | .46                     | 106.7              | .42                     |
| Barbados                    | 361                   | .13                     | 11.1               | .04                     |
| Belgium                     | 5,795                 | 2.02                    | 554.5              | 2.17                    |
| Bolivia                     | 460                   | .16                     | 21.0               | .08                     |
| Botswana                    | 293                   | .10                     | 4.3                | .02                     |
| Brazil                      | 3,983                 | 1.39                    | 373.3              | 1.46                    |
| Burma                       | 757                   | .26                     | 50.7               | .20                     |
| Burundi                     | 400                   | .14                     | 15.0               | .06                     |
| Cameroon                    | 450                   | .16                     | 20.0               | .08                     |
| Canada                      | 9,668                 | 3.37                    | 941.8              | 3.69                    |
| Central African Republic    | 350                   | .12                     | 10.0               | .04                     |
| Chad                        | 350                   | .12                     | 10.0               | .04                     |
| Chile                       | 1,193                 | .42                     | 94.3               | .37                     |
| China                       | 7,750                 | 2.70                    | 750.0              | 2.94                    |
| Colombia                    | 1,183                 | .41                     | 93.3               | .37                     |
| Congo, People's Republic of | 350                   | .12                     | 10.0               | .04                     |
| Costa Rica                  | 357                   | .12                     | 10.7               | .04                     |
| Cyprus                      | 472                   | .16                     | 22.2               | .09                     |
| Dahomey                     | 350                   | .12                     | 10.0               | .04                     |
| Denmark                     | 2,461                 | .86                     | 221.1              | .87                     |
| Dominican Republic          | 393                   | .14                     | 14.3               | .06                     |
| Ecuador                     | 431                   | .15                     | 18.1               | .07                     |
| Egypt, Arab Republic of     | 1,671                 | .58                     | 142.1              | .56                     |
| El Salvador                 | 370                   | .13                     | 12.0               | .05                     |
| Equatorial Guinea           | 314                   | .11                     | 6.4                | .03                     |
| Ethiopia                    | 364                   | .13                     | 11.4               | .04                     |

| Member                       | Voting Power    |                   | Total Subscription |                   |
|------------------------------|-----------------|-------------------|--------------------|-------------------|
|                              | Number of Votes | Per Cent of Total | Amount \$          | Per Cent of Total |
| Fiji                         | 361             | .13               | 11.1               | .04               |
| Finland                      | 1,871           | .65               | 162.1              | .63               |
| France                       | 13,042          | 4.55              | 1,279.2            | 5.01              |
| Gabon                        | 370             | .13               | 12.0               | .05               |
| Gambia, The                  | 303             | .11               | 5.3                | .02               |
| Germany, Federal Republic of | 13,903          | 4.85              | 1,365.3            | 5.34              |
| Ghana                        | 984             | .34               | 73.4               | .29               |
| Greece                       | 986             | .34               | 73.6               | .29               |
| Guatemala                    | 373             | .13               | 12.3               | .05               |
| Guinea                       | 450             | .16               | 20.0               | .08               |
| Guyana                       | 421             | .15               | 17.1               | .07               |
| Haiti                        | 400             | .14               | 15.0               | .06               |
| Honduras                     | 334             | .12               | 8.4                | .03               |
| Iceland                      | 434             | .15               | 18.4               | .07               |
| India                        | 9,250           | 3.23              | 900.0              | 3.52              |
| Indonesia                    | 2,450           | .85               | 220.0              | .86               |
| Iran                         | 1,830           | .64               | 158.0              | .62               |
| Iraq                         | 948             | .33               | 69.8               | .27               |
| Ireland                      | 1,282           | .45               | 103.2              | .40               |
| Israel                       | 1,358           | .47               | 110.8              | .43               |
| Italy                        | 8,775           | 3.06              | 852.5              | 3.34              |
| Ivory Coast                  | 615             | .21               | 36.5               | .14               |
| Jamaica                      | 696             | .24               | 44.6               | .17               |
| Japan                        | 10,480          | 3.65              | 1,023.0            | 4.00              |
| Jordan                       | 437             | .15               | 18.7               | .07               |
| Kenya                        | 650             | .23               | 40.0               | .16               |
| Khmer Republic               | 464             | .16               | 21.4               | .08               |
| Korea                        | 932             | .33               | 68.2               | .27               |
| Kuwait                       | 944             | .33               | 69.4               | .27               |
| Laos                         | 350             | .12               | 10.0               | .04               |
| Lebanon                      | 340             | .12               | 9.0                | .04               |
| Lesotho                      | 293             | .10               | 4.3                | .02               |
| Liberia                      | 463             | .16               | 21.3               | .08               |
| Libyan Arab Republic         | 450             | .16               | 20.0               | .08               |
| Luxembourg                   | 450             | .16               | 20.0               | .08               |
| Malagasy Republic            | 469             | .16               | 21.9               | .09               |
| Malawi                       | 400             | .14               | 15.0               | .06               |
| Malaysia                     | 1,837           | .64               | 158.7              | .62               |
| Mali                         | 423             | .15               | 17.3               | .07               |
| Mauritania                   | 350             | .12               | 10.0               | .04               |
| Mauritius                    | 438             | .15               | 18.8               | .07               |
| Mexico                       | 2,530           | .88               | 228.0              | .89               |
| Morocco                      | 1,210           | .42               | 96.0               | .38               |

| Member               | Voting Power    |                   | Total Subscription |                   |
|----------------------|-----------------|-------------------|--------------------|-------------------|
|                      | Number of Votes | Per Cent of Total | Amount \$          | Per Cent of Total |
| Nepal                | 362             | .13               | 11.2               | .04               |
| Netherlands          | 6,173           | 2.15              | 592.3              | 2.32              |
| New Zealand          | 1,966           | .69               | 171.6              | .67               |
| Nicaragua            | 341             | .12               | 9.1                | .04               |
| Niger                | 350             | .12               | 10.0               | .04               |
| Nigeria              | 1,402           | .49               | 115.2              | .45               |
| Norway               | 2,298           | .80               | 204.8              | .80               |
| Oman                 | 310             | .11               | 6.0                | .02               |
| Pakistan             | 2,250           | .78               | 200.0              | .78               |
| Panama               | 426             | .15               | 17.6               | .07               |
| Paraguay             | 310             | .11               | 6.0                | .02               |
| Peru                 | 985             | .34               | 73.5               | .29               |
| Philippines          | 1,572           | .55               | 132.2              | .52               |
| Portugal             | 1,050           | .37               | 80.0               | .31               |
| Qatar                | 421             | .15               | 17.1               | .07               |
| Romania              | 1,871           | .65               | 162.1              | .63               |
| Rwanda               | 400             | .14               | 15.0               | .06               |
| Saudi Arabia         | 1,393           | .49               | 114.3              | .45               |
| Senegal              | 583             | .20               | 33.3               | .13               |
| Sierra Leone         | 400             | .14               | 15.0               | .06               |
| Singapore            | 570             | .20               | 32.0               | .13               |
| Somalia              | 400             | .14               | 15.0               | .06               |
| South Africa         | 2,980           | 1.04              | 273.0              | 1.07              |
| Spain                | 3,621           | 1.26              | 337.1              | 1.32              |
| Sri Lanka            | 1,077           | .38               | 82.7               | .32               |
| Sudan                | 850             | .30               | 60.0               | .23               |
| Swaziland            | 318             | .11               | 6.8                | .03               |
| Sweden               | 3,023           | 1.05              | 277.3              | 1.09              |
| Syrian Arab Republic | 650             | .23               | 40.0               | .16               |
| Tanzania             | 600             | .21               | 35.0               | .14               |
| Thailand             | 1,393           | .49               | 114.3              | .45               |
| Togo                 | 400             | .14               | 15.0               | .06               |
| Trinidad and Tobago  | 785             | .27               | 53.5               | .21               |
| Tunisia              | 623             | .22               | 37.3               | .15               |
| Turkey               | 1,536           | .54               | 128.6              | .50               |
| Uganda               | 583             | .20               | 33.3               | .13               |
| United Arab Emirates | 378             | .13               | 12.8               | .05               |
| United Kingdom       | 26,250          | 9.15              | 2,600.0            | 10.18             |
| United States        | 64,980          | 22.66             | 6,473.0            | 25.34             |
| Upper Volta          | 350             | .12               | 10.0               | .04               |
| Uruguay              | 661             | .23               | 41.1               | .16               |

| Member                          | Voting Power          |                         | Total Subscription |                         |
|---------------------------------|-----------------------|-------------------------|--------------------|-------------------------|
|                                 | Number<br>of<br>Votes | Per cent<br>of<br>Total | Amount<br>*        | Per cent<br>of<br>Total |
| Venezuela                       | 2,222                 | .77                     | 197.2              | .77                     |
| Viet-Nam                        | 793                   | .28                     | 54.3               | .21                     |
| Western Samoa                   | 267                   | .09                     | 1.7                | .01                     |
| Yemen Arab Republic             | 335                   | .12                     | 8.5                | .03                     |
| Yemen, People's<br>Dem. Rep. of | 498                   | .17                     | 24.8               | .10                     |
| Yugoslavia                      | 1,428                 | .50                     | 117.8              | .46                     |
| Zaire                           | 1,210                 | .42                     | 96.0               | .38                     |
| Zambia                          | 783                   | .27                     | 53.3               | .21                     |
| <b>Totals</b>                   | <b>286,739</b>        | <b>100.00*</b>          | <b>25,548.9</b>    | <b>100.00*</b>          |

\* Millions of U.S. dollars of the weight and fineness in effect on July 1, 1944.

\* May differ from the sum of the individual percentages shown because of rounding.

125 Countries

# THE WORLD TODAY

## The Vital Triangle

GERARD C. SMITH

*Reprinted from the  
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**CHATHAM HOUSE**

The Royal Institute of International  
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