U.S. EXPORT CONTROL POLICY AND EXTENSION OF THE EXPORT ADMINISTRATION ACT

HEARINGS

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

NINETY-SIXTH CONGRESS

FIRST SESSION

PART I

OVERSIGHT TO REVIEW U.S. EXPORT CONTROL POLICY AND PROPOSALS TO EXTEND AND REVISE THE EXPORT ADMINISTRATION ACT OF 1969, AS AMENDED

MARCH 5 AND 6, 1979

Printed for the use of the
Committee on Banking, Housing, and Urban Affairs

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U.S. EXPORT CONTROL POLICY AND EXTENSION OF THE EXPORT ADMINISTRATION ACT

MONDAY, MARCH 5, 1979

U. S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, D.C.

The committee met at 10:05 a.m., in room 5302 of the Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Also present: Sentators Stevenson, Cranston, Garn, and Heinz.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order. The purpose of the committee's hearings today and tomorrow, and those which the International Finance Subcommittee will hold later this month is to review the U.S. export policy and the proposals to extend and revise the export Administration Act.

The act expires September 30, unless renewed, and provides the President with authority to control exports of nonmilitary technology necessary to safeguard our national security, promote our foreign policy and protect our economy when short supply conditions arise.

Export controls interfere with the free market system. They introduce economic distortions and impose real economic costs on American citizens through lost sales and jobs. But the costs imposed by export controls are often necessary costs.

Our top priority must be our national security. Exports which would help potential enemies increase significantly their military power must be prevented. Controls on exports are also necessary to support other foreign policy goals including human rights.

There are times when we must be willing, as Americans have always been willing, to pay a price to defend our moral principles, even if we cannot be entirely certain of success. The United States should continue to be among the first, not the last, nations to make sacrifices to oppose regimes engaged in gross and persistent violations of human rights.

We should increase the effectiveness of export controls by securing closer cooperation from export competing nations which share our concerns.

The central issue in these hearings is the need to increase multilateral cooperation in export controls, which defend the interests shared by all three nations. We should reduce the cost of export controls by improving the focus and the management of the export licensing process.

The Export Administration Act clearly states that all license applications shall be approved or denied with 90 days of receipt. Therefore, I was distressed to learn last year from a Wisconsin company that they had been waiting 6 months for an export license decision. When they went on to say that their real concern was another application which had been languishing in the Washington bureaucracy for 18 months, I was appalled.

Surely, it need not take 6 months, let alone 18 months, to determine whether to approve or deny an export license, not when the law provides a 90 day limit. The Commerce Department will testify later today that a high percentage of license applications are acted upon within 90 days, but the fact is that the number not acted upon within 90 days is increasing every month.

The committee will also want to review the export licensing system carefully. It's tough enough to convince citizens that business must sometimes be passed up in order to defend national interest.

It is intolerable to lose exports and impose additional costs on U.S. companies because the Federal bureaucracy is not responsive. We will hear testimony from the General Accounting Office first this morning, which I understand will include suggestions for expediting export licenses. Later we will hear from administration witnesses. I must say at the outset that I'm disappointed that the administration does not have a bill to present to the Congress at this time. I must remind the administration witnesses and my colleagues that legislation to extend the Export Administration Act must include an authorization for appropriations to the Commerce Department for fiscal 1980 to meet expenses in administering the act.

That means that this committee must report such legislation by May 15, a little more than 2 months from now, or stand in violation of the Budget Act. I hope the administration will get a bill up here promptly. I am encouraging any Senators who are preparing bills on the subject to introduce them as early as they can so that the committee will be able to study all proposals carefully.

Senator Garn?

OPENING STATEMENT OF SENATOR GARN

Senator GARN. Mr. Chairman, it is generally agreed that the Congress rarely addresses a problem until it is already on the mend, often in order to obtain enough support for legislation. The current situation is looked upon in the light of past severities, restrictions tailored to outdated diagnoses.

The Humphrey-Hawkins legislation and economic policy in general can be cited. It treated the economy as if it were in the depths of a recession, while it was actually in advanced stages of recovery. We adopted the jobs bill at the height of economic expansion.

Similarly, much of the currently falling rate of inflation is due to the continuation of expansionary fiscal and monetary policies far into the recovery period. We kept adding heat to avoid the kettle. In fact we seem to have grown so used to such policies that Government officials can call a $29 billion budget deficit austerity because it is not a $40 billion deficit.

I am not particularly a fan of Keynes. I'm not sure that even Keynes would be a fan of such policies. Mr. Chairman, I mention this because I feel that it has application to the issues that we are addressing today in these hearing, the issues surrounding U.S. exports, have had exceptional, unprecedented trade in balances, but we have also experienced exceptional unprecedented economic disruptions.

Given these disruptions, the oil embargo followed by the quadrupling of oil prices, deep recession followed by differing rates of recovery among the major industrial nations it would have been surprising if there did not result any major imbalances such as in our trade. There are signs now, however, that the U.S. trade picture is markedly improving as these disruptions are working themselves out. It is important, therefore, that we do not address ourselves to correcting the problem. That is on the mend on its own. Before we yield to the traditional pressures for greater Government involvement, we should consider how the picture is improving without that involvement, how Government action is inhibiting that improvement, and what exactly is the proper role for the Government in U.S. exports.

We have the opportunity to conduct this review, particularly with the Export Administration Act in mind. I have some problems with this legislation. I intend to keep these in view as we consider this matter.

Mr. Chairman, as I mentioned, the U.S. export picture is improving. The Federal Reserve Bank of New York study indicates, and I quote, "Following a prolonged period of stagnation, the volume of U.S. exports registered one of its sharpest surges ever between January and November 1978. Export volume increases at nearly a 25 percent annual rate. That compares with an average increase of less than 1 percent per annum over the preceding 3 years." End of quote.

It certainly is true that our exports have a long way to go, but by any standard, that is phenomenal growth. I emphasize, Mr. Chairman, that this growth was accomplished without any new governmental programs. The same study indicates the U.S. export growth is expected to continue at a fast clip throughout 1979. The January trade figures, taking into account the new method of seasonal adjustment, seem to bear this out.

One of the things in the last few years have demonstrated is the strength of our economy. The United States emerged from the global recession more quickly and more strongly than any other major industrial nation. The actual recovery in other nations was at a lower rate and took a longer period of time than has been our history, while the United States exceeded its historical rate as well as those of its major industrial trading partners, including Japan and Germany.

What this meant was that for foreign businesses the United States offered a stronger market than they could find in their own countries. Our own industries found business at home better than that abroad. Mr. Chairman, this is not the whole picture, but it is an important part because since Japan and Europe have caught up, the market for U.S. exports has been improving.

The dollar devaluation is improving the price competitiveness of our export products. This is responsible for part of the trade improvement in 1978. It is likely to continue to have positive effects throughout the months ahead, considering the timelag involved. The role of inflation on exports must not be missed; continuation of double digit inflation can wipe out any gains that we expect in our exports and dollar devaluation, while continued domestic inflation at rates higher than those of our trading partners will likely force additional erosion in the price of the dollar.

We will have devalution with all of its costs and none of its trade benefits. Mr. Chairman, as I see it, an important role for Government in the area of exports is in maintaining a healthy noninflationary economy. The effort to control the inflation is directly connected with the improvement in U.S. exports.

I must admit that I am not heartened by the prospects in the current efforts in this area. It must be admitted that controls and limitations on exports do not help our trade balance. There are very real costs involved. As former Secretary of State Dean Rusk stated last fall before this committee:

> The question now is how we are to justify penalties imposed upon ourselves. The idea that exporting is a privilege granted to businesses by the Government is absolutely foreign to my own way of thinking. I reject the view that the administration should be allowed to parcel out export favors to those businesses that support a given domestic program and deny such things to those who differ with them.

Dr. Bosworth testified before this committee a few weeks ago that it was his understanding the Export-Import Bank had a policy to insure that Government loan programs are not directed toward encouraging exports in those areas where there are inflationary price increases.

I reject that policy, and I intend to closely scrutinize the Export Administration Act to insure that it will not be possible to abuse it in such a manner. Export controls should be used only when absolutely necessary for the few cases when it is probable that an export will seriously threaten the security interests of the United States or is necessary to combat foreign economic policies of other states or when necessary as an effective and significant support for U.S. foreign policy goals and obligations.

There is more that could be said, but again, permit me to emphasize that all of our efforts at improving the trade balance will meet with failure if we fail to gain control of our domestic economy and restore it to a sound, noninflationary footing that will not erode all of our efforts even as we carry them out.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator. I recognize Senator Stevenson, and I might say how grateful the committee is to Senator Stevenson for the leadership and tremendous amount of time and effort he's put into this whole problem. I think he and his subcommittee have done more work in this area than any congressional subcommittee has ever done, 11 days of hearings last year on export policy plus 2 days on export control. I understand there's going to be a very significant report forthcoming from the Stevenson subcommittee.

So we're very grateful to you, Senator Stevenson, for all the effort and work that you have done.

OPENING STATEMENT OF SENATOR STEVENSON

Senator STEVENSON. Mr. Chairman, thank you.

I'm grateful to you for your support, for holding these hearings today. The U.S. share of world markets is declining steadily. The cost of imported oil is rising. Other nations are now suppliers of the most sophisticated goods, including goods with military applications. There's scarcely anything left, at least that the U.S. produces that is unique or of superior quality.

As you indicated, we have conducted some lengthy hearings and studies of U.S. competitiveness in the world. The conclusions are grim. The report will be available perhaps as early as late this week, if not next week. That report, in addition to describing the competitive position of the United States, will make many recommendations for improving our competitive position in a highly competitive environment.

Suffice it now to say many of the wounds are self-inflicted and that it's not likely our position in the world will be significantly improved by relying on economic orthodoxy which evolves from abstractions of behavior of nations and markets in the 18th century. The world has changed.

Other nations are going all out in the fight for markets and subsidize their exports to enlarge their market shares with all the ferocity of ancient wars of religion and empire. This country is asleep. There's much that needs to be done and much of it involves the removal of self-inflicted disabilities, export controls included.

I think there's a tendency to exaggerate the effectiveness of export controls and to ignore their economic costs. As you've indicated, we've been trying for some time now to get an expression of policy with respect to export controls from the administration. We tried last fall without success, and I hope we'll have some success in the hearings that we'll be holding this week.

But in the interim legislation which has been prepared will reform the administration of export controls by the United States, and I hope that legislation will be available for introduction this week. When it is introduced, reforming the Export Administration Act that expires soon, I hope that we'll have a chance to get the comments of our witnesses today on that legislation.

Thank you, Senator.

The CHAIRMAN. Senator Heinz?

OPENING STATEMENT OF SENATOR HEINZ

Senator HEINZ. Thank you, Mr. Chairman.

Let me at the outset thank you, Mr. Chairman and Senator Garn for scheduling these hearings. It's extremely timely. The report that Senator Stevenson mentioned a moment ago, that is the outgrowth of many, many days and weeks of hearings conducted by the International Finance Subcommittee. It's a very thorough and complete document; I think the public will find it of great interest. It contains many very valuable suggestions. I was glad to hear Senator Stevenson say that he will be incorporating some of them into a legislative package later this week.

So I also have a sense of deja vu. We had hearings on the subject I think the GAO is going to cover today. I remember voicing some

concern at that time about an administration policy which many saw as inconsistent, plagued by uncertainty and vagueness and threatening to undermine our reputation as a reliable supplier in the world marketplace.

Unfortunately, I've heard little since those hearings to convince me that those were criticisms that were unfair to the administration, and that's why I feel that if these hearings do little more than to clarify the issues and the areas of disagreement, our time here will be well spent. Of course it's my hope that more can be accomplished. This is the year in which the Export Administration Act is up for reauthorization, and it's absolutely essential that the administration present a clear and coherent policy on that subject so that we in Congress can tailor our legislation to respond to those policy guidelines.

The administration and the Congress have a particularly difficult task on export control legislation for it entails no less than the reconciliation of our political and economic goals in the world arena. Preoccupation with one to the exclusion of the other would inevitably lead to a policy destructive to our national interest.

There is an inescapable tension between the two forcing a delicate balance to be struck. We are ill-served by a system which causes seemingly endless delays and uncertainty on licenses before granting them, but it certainly would not be in our interest to replace the current system with a process which permits only cursory consideration of the export of technology which might eventually undermine our world market position or national security.

There is nothing inherently wrong with the use of export controls to send signals of international significance, but it is absolutely essential that an administration that embarks on such a course have reliable intelligence information about the degree of political leverage that any particular export can afford.

Otherwise the signal may be one of weakness and ineffectuality rather than strength, a fit of pique rather than a diplomatic message. Such behavior may also convince potential customers to look elsewhere for a more reliable supplier. Certainly, this is a reputation no great trading nation wishes to cultivate.

The promotion of human rights is a goal I strongly support. The question is really one of what is the best means to achieve that end, how much leverage do we have.

In an age of technological diffusion, how much success are we likely to have in convincing our industrialized allies—whose cooperation is critical—that the promotion of human rights is a goal worthy of financial sacrifices?

These are questions which will have to be answered if we are to write an Export Administration Act which will serve us well as we begin a new decade.

The message I have gotten from exporters is that they are not asking for removal of restraint, per se. Rather, what they want—and what we in Congress should want—is a streamlined and predictable export control policy which can be used as a reliable guide to marketing and long-term commitments. Hopefully, these hearings will provide us with the information necessary to fashion such legislation.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Heinz.

Comptroller General Staats, we are honored to have you.

You have a 19-page statement. We would appreciate it if you would abbreviate the statement. We have lots of questions for you. And we will have the statement printed in full in the record.

STATEMENT OF ELMER B. STAATS, COMPTROLLER GENERAL OF THE UNITED STATES, ACCOMPANIED BY JOHN MILGATE, ASSOCIATE DIRECTOR, INTERNATIONAL DIVISION, AND STEWART TOMLINSON, ASSISTANT DIRECTOR, INTERNATIONAL DIVISION

Mr. STAATS. Thank you, Mr. Chairman. And I believe I can abbreviate my statement.

My remarks today are concerned with the export control of so-called dual use commodities—that is, commodities like electronic instruments which are not necessarily produced for military purposes but which could have military applications. In this respect, it is important to note that such controls are applied for either or both national security and foreign policy purposes. National security controls are designed to delay the acquisition of technology and restrict products that potential adversaries seek. Foreign policy controls are designed to support our foreign policy objectives, such as the enhancement of fundamental human rights.

Expanding the U.S. share of international trade is an important goal. The President clearly affirmed this view in his export policy declaration last September. Export controls also have important purposes. The problem is that some aspects of export control administration have become unintended and unnecessary barriers to expanding the trade we clearly need to help alleviate our current balance-of-payments problems.

Crucial to building and maintaining trade relationships is the need for predictability. Sellers must know with some predictability what they can and cannot sell. Suddenly used, or inadequately explained, export controls are clearly corrosive to these relationships. U.S. exporters can be tagged with a reputation for unreliability in such a situation, and the business that might otherwise be theirs may simply go to others.

There are a number of reasons why we believe export control administration has become an unintended barrier to expanding international trade. One of them concerns the growing use of controls to support foreign policy goals as opposed to national security goals.

Controlling exports for foreign policy purposes raises an especially complicated regulatory problem. Last October this committee heard testimony which highlighted the considerable concern U.S. exporters have with the impact of such controls on foreign trade.

Even if one agrees that export controls should support some foreign policy goals, their inconsistent and unpredictable application can erode trading relationships, which, by their nature, take a considerable time to nourish. How many sales are lost because a foreign buyer, contemplating what appears to them to be an erratic use of controls, simply writes off a potential U.S. seller in favor of someone else? We found this to be impossible to answer quantita-

tively. However, exporters have strongly advised us that the adverse impact is significant.

It is important to note that when the United States uses export controls for foreign policy purposes, it usually does so alone. The other governments that jointly control exports for mutual security purposes through CoCom are under no obligation to support our foreign policy controls. The use of such controls needs to be preceded by a carefully conceived policy which at the very least addresses the long-term impact such controls might have on our international trading position.

In our most recent report, we noted that the Congress is not regularly and systematically informed about how and why foreign policy controls are being used. The Congress does not have an adequate basis for evaluating the merit of such controls, much less the impact they have on our international trade.

The Export Administration Act requires Commerce to prepare a semiannual report to the Congress and the President on the use of controls. However, the discussion on controls for foreign policy purposes in this report is brief and, we believe, inadequate because it does not discuss the specific foreign policy goals that trade controls are supposedly designed to serve, nor whether they are serving these goals well or poorly.

We recommended in our recent report that the Congress require that the semiannual report discuss in more detail the uses and reasons for foreign policy controls.

International trade is highly competitive. The Export Administration Act recognizes this principle in relation to national security controls by requiring the Government to show cause why a commodity should not be licensed for export if a comparable commodity is amply available from other sources.

The President also recognized this principle in his September 1978 announcement by requiring a similar test with respect to the use of foreign policy controls. The importance of foreign availability is obvious; not to insist on this consideration can divert sales to other sources.

While the President's statement is clearly important, its effect may very well be nullified if foreign availability analyses and evaluation are diffused and inconsistently interpreted throughout the many agencies involved in export control. We are not suggesting that these analyses and evaluations are easy to make. However, the absence of reasonably clear availability standards and criteria contribute to this problem.

We were unable to determine whether efforts were underway to establish such standards or criteria or, indeed, whether foreign availability is being systematically judged. For example, preparatory to the current CoCom commodity list review, no one appears to have been specifically charged with the responsibility of developing and applying such standards or criteria.

Foreign availability is now just one of many concerns competing for the attention of the Government's technical evaluators when reviewing export license applications or the commodity control list. Its importance is, however, mandated by law, and, further, it is of sufficient complexity to require a separate, detailed effort by the export control, intelligence, and exporting communities.

If we were to make trading relationship more predictable and less uncertain, we need to change the way we determine foreign availability. Simply stated, the Government needs to put someone in charge who can administer the required analyses and make evaluative judgments.

In our recent report we recommended that the Congress amend the Export Administration Act by requiring that foreign availability be administered as a separate effort under a foreign availability evaluator.

We further recommended that the act be amended to state that the President shall consider foreign availability when imposing export controls for foreign-policy purposes.

At the very heart of export control administration is the commodity control list. As noted earlier, the so-called international, or CoCom list, is now being revised, as it is every 2 to 3 years. A new list will become effective late this year.

The control list is not in the literal sense a list of products. Rather, it is a list of specifications which may or may not be applicable to a product. The current international list consists of 105 such categories, and the Government unilaterally controls an additional 38 categories. Export control decisions necessarily involve a comparison between a specific product that an exporter wishes to sell and the appropriate specifications on the control list.

For the current CoCom list review, representatives from industry, Defense, State, Commerce, Energy, and the intelligence agencies spent considerable time reviewing the need for and adequacy of controls on existing items. Their effectiveness was limited, however, because specially formed technical review groups were unable to furnish complete analyses and adequate support for their recommendations at the expected time. The inability of higher level review committees to reach agreement further hindered the establishment of a U.S. position for some categories.

The regular work of the Government's technical evaluators took priority. For example, list review preparations received a low priority within Defense, principally because there was no budget line item against which to charge time for the work performed.

This important function needs more priority attention and management direction. We propose that it should be administered as part of the policymaking structure we recommended in our recent report.

The credibility of the export control program may very well hinge on the question of whether or not a revised list truly reflects the complex relationship between products, technology, and a calculation of their military significance. The list review is the traditional means by which this relationship is defined.

Concurrent with the list review, Defense is implementing what is coming to be called the critical technology approach to export controls. The Government controls both product and technology exports. Defense is trying to systematically define the relationship between the two by specifying technologies which are most critical from the military's perspective and which, therefore, presumably ought to be rigorously controlled.

Defense is advertising this effort as strongly enforcing control on the export of selected critical technologies while simultaneously

relaxing many existing product controls. They have further characterized this as a refocusing of export control regulations but have noted that there will always be a number of products which have to be controlled because they have a large intrinsic military value or can be readily reverse-engineered.

However, Defense may be running the risk of promising more than it can deliver. The critical technology approach is far from complete. A Defense-led task force report is due in April of this year, and the current analytical effort is not expected to be fully completed before 1980.

Since multilateral export control is a necessary part of the Government's own control system, the critical technologies approach would have to become part of each participating CoCom member's control system. Implementing this approach through CoCom will, however, take time, since the current CoCom list review involves no major attempt to clarify the relationship between technology and product control for specific items. Since CoCom list reviews are held every 2 to 3 years, this whole effort probably cannot be fully implemented internationally for a number of years.

Whether the critical technology approach becomes a substitute for or a supplement to the current international control system, one fact seems obvious: We will need the continued cooperation of our CoCom partners. The effectiveness of our national security controls is dependent on parallel controls being applied by other member governments.

These governments, as well as our own, may, on behalf of their exports, ask that particular sales be exempt from international control. These exception requests, as they are called, are reviewed by the United States and other CoCom member governments.

While the U.S. Government only rarely recommends that an exception request be denied, it often takes considerable time to give its approval, although these requests have already been approved by the submitting government. The United States lengthy review process is causing discontent on the part of other governments and could ultimately lessen CoCom effectiveness.

There are a number of additional issues which are also complicating relations with our CoCom partners. The United States is the only CoCom member to require reexport licensing. This requirement means any item or technology subject to U.S. export licensing must be relicensed each time it is further exported. Approximately one-quarter of the CoCom exception requests submitted by other members include equipment or technology subject to U.S. export licensing. These are thus reviewed twice by our Government: Once as a reexport licensing case, and again as an exception request.

This practice has been viewed as infringing on the CoCom system, implying a distrust of our allies national control processes, and can result in foreign firms finding or developing substitutes for U.S. components to avoid delays in obtaining approval for their sales.

The Department of State has proposed to change this situation by substituting the exception request review for the reexport licensing review. We support this proposal very strongly. A single review would still meet U.S. security concerns, while eliminating the duplication in the present system.

Unlike some of his colleagues, the U.S. CoCom delegate does not have authority to independently approve exception requests made routine by clear precedent. All requests must be sent to Washington for review, thus delaying consideration of other governments' exception requests. Thus, we support a State Department proposal to give our CoCom delegate authority to approve these kinds of routine requests.

While these kinds of proposals would better our participation in CoCom by making it consistent with our allies, export control administration, as a whole, needs more basic changes.

A major conclusion of our two recent reports is that export control administration is so complex that the Congress should direct its reform. To this end, we have recommended a reorganization plan for your consideration, and we should like to talk about it just briefly.

The goals of the export control program cannot be fully achieved without closely considering the administrative means by which they are attained. Currently, these goals are frustrated by a decisionmaking system in which authority to manage licensing is diffused among too many Government agencies. The consequence is, to be sure, lengthy review times for some export license applications. Previous legislative hearings on the Export Administration Act are replete with concerns about processing time. This has and continues to be a serious problem for some exporters.

This complex regulatory system makes it difficult for exporters to know how and why the Government makes its export control decisions. This uncertainty hinders business operations and is inconsistent with our trade expansion goals. It is quite possible that many businesses simply shun the idea of exporting because of the uncertainty and frustration this system creates.

It is true that, in the limited sense, export control seems relatively benign. Most export license applications are approved, although some in amended form. In 1978, for example, over 56,000 licenses were approved, while only 210 were denied.

In another sense, however, it is less than benign. As shown in our October 1978 report, the delays in approving licenses have been an increasing problem. Since exporters have important deadlines they must meet in order to preserve long-term international trading relationships, the delays and uncertainty in obtaining export licensing decisions damages their reputation as suppliers, and further business can be lost. Thus, the real impact on U.S. exporters is probably greater than the fact of a few denials.

We found repeated instances where frustrated exporters could not get ready answers to what are really simple yet important questions, such as: What is happening to a license application, and why? Exporters who can't afford to maintain license expediters in Washington are particularly disadvantaged by this complex system. Our October 1978 report detailed the frustrating experiences some exporters have in trying to get needed information about their applications.

If we are to have an effective export control system which does not function as an unintended trade barrier, we should consider changing the whole and not just a part of it here or there.

Central to the reorganization plan we recommended in our report is a very straightforward idea: One agency should be designated the licensing manager for the executive branch. The Export Administration Act authorizes Commerce to issue export licenses, and its Office of Export Administration is the appropriate office to have the full management responsibility. Export control regulation is, after all, an executive branch function, and it is important to think of it in this way, rather than in terms of individual agency prerogatives.

License applications should be sent directly to the various agency technical evaluators by the OEA and not, as is the custom now, to various coordinators in the reviewing agencies. This simple, obvious procedure could eliminate much of the delay associated with applications which were referred to other agencies. All of the steps which currently intervene between OEA's licensing officers and technical evaluators in other agencies could be eliminated. Regardless of who actually employs them, technical evaluators should serve as consultants to OEA for export control purposes, and their agencies should be reimbursed by Commerce for the services OEA requests.

The Export Administration Act gives Defense a special role in the licensing process. Our plan does not alter the intent of the act. Defense would be sent copies of all technical evaluations for certain types of applications for their policy review and possible veto.

The Government has no effective policymaking structure to reconcile the conflicting goals of export promotion and control. For this reason, we believe that export control policymaking should be the responsibility of one organization, a multiagency export policy advisory committee. It is at the policymaking level and not at the licensing level that each relevant agency should be represented as an agency.

This committee should be given real decisionmaking power in the person of an executive director appointed by the President and responsible to him. Agency members should serve on the committee in order to advise him, but the director should have the authority to make the policy decisions. If a committee member, however, considers a decision unsatisfactory, the member could appeal it to the Export Administration review board and to the President.

This committee should not review license applications except in the most unusual circumstances. However, its goal should be to write policy guidelines of sufficient clarity so that they can be applied to reviews of license applications by OEA's staff.

This policy committee should additionally administer the Government's preparation for periodic CoCom list reviews and continuously administer reviews of the Government's unilateral control list. In short, policymaking should be made by an organization specifically responsible for that function.

The current multiagency review committees, such as the Advisory Committee on Export Policy and the Economic Defense Advisory Committee, would be abolished in conjunction with the above recommendations. As you know, the various committees of the ACEP structure, particularly its Operating Committee, review some license applications. EDAC is the somewhat similarly structured set of committees which reviews CoCom exception requests. Our reor-

ganization plan allows for only one review pattern for both types of cases. The only difference is that while Commerce would make final U.S. licensing decisions, State, as our CoCom negotiator, would make the final decisions on other governments' exception requests.

I terminate my statement at this point.

[The complete statement of Mr. Staats follows:]

STATEMENT OF ELMER B. STAATS, COMPTROLLER GENERAL OF THE UNITED STATES

Mr. Chairman and Members of the Committee: We are pleased to be here today to discuss with you the administration of export controls. Last October, we issued a report on this subject, and we recently issued a second report which discusses additional export control issues. As you know, our 1976 report on East-West trade [1] also discussed aspects of export control administration. In summary, our reports point out that the Government does not have an effective policymaking structure to reconcile the conflicting goals of export promotion and export control. Further, the decisionmaking apparatus for determining what technology or products should be controlled is unwieldy and time consuming. On top of these problems, the export licensing system is characterized by delay, uncertainty, and lack of accountability.

We have recommended to the Congress in these reports that it should provide for realignment of the export policy structure, centralization of export licensing management, and certain other processes to facilitate the efficient and timely administration of export controls.

OVERVIEW

A number of developments are occurring which parallel this Committee's deliberations to extend and amend the Export Administration Act.

1. The Administration completed last year its Presidential Review Memorandum No. 31 on East-West technology transfer. This memorandum's implementation plan has incorporated a Department of Defense study which seeks to define export control in terms of "critical" technology. This work derives from a 1976 report of the Defense Science Board Task Force on the Export of U.S. Technology. According to the report, known informally as the "Bucy Report," design and manufacturing know-how, as opposed to the products of technology should be the principal focus of strategic technology control.

2. The United States and 14 other governments that participate in the international export control advisory committee known as CoCom are revising the international control list. This list forms the basis of the U.S. Government's national security controls.

3. The President recently announced a number of steps to reduce barriers which impede exports. He emphasized that the availability of items from other countries should be considered when exports are controlled for foreign policy purposes.

4. Finally, we understand that the Department of Commerce is reviewing a number of proposals, including GAO's, to change aspects of export control administration.

All of these events form a backdrop to your deliberations on the Export Administration Act.

My remarks today are concerned with the export control of so-called dual-use commodities; that is, commodities like electronic instruments which are not necessarily produced for military purposes but which could have military applications. In this respect, it is important to note that such controls are applied for either or both national security and foreign policy purposes. National security controls are designed to delay the acquisition of technology and restrict products that potential adversaries seek. Foreign policy controls are designed to support our foreign policy objectives such as the enhancement of fundamental human rights.

EXPORT CONTROL ADMINISTRATION IS AN UNINTENDED BARRIER TO TRADE EXPANSION

Expanding the U.S. share of international trade is an important goal. The President clearly affirmed this view in his export policy declaration last September. Export controls also have important purposes. The problem is that some aspects of export control administration have become unintended and unnecessary barriers to expanding the trade we clearly need to help alleviate our current balance of payments problems.

[1] The Government's Role in East-West Trade—Problems and Issues, Feb. 4, 1976.

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Crucial to building and maintaining trade relationships is the need for predictability. Sellers must know with some predictability what they can and cannot sell. Suddenly used, or inadequately explained, export controls are clearly corrosive to these relationships. U.S. exporters can be tagged with a reputation for unreliability in such a situation, and the business, that might otherwise be theirs, may simply go to others.

There are a number of reasons why we believe export control administration has become an unintended barrier to expanding international trade. One of them concerns the growing use of controls to support foreign policy goals as opposed to national security goals.

The use of controls for foreign policy purposes

Controlling exports for foreign policy purposes raises an especially complicated regulatory problem. Last October this committee heard testimony which highlighted the considerable concern U.S. exporters have with the impact of such controls on foreign trade.

Even if one agrees that export controls should support sosme foreign policy goals, their inconsistent and unpredictable application can erode trading relationships which, by their nature, take a considerable time to nourish. How many sales are lost, because a foreign buyer, contemplating what appears to them to be an erratic use of controls, simply writes off a potential U.S. seller in favor of someone else? We found this to be impossible to answer quantitatively. However, exporters have strongly advised us that the adverse impact is significant.

It is important to note that when the United States uses export controls for foreign policy purposes it usually does so alone. The other governments that jointly control exports for mutual security purposes through CoCom are under no obligation to support our foreign policy controls. The use of such controls needs to be preceded by a carefully conceived policy which at the very least addresses the long term impact such controls might have on our international trading position.

In our most recent report, we noted that the Congress is not regularly and systematically informed about how and why foreign policy controls are being used. The Congress does not have an adequate basis for evaluating the merit of such controls; much less the impact they have on our international trade.

The Export Administration Act requires Commerce to prepare a semiannual report to the Congress and the President on the use of controls. However, the discussion on controls for foreign policy purposes in this report is brief and, we believe, inadequate because it does not discuss (1) the specific foreign policy goals that trade controls are supposedly designed to serve nor (2) whether they are serving those goals well or poorly.

We recommended in our recent report that the Congress require that the semiannual report discuss in more detail the uses and reasons for foreign policy controls.

Determining availability of commodities from other countries

International trade is highly competitive. The Export Administration Act recognizes this principle, in relation to national security controls, by requiring the Government to show cause why a commodity should not be licensed for export if a comparable commodity is amply available from other sources. The President also recognized this principle in his September 1978 announcement by requiring a similar test with respect to the use of foreign policy controls. The importance of foreign availability is obvious; not to insist on this consideration can divert sales to other sources.

While the President's statement is clearly important, its effect may very well be nullified if foreign availability analyses and evaluation are diffused and inconsistently interpreted throughout the many agencies involved in export control. We are not suggesting that these analyses and evaluations are easy to make. However, the absence of reasonably clear availability standards and criteria contribute to this problem.

We were unable to determine whether efforts were underway to establish such standards or criteria or, indeed, whether foreign availability is being systematically judged. For example, preparatory to the current CoCom commodity list review, no one appears to have been specifically charged with the responsibility of developing and applying such standards or criteria.

Foreign availability is now just one of many concerns competing for the attention of the Government's technical evaluators when reviewing export license applications or the commodity control list. Its importance is, however, mandated by law, and further, it is of sufficient complexity to require a separate detailed effort by the export control, intelligence, and exporting communities.

If we are to make trading relationships more predictable and less uncertain, we need to change the way we determine foreign availability. Simply stated, the Government needs to put someone in charge who can administer the required analyses and make evaluative judgments.

In our recent report we recommended that the Congress amend the Export Administration Act by requiring that foreign availability be administered as a separate effort under a "foreign availability evaluator."

We further recommended that the Act be amended to state that the President shall consider foreign availability when imposing export controls for foreign policy purposes.

Determining what should be controlled

At the very heart of export control administration is the commodity control list. As noted earlier, the so-called international, or CoCom list, is now being revised as it is every 2–3 years. A new list will become effective late this year.

The control list is not in the literal sense a list of products. Rather it is a list of specifications which may or may not be applicable to a product. The current international list consists of 105 such categories, and the Government unilaterally controls an additional 38 categories. Export control decisions necessarily involve a comparison between a specific product that an exporter wishes to sell and the appropriate specifications on the control list.

For the current CoCom list review, representatives from industry, Defense, State, Commerce, Energy, and the intelligence agencies spent considerable time reviewing the need for and adequacy of controls on existing items. Their effectiveness was limited, however, because specially formed technical review groups were unable to furnish complete analyses and adequate support for their recommendations at the expected time. The inability of higher level review committees to reach agreement further hindered the establishment of a U.S. position for some categories. The regular work of the Government's technical evaluators took priority. For example, list review preparations received a low priority within Defense principally because there was no budget line against which to charge time for the work performed.

This important function needs more priority attention and management direction. We propose that it should be administered as part of the policymaking structure we recommended in our recent report.

Presidential review memorandum on east-west trade: Defense's critical technology analysis

The credibility of the export control program may very well hinge on the question of whether or not a revised list truly reflects the complex relationship between products, technology, and a calculation of their military significance. The list review is the traditional means by which this relationship is defined. Concurrent with the list review, Defense is implementing what has come to be called the "critical technology approach" to export controls. The Government controls both product and technology exports. Defense is trying to systematically define the relationship between the two by specifying technologies which are most critical from the military's perspective, and which therefore presumably ought to be rigorously controlled.

Defense is advertising this effort as "strongly enforcing control on the export of selected critical technologies while simultaneously relaxing many existing product controls." They have further characterized this as a "refocusing of export control regulations" but have noted that there "will always be some number of products which have to be controlled because they have a large intrinsic military value or can be readily reverse-engineered." However, Defense may be running the risk of promising more than it can deliver. The critical technology approach is far from complete. A Defense-led task force report is due in April 1979, and the current analytical effort is not expected to be fully completed before 1980.

Since multilateral export control is a necessary part of the Government's own control system, the critical technologies approach would have to become part of each participating CoCom member's control system. Implementing this approach through CoCom will, however, take time since the current CoCom list review involves no major attempt to clarify the relationship between technology and product control for specific items. Since CoCom list reviews are held once every 2 or 3 years, this whole effort probably cannot be fully implemented internationally for a number of years.

Administering controls through CoCom

Whether the critical technology approach becomes a substitute for, or a supplement to, the current international control system, one fact seems obvious. We will need the continued cooperation of our CoCom partners. The effectiveness of our

national security controls is dependent on parallel controls being applied by other member governments.

These governments, as well as our own, may on behalf of their exporters ask that particular sales be exempt from international control. These exception requests, as they are called, are reviewed by the United States and other CoCom member governments.

While the U.S. Government only rarely recommends that an exception request be denied, it often takes considerable time to give its approval, although these requests have already been approved by the submitting government. The United States lengthy review process is causing discontent on the part of other governments and could ultimately lessen CoCom effectiveness.

There are a number of additional issues which are also complicating relations with our CoCom partners. The United States is the only CoCom member to require reexport licensing. This requirement means that any item or technology subject to U.S. export licensing must be relicensed each time it is further exported. Approximately one-quarter of the CoCom exception requests submitted by other members include equipment or technology subject to U.S. export licensing. These are thus reviewed twice by our Government; once as a reexport licensing case and again as an exception request.

This practice has been viewed as infringing on the CoCom system, implying a distrust of our allies' national control processes, and can result in foreign firms finding or developing substitutes for U.S. components to avoid delays in obtaining approval for their sales.

The Department of State has proposed to change this situation by substituting the exception request review for the reexport licensing review. We support this proposal. A single review would still meet U.S. security concerns while eliminating the duplication in the present system.

Unlike some of his colleagues, the U.S. CoCom delegate does not have authority to independently approve exception requests made routine by clear precedent. All requests must be sent to Washington for review, thus delaying consideration of other governments' exception requests. Therefore, we support a State Department proposal to give our CoCom delegate authority to approve these kinds of routing requests.

While these kinds of proposals would better our participation in CoCom by making it consistent with our allies, export control administration as a whole needs more basic change.

Reorganization of Export Control Administration

A major conclusion of our two recent reports is that export control administration is so complex that the Congress should direct its reform. To this end, we have recommended a reorganization plan for your consideration, and we should like to talk now about how and why this reform should be undertaken.

The goals of the export control program cannot be fully achieved without closely considering the administrative means by which they are attained. Currently, these goals are frustrated by a decisionmaking system in which authority to manage licensing is diffused between too many government agencies. The consequence is, to be sure, lengthy review times for some export license applications. Previous legislative hearings on the Export Administration Act are replete with concerns about processing time. This has, and continues to be, a serious problem for some exporters.

This complex regulatory system makes it difficult for exporters to know how and why the Government makes its export control decisions. This uncertainty hinders business operations and is inconsistent with our trade expansion goals. It is quite possible that many businesses simply shun the idea of exporting because of the uncertainty and frustration this system creates.

It is true that in a limited sense export control seems relatively benign. Most export license applications are approved although some in amended form. In 1978, for example, over 56,000 licenses were approved while only 210 were denied.

In another sense, however, it is rather less than benign. As shown in our October 1978 report, the delays in approving licenses have been an increasing problem. Since exporters have important deadlines they must meet in order to preserve long term international trading relationships, the delays and uncertainty in obtaining export licensing decisions damages their reputation as suppliers and further business can be lost. Thus, the real impact on U.S. exporters is probably greater than the fact of a few denials.

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Our October 1978 report detailed the frustrating experiences some exporters have in trying to get needed information about their applications.

If we are to have an effective export control system which does not function as an unintended trade barrier, we should consider changing the whole and not just a part here or there.

Export Licensing Administration needs to be centralized

Central to the reorganization plan we recommended in our report is a very straight forward idea: one agency should be designated the licensing manager for the executive branch. The Export Administration Act authorizes Commerce to issue export licenses and its Office of Export Administration (OEA) is the appropriate office to have full management responsibility. Export control regulation is, after all, an executive branch function, and it is important to think of it in this way, rather than in terms of individual agency prerogatives.

License applications should be sent directly to various agency technical evaluators by OEA and not, as is the custom now, to various coordinators in the reviewing agencies. This simple, obvious procedure could eliminate much of the delay associated with applications which are referred to other agencies. All the steps which currently intervene between OEA's licensing officers and technical evaluators in other agencies could be eliminated. Regardless of who acutually employs them, technical evaluators should serve as consultants to OEA for export control purposes, and their agencies should be reimbursed by Commerce for the services OEA requests.

The Export Administration Act gives Defense a special role in the licensing process. Our plan does not alter the intent of the Act. Defense would be sent copies of all technical evaluations for certain types of applications for their policy review and possible veto.

Export policy making structure needs to be established

The Government has no effective policy making structure to reconcile the conflicting goals of export promotion and control. For this reason, we believe that export control policy making should be the responsibility of one organization—a multiagency Export Policy Advisory Committee. It is at the policy making level, and not at the licensing level, that each relevant agency should be represented as an agency.

This committee should be given real decisionmaking power in the person of an executive director appointed by the President and responsible to him. Agency members should serve on the committee in order to advise him, but the director should have the authority to make the policy decisions. If a committee member, however, considers a decision unsatisfactory, the member could appeal it to the Export Administration Review Board and to the President. This committee should not review license applications except in the most unusual circumstances. Rather, its goal should be to write policy guidelines of sufficient clarity so that they can be applied to reviews of license applications by OEA's staff.

This policy committee should additionally administer the Government's preparation for periodic CoCom list reviews and continuously administer reviews of the Government's unilateral control list. In short, policy making should be made by an organization specifically responsible for that function.

The current multiagency review committees such as the Advisory Committee on Export Policy (ACEP), and the Economic Defense Advisory Committee (EDAC), would be abolished in conjunction with the above recommendations. As you know, the various committees of the ACEP structure, particularly its Operating Committee, review some license applications. EDAC is the somewhat similarly structured set of committees which reviews CoCom exception requests. Our reorganization plan allows for only one review pattern for both types of cases. The only difference is that while Commerce would make final U.S. licensing decisions, State, as our CoCom negotiator, would make final decisions on other governments' exception requests.

CONCLUSIONS

We have suggested today that the administration of export controls has become an unintended barrier to trade expansion because:

Some policy controls tend to be used in an erratic fashion without adequate consideration of their long term impact on U.S. exporting;

No one is specifically in charge of systematically evaluating foreign availability;

There is uncertainty about what ought to be controlled;

The Government's participation in CoCom is inconsistent with that of our partners thus inviting possible adverse reactions by them; and

The Government's complex licensing system contributes to processing delays and makes it unresponsive to important needs of our exporters, as does the lack of an effective export policy making structure to reconcile the conflicting goals of export promotion and control.

We have recommended that, as far as export controls are concerned, the relationship between the relevant executive branch agencies should be changed. Our recommendations were criticized by various executive branch agencies for one major reason. They believe it is necessary to have an agency position for each license application that is referred to them for review. We believe their concern is unfounded. Our recommendations provide for Commerce to apply policy that these agencies have participated in developing.

Mr. Chairman, this completes my statement. We would be pleased to answer any questions you may have.

The CHAIRMAN. Thank you very much, Mr. Staats. Will you identify the distinguished gentlemen who accompany you?

Mr. STAATS. On my left, Mr. Chairman, is John Milgate, Associate Director of the International Division; on my right, Stewart Tomlinson, Assistant Director of that Division.

We'd all be happy to answer any questions you may have.

The CHAIRMAN. You have some interesting statistics. You say in 1978, for example, 56,000 licenses were approved; only 210 were denied. That would give the impression that the licensing process—and you modified that in your subsequent paragraph—that the licensing process does not interfere with licensed exports significantly.

But the delay, as I understand it in some cases, is so prolonged that the business is lost; isn't that right?

Mr. STAATS. That's right. We have had much testimony from exporters to that effect.

The CHAIRMAN. So in effect the delay is equivalent to a denial, even though approval might come by that time. The business is gone.

Mr. STAATS. It may even be worse than that, Mr. Chairman. It may discourage people from even going to the Government in the first place to get a license and decide just to do business domestically.

The CHAIRMAN. You think that's a significant deterrent?

Mr. STAATS. I think it is. Mr. Milgate and Mr. Tomlinson are free to join me on any of the questions.

Mr. MILGATE. Let me mention this: we have found in our discussions with suppliers in the United States, that the uncertainties that are associated with it are extremely important, that the prospective customers from abroad would be hesitant to come to the United States because of those uncertainties and the unreliability of the United States as a supplier.

By the same token, as Mr. Staats has stated, the difficulty of the exporters to obtain licenses makes it more difficult for them to help out in the exporting area.

The CHAIRMAN. Now, your office recommended last October and again in your report just released that export licensing management responsibility be concentrated in the Department of Commerce. Given the Commerce Department's poor record to date on getting license applications resolved within 90 days, a record your report documents, why do you think that centralizing the authority in the Commerce Department would lead to greater efficiency?

Mr. STAATS. It isn't solely centralizing the authority, although that is important. It's important from the point of view of being able to hold someone responsible. But the system that we're suggesting also has another important meaning in it; that is to cut out the concept that each agency has to take an agency position on every one of these licenses. They will provide an evaluator, in effect, as a service to the Commerce Department. But he would not be in the position of holding it up because of the absence of an internal agency agreement as to what his position should be.

The CHAIRMAN. You think that those are the major reasons why you have these lengthy delays?

Mr. TOMLINSON. It is definitely a problem to have to reconcile the various agencies' positions. They do operate on a rule of unanimity. Therefore, to get approval, they have to have all the agencies approve, and this is quite a problem on each license; whereas, we feel that there should be a policy that could be applied, and the agencies can set forth their requirements at that particular level.

The CHAIRMAN. You don't escape from this entirely, do you? You recommend that the State Department be the final authority in matters affecting, for example, foreign policy, do you not? You would still have Commerce and State necessarily, both to give a pass and to give clearance and because two agencies are involved. In those circumstances you would have at least that amount of delay still.

Mr. TOMLINSON. Of course, there's going to be delays involved. Our position is that there wouldn't have to be as many as there are or take the time that it does.

The CHAIRMAN. Now, if I understand your report correctly, you're saying that no one in the U.S. Government is in charge of determining the foreign availability of goods and technologies subject to export controls, no one in charge. And there's no clear standard for determining how much foreign availability is enough to meet legal provisions of the Export Administration Act.

Who should be in charge, in your view, to best administer that part of the law? And what would be an appropriate standard?

Mr. STAATS. There are two possibilities that we have thought about here. One would be to have an officer located in the Commerce Department. That would be his prime responsibility. And the other would be to place it in the director of the advisory committee, which we have suggested. It could be done in either of those two ways and still centralize and focus responsibility on some individual. Right now it's everybody's business.

The CHAIRMAN. And what would be an appropriate standard?

Mr. TOMLINSON. Well, the standard has to be in regard to comparability, not just similarity. I think at this point in time to play it safe, they're very stringent in regard to whether a particular product or item has the exact same or very similar capability.

This should probably not be as stringent.

The CHAIRMAN. Mr. Staats, in your testimony and your report, you emphasize the importance of foreign availability evaluation. You set forth the idea requiring that this evaluation be linked with an annual controlled list review.

Mr. STAATS. Yes, sir, we do.

The CHAIRMAN. What increased role would you recommend for the technical advisory committee in the review of the controlled list?

Mr. TOMLINSON. I'm sorry, sir?

Mr. MILGATE. Let me address that. Under the proposal that we have, Mr. Chairman, the various joint industry/Government technical advisory committees would in effect become subcommittees of our proposed policy committee. The same would be true for the various technical task groups which were formed to review the commodity control list entries in relation to the ongoing list review. In short, our recommendation in this area would unite all the various policymaking groups in one specifically designated organization.

The CHAIRMAN. Then in your judgment, would annual review and revision of the control list keep it more in accordance with the current state of technology?

Mr. MILGATE. It could well do that, yes, sir.

The CHAIRMAN. How often would it be reviewed?

Mr. MILGATE. At the present time, as you know, it's every 2 to 3 years. I think we would have to give it some tests to see whether it would be necessary to evaluate it on an annual basis. That's something that we do not know at this time.

The CHAIRMAN. Do you think that the current system of two types of export licenses, general licenses and validated licenses is sufficient?

Mr. TOMLINSON. This would be sufficient. The important thing that we're talking about here is the validated license. There is consideration, I believe, to increase the number of commodities or items that could be exported under a general license.

The CHAIRMAN. A qualified general license did you say? That would be a third category, qualified general license; is that right?

Mr. TOMLINSON. No, sir. What I'm saying is that there are some moves afoot to have more items put under a general license rather than a validated license, therefore, avoiding the process that you're talking about. They could just be exported.

The CHAIRMAN. Maybe you're not familiar with what I'm talking about. I'm talking about a proposal that I guess has not surfaced completely to create a third category of license called by some a qualified general license.

The question is whether or not the creation of that would assist in the process of making licensing procedures more efficient.

Mr. MILGATE. Mr. Chairman, let me add this comment in that regard. It may raise the question by prospective exporters as to which of the three categories they fall under, and so there could be that additional element of uncertainty if you have three.

The CHAIRMAN. So it would complicate it even further.

Mr. MILGATE. That's very possible, yes, sir.

The CHAIRMAN. Do license applicants now have sufficient access to the technical experts if they disagree with the Commerce Department's technical evaluation of proposed exports, and if not, how should that contact be improved?

Mr. TOMLINSON. No, sir. They say that they do not.

The CHAIRMAN. They say that they do not?

Mr. TOMLINSON. No. In our October 1978 report, we discussed this matter, and we recommend that this be revised so that the exporters have a better opportunity to confront those technicians who are taking exception to their exports. It's specifically discussed in our October report.

The CHAIRMAN. Senator Garn?

Senator GARN. Mr. Chairman, we're running enough behind schedule that I will submit my questions to Mr. Staats, and if he would respond in writing, then we can pick up at that time.

[The questions and answers follow:]

QUESTIONS SUBMITTED TO THE COMPTROLLER GENERAL BY SENATOR JAKE GARN

1. *Question.* On page 10 of your written statement you indicated that Defense Department intentions to shift its export control emphasis from products to technology "may be running the risk of promising more than it can deliver."

Gary C. Hufbauer of the Treasury gave his own view last May before the International Finance Subcommittee that:

"Restrictions on the outflow of technology would not be in the national interest. The administrative aspects of a technology licensing system are truly mindboggling. A Technology Review Board would be a boon to Washington attorneys and bureaucrats, but very costly to firms with technology to sell." (May 16, 1978.)

Do you differ with this assessment?

Can you envision any practical and beneficial form of export controls of technology?

Answer. The Government currently controls the export of both selected products and technology having national security implications. Such technology not embodied in products is controlled by technical data licenses. Regulations define technical data (technology) as follows:

"Information of any kind that can be used, or adapted for use, in the design, production, manufacture, utilization, or reconstruction of articles or materials. The data may be in tangible form, such as a blueprint, or intangible form, such as a technical service."

While most items on the Government's commodity control list are multilaterally controlled to all destinations, validated export licenses are required for technical data only to Communist countries.

Relatively few applications are made to export technology in the form of technical data. For example, in 1977, 299 applications were submitted and only 3 were denied. The total overall export applications approved in 1977 totaled 50,737, only 348 of which were denied.

Some products might also be considered technology if they contribute significantly to a manufacturing process.

Computers are the usually given example of this sort of technology. They are, of course, the product of computer technology as well as technology themselves.

Other products might also be considered technology if they can be readily reverse-engineered in order to extract manufacturing knowhow.

Technology in these three forms is currently controlled provided it meets other tests of national security significance.

Mr. Hufbauer appears to be referring to a situation where the Government might seek to control forms of international technology transfer not currently covered by law and regulation. The Department of Defense's attempts to specify technology which is "critical" to military security does not suggest that they are advocating expanding the Government's regulatory role to include any form of technology transfer.

Whether current controls over technology are beneficial depends on whether one believes export controls are significantly delaying the acquisition of militarily significant technology by our potential adversaries. The Government believes they have this beneficial effect, and we have no basis upon which to question this view.

2. *Question.* The GAO has already released an evaluation of the legality, or lack thereof, of the Administration using its procurement authority to enforce compliance with its wage-price guidelines. Could you state what, in your view, would be the legality of the Administration using its powers to influence exports in order to enforce compliance with President Carter's inflation program?

Are you aware of any such policies of the Administration either by the White House, or any of the Executive Departments of agencies?

Answer. There are only three statutory criteria which justify the denial of an export license: considerations of national security, foreign policy, or the fact that the commodity to be exported is in short supply in the United States (50 U.S.C. app. 2402, 3 as amended). Under the Export Administration Amendments of 1977 (Pub. L. No. 95-52, June 22, 1977), applicants must be informed in writing of the specific statutory basis for the denial of a license. In explaining the reasons for this requirement, the House Committee on International Relations stated:

"This provision will end the Commerce Department's present unsatisfactory practice of informing applicants that a license has been denied under the Export Administration Act is not a criterion for denying license applications." (H. Rept. No. 95-190, April 6, 1977).

There is a similar statement in Senate Report No. 95-104, April 26, 1977.

Thus, denial of a license because an exporter refused to comply with domestic wage or price guidelines established to control inflation would not be legally justified unless such failure of compliance also can be shown to have a direct adverse impact on our foreign relations or to threaten national security.

We know of no specific policies at present to use export controls in this manner. However, we note that Executive Order 12002, July 7, 1977, authorizes the Secretary of Commerce to refer export license matters to the Export Administration Review Board, and the Board to consider "the domestic economy" in making recommendations on export license policies.

The CHAIRMAN. Very good.

Senator Stevenson?

Senator STEVENSON. Thank you, Mr. Chairman.

Gentlemen, your suggestions are very helpful, and they're not unlike the suggestions that we've received from others, in particular the suggestion that responsibility for the establishment of export control policy be placed in an interagency committee. I gather that that suggestion is not unlike the practice which was pursued informally in the sixties. But I think then that the implementation of the policy was, as you suggest in the Department of Commerce—but we have heard and have some reason to believe that notwithstanding the fact your proposal is exceptionally clean, it might not work at the present time.

I say that because of complaints about a new operational role for the National Security Council. It surfaces operationally in many contexts nowadays, one of which is in the administration of export control policy. We have heard that the NSC bypasses cabinet secretaries. It dictates specific export control decisions to bureaucrats. Sometimes NSC's decisions are in conflict with the announced policy of the administration.

And, of course, all of this is done without accountability to the Congress and the public. Have you in your studies discovered the tracks of the National Security Council?

Mr. TOMLINSON. That's quite difficult to discover, the tracks, I'm sorry.

Senator STEVENSON. You mean they're all over the place. [Laughter.]

Mr. TOMLINSON. They're not always known to us in our review. Certainly, there is an influence.

Senator STEVENSON. Well, how do you feel about the National Security Council exercising an operational role in this process? And if you're not enthusiastic about it, what can we do about it?

Mr. STAATS. Well, I think the statute can take care of that. We have some concern also, Senator Stevenson, about the idea of creating still another point of reference in the operating decisions on export licensing. We've got too much machinery already.

So we come back basically to another point, that you hold the Secretary of Commerce responsible and provide some machinery for the agencies—to have agency representation in the policy work. Then if the secretary feels or if any other agency represented on that committee feels that they need to go to the President, then they are always obviously free to do that.

To inject the NSC or its staff into an operational role would be a step backward, not a step forward.

Senator STEVENSON. I am pleased to hear you say that, but as a practical matter, is it possible by such means as you have suggested to exclude it? What if the statute did establish the procedure that you're suggesting and afterward the NSC calls the administrator, whatever the title, in the Department of Commerce and directs that a computer, for example, go ahead to the People's Republic of China but not the U.S.S.R. Nothing would be changed by your proposal, would it?

Mr. STAATS. I assume that the White House and the Commerce Department would follow what could be a clearly stated intent of the law. That's the way that the system works.

You can't do anything about somebody calling somebody on the phone, but you can do something about placing the responsibility for that decision and do it in a way where it is clearly visible to the Congress and to the public and to the exporters who is making that decision.

Senator STEVENSON. Has it ever been the intent of the executive branch or the Congress to make the National Security Council an operational agency? Is it not the intent still to make it the collection point for information and for opinions from the departments for the benefit of the President?

Mr. STAATS. I don't believe the law is written as clearly as we would like to see it written in order to fix that responsibility.

Senator STEVENSON. Have you in your studies been able to quantify the economic loss occasioned by export controls for national security or foreign policy purposes?

Mr. STAATS. I don't know how you would quantify it, because there is so much evidence, that we're losing business simply because of the delays or that the foreign buyer doesn't take the time and trouble to come to the United States because he knows the procedure is cumbersome; so he goes somewhere else and he never inquires as to U.S. law. I've known some cases of that.

Senator STEVENSON. You sound skeptical about the efforts of the Defense Department to establish a list of critical technologies, the critical technology concept. If so, why?

Mr. STAATS. It's been very slow, coming about. And they're already behind schedule. I guess we're basing our feeling on that kind of evidence.

Senator STEVENSON. On the record so far.

Mr. STAATS. Yes.

Senator STEVENSON. You're not optimistic about their success?

Mr. TOMLINSON. Well, one of the problems is that I think they're finding it quite difficult to separate products from technology, and once again as more people get involved and feel that something should be on the list because the technology is available, the list

gets longer. And therefore, although they set out to have something which might be a shorter list of controls.

It might end up being just as long as it is today, and we're right back where we started.

Senator STEVENSON. Thank you.

The CHAIRMAN. Senator Heinz.

Senator HEINZ. Yes, thank you, Mr. Chairman.

Mr. Staats, in your report you note that there's a great difficulty in evaluating foreign availability of many controlled items because there simply is not sufficient intelligence available on whether Communist countries and some non-Communist ones as well, I understand, actually produce those items. Is that a problem because of misguided priorities in our intelligence community, or is it simply that they don't have the staff and capabilities to gather that kind of intelligence; that is to say, a question of mandate?

Mr. TOMLINSON. Of course, the gathering of such information is a lower priority for the intelligence agencies. I think this contributes to the problem.

I think that they try to designate more people to be responsible for putting this type of information together. But, as I said in the first place, it is a lower priority. I think we can appreciate why that can happen.

There have been some problems however in using the information that is available to make determinations. And this we talk about in our report. Some of it is a little bit lost among the many people involved.

Senator HEINZ. And your principal recommendation for making better use of what we do have is the streamlined structure that you proposed to us?

Mr. TOMLINSON. Yes, sir, and to put somebody in charge.

Senator HEINZ. Now, do you recommend—or would you recommend that there be more people and/or higher priority given within our intelligence-gathering network to this kind of commercial intelligence?

Or are you making no recommendation on that?

Mr. TOMLINSON. We aren't making a recommendation.

I know, for myself, I would not have enough knowledge to know what the various priorities are that they have to consider.

Senator HEINZ. Would you think it would make sense to suggest that this should be a subject of further study perhaps by the intelligence committee which Senator Garn serves on?

Mr. TOMLINSON. I think so. I think maybe there's a possibility that it should have more priority. I think that is a possibility. I cannot say for sure.

Mr. STAATS. With respect to your question, too, it seems to us that if this were funded correctly to whoever is given this responsibility, it would be of a little different priority than if the agency, in effect, would have to take it out of their own hide.

Senator HEINZ. One of the concerns I think many of us have is that the Department of Commerce isn't listened to even at the Secretarial level as carefully as it ought to be.

Some of us have proposed, therefore, a strengthening of the Commerce Department and a broadening of its responsibilities by including in it certain functions performed by the Treasury Depart-

ment regarding the antidumping statutes that the special trade representative functions be incorporated in the Department so that we create a Department of International Trade and Investments.

Senator Ribicoff, Senator Roth, and myself have introduced such legislation.

Would this higher visibility and more powerful and more relevant Commerce Department affect the ability of the new procedures that you proposed to us positively, negatively, or neither way?

Mr. STAATS. It seems to me it addresses a somewhat broader question than we're dealing with here in this specific statute. I don't see it would cause any harm; I think it would be quite consistent with what we're saying, that we ought to dramatize, highlight, and emphasize any way we can the importance of exports to our economy.

One of the avenues that we have been pursuing is this whole question of productivity in the American economy and the role the Federal Government plays in respect to assisting, in any way possible, the efforts of the private sector to enhance productivity.

As you well know, our productivity growth in this country has been on a steady decline now for 10 years; and now it's the slowest growth rate of any industrialized country. We have made reports on this; we think there are many things the Federal Government can do. But it further underpins all of our efforts to increase our exports, because if we're not competitive with our major competitors, then this decline is going to continue, and it's just going to make it that much more difficult for us to export.

Senator HEINZ. Well, in the Advisory Committee on Export Policy, which we have, which you intend to replace with the new multiagency group—namely, the Export Administration Review Board, what administrative level would the new members of that Board be?

Would they be secretaries, or a lower level?

Mr. TOMLINSON. The Export Review Board is the Cabinet level. The committee that we're recommending would be below the Cabinet level.

Mr. STAATS. Probably at the Assistant Secretary level?

Mr. TOMLINSON. Yes, sir.

Senator HEINZ. And that's the committee which would have the executive director and would have the power to make policy decisions unless somebody took exception?

Mr. STAATS. That's correct.

Senator HEINZ. I think that's an excellent suggestion, but I'd be curious to know why you decided that it should be at a lower level, at the Assistant Secretary level, which would be not one but two levels lower than the Secretary?

Mr. TOMLINSON. Well, we do not say specifically in our report—we do say appropriate level. This is suggested, because this is at the primary level, where the operation is now involved; and the people who are, as I said, mostly involved with it certainly should be able to represent their agency in regard to the forming of a policy.

Senator HEINZ. All right.

Thank you very much.

The CHAIRMAN. I just have one more question, and I apologize, because I think Senator Garn is right—we do have another witness of whom we want to ask many questions, but I think it is important for the record that we try to get this in the record.

Would the Technical Advisory Committee, composed of industry representatives, be one of the best sources of foreign-availability information? After all, it's vital to their businesses to know what the competition can do. I don't mean that to be the final source, but it should be a very helpful source—maybe much more helpful than a Government source.

So shouldn't the Commerce Department make better use of these committees?

Mr. STAATS. I think we would fully support that, Mr. Chairman.

The extent to which they are now actually receiving this information I personally do now know.

Perhaps Mr. Tomlinson or Mr. Milgate——

Mr. TOMLINSON. We talk about this in our report—that is, various information has come in from these particular groups, which did not in the end result in changed positions that we presented to CoCom. Right or wrong, there were quite a number of these cases.

We have talked to people in the industry who feel that they're not getting as much responsiveness to the input that they are making to the Government; and in our recommendations, we do recognize the importance of these people, and we say that this committee structure, as such, should be advising within the structure of the Policy Committee. This should be continued and it is important.

Mr. MILGATE. Mr. Chairman, let me add one point.

I think the importance of it is to have a focal point to bring the various intelligence together relative to availability. This is one of the problems that we've perceived and have seen in our review effort.

The CHAIRMAN. Mr. Staats and gentlemen, thank you very much. We very much appreciate your statement and your responsiveness to the questions. I think you've made a very good record.

Mr. STAATS. Thank you.

[The following was received for the record:]

QUESTIONS SUBMITTED TO THE COMPTROLLER GENERAL BY SENATOR JOHN HEINZ

1. *Question.* You note in your testimony that the Defense Department may be promising more than it can deliver, when it advertises its intention to control critical technologies while "simultaneously relaxing many existing products controls."

In practice, is there really a significant difference between products and the technologies that go into them?

It would seem to me that this distinction is more apparent than actual.

Answer. The reference in our prepared remarks to the Department of Defense's "critical technologies" approach was drawn from a discussion in our March 1, 1979 report, "Export Controls: Need to Clarify Policy and Simplify Administration" (ID-79-16, pp. 60-63). We would like to draw your attention the following paragraph on p. 63 of that report:

"A Defense official has characterized [the critical technologies approach] as a "refocusing [of] U.S. export control regulations," but also notes that there "*will always be some number of products which have to be controlled because they have a large intrinsic military value*, or can be readily reverse-engineered." If one agrees with the proposition that products controlled precisely because the United States and other participating governments determined that they have large intrinsic military value, than it is difficult to see how Defense's critical technology exercise

constitutes a "refocusing" in the sense of shifting the emphasis from product control to technology control. (Italics added.)

The distinction between manufacturing know-how (technology) and the products of technology while conceptually distinct is, we believe, not clear in relation to export control administration.

Briefly stated, we are not sure that relaxing many existing product controls is an inevitable consequence of the critical technologies approach. This may of course, occur as a result of the current and future list reviews, but Defense seems to have drawn a conclusion before establishing the relevance of the military value of currently controlled products as amended by the list review. To assert, as Defense does, the importance of intrinsic military value of products is to assert the importance of the control list. If this is true, then relaxing many existing products controls cannot logically follow. The concept of intrinsic military value is either important or it isn't. Defense cannot have it both ways without contradicting itself.

A relevant question certainly is whether or not the control list accurately reflects products of intrinsic military value. Presumably, the U.S. Government's 1978 proposals to revise the current CoCom control list were designed to answer that question.

2. *Question.* In your testimony, you make an excellent suggestion that the Export Administration Act be amended to compel the President to explain the specific foreign policy goals sought through the use of trade controls to achieve those goals.

Don't you think it would be useful to direct the President to quantify the cost of achieving those goals so that the Congress would have additional criteria upon which to make a judgment?

Answer. The cost of achieving foreign policy goals through the use of trade controls is the direct cost to U.S. exporters in lost sales, related employment etc., and more generally, the cost to our balance of trade.

Only one kind of cost is specifically quantifiable, namely, the value of exports lost because an export application is denied. This known cost of export control is, however, not a substantial amount.

There are, however, unknown but suspected costs, which are quite probably much more substantial. These include:

Instances where business is never placed with a U.S. exporter because of the potential buyer's perception of U.S. foreign policy controls;

Instances where future business is lost to non-U.S. exporters because a buyer's order was cancelled when the seller's export license application was denied, and/or;

Instances where future business is lost to non-U.S. exporters because a buyer's order was delayed as a result of delay in processing the seller's export license application.

These sorts of unknown costs refer to the subjective relationship between buyer and seller. This relationship is defined in terms of dependability. Export controls can, we believe, unintentionally erode reputations for reliability, but the extent of the erosion cannot be quantified.

The CHAIRMAN. Our next witness is the distinguished Secretary of Commerce, Juanita Kreps—Secretary Kreps.

Mrs. Kreps, we're happy to have you.

STATEMENT OF JUANITA M. KREPS, SECRETARY OF COMMERCE, ACCOMPANIED BY C. L. HASLAM, GENERAL COUNSEL; AND STANLEY J. MARCUSS, SENIOR DEPUTY ASSISTANT SECRETARY FOR INDUSTRY AND TRADE, DEPARTMENT OF COMMERCE

The CHAIRMAN. You have a very fine and substantial statement, also. If you'd like to abbreviate it, we'd appreciate it.

The entire statement will be printed in full in the record.

We'd also appreciate your identifying your distinguished colleagues whom you have with you. One of them is very familiar to this committee. He did a marvelous job for us for a number of years, and we miss him very much.

Secretary KREPS. Mr. Chairman, to my left is C. L. Haslam, General Counsel of the Department.

And you know Mr. Marcuss, whose office administers the Export Administration Act.

I may not be able to abbreviate very much, because there are a number of points that I would like to emphasize.

I am, first of all, pleased to be here. These hearings are addressing questions of major importance having to do with the promotion and the control of U.S. exports.

We should stress, of course, that the Nation has a vital interest in increasing exports. The evidence is everywhere—the record trade deficit, the dollar under constant pressure, and increasing competition from abroad.

It is beyond question that we must do all we can to promote exports. We have, however, at the same time, a vital interest in controlling exports that might impair the national security or our foreign policy.

The issues that you have identified illustrate the inescapable conflict inherent in these two sets of interests.

First, on the question of the proper balance between export promotion and export control, there is a wide diversity of views. There are those who argue that export controls are too restrictive, that they strangle trade, exclude the United States from important markets overseas, and depress our export effort by inflicting arbitrary delays and denials.

Others maintain, with equal vehemence, that export controls are too lax, and as a result the United States is giving away high technology and assisting the military buildup of adversaries.

Neither of these extreme views is valid, but perspectives are colored by one's perceptions of what export controls are supposed to achieve and the degree to which controls conflict with other important goals.

Unfortunately, like the famous Swiss army knife, export controls are often looked upon as a tool for everything. They are called upon, for example, to restrict the flow of militarily significant goods and technologies to potential adversaries, even where the items themselves have no direct military application; to generate caution in cases where civilian goods could have military application, but where the military significance is not at all clear; to guard against unauthorized reexport of restricted items, from acceptable to unacceptable recipients; to limit U.S. exports to serve foreign policy interests; to exert pressure on nations whose human rights practices are contrary to U.S. policy; to engender the cooperation of our allies in restricting the export of militarily significant goods; and to guard against the excessive export of items in short supply domestically.

All of these objectives require that exports be restricted, sometimes quite stringently.

At the same time, the export control system is called upon to minimize interference with our export potential by keeping all the export restrictions to a minimum; to remove controls where similar items are available from other sources; and to process export applications with dispatch.

Now, it is clear that these goals are not always compatible. At times, indeed, they are mutually exclusive; and much effort and debate goes into trying to reconcile them.

These debates are often long and difficult. They arise from genuine differences of opinion among responsible individuals striving to decide what is in the best interests of the Nation.

Of the issues you have identified, Mr. Chairman, perhaps most central is how to strike the proper balance between the need to act with dispatch and predictability and the need to understand fully the national security or foreign policy consequences before we act.

The reconciliation of these issues does not lend itself to simplistic solutions.

One of the most common criticisms of the present system is that it sometimes takes too long to reach a decision. It is true that some cases do take longer to resolve than we would like, but this happens less frequently than some assume.

In 1977, 73 percent of all applications were processed in 10 days or less, and 96.7 percent were processed in 90 days or less. The 3.3 percent of the applications which took more than 90 days caused the furor.

On checking the latest data, I find that there has not been very much change in the proportion of overdue applications.

In December 1977, there were 495 overdue applications—meaning those exceeding 90 days. In June 1978, we had 603 such cases. In February 1979, 585 applications.

Meanwhile, of course, the workload increased dramatically. During 1978, we had a total of 65,000 export license applications, up from 60,000 the year before.

During the first 6 weeks of this year, applications were being filed at an annual rate of 77,000, up some 13 percent from last year.

Understandably, those whose applications take a long time to process are displeased. We are examining internal procedures, and working with the other executive agencies, to minimize this problem. But I think it's useful to put the problem into perspective.

The fact is that only a very small percentage of the more than 70,000 cases that we receive annually are delayed beyond the reasonable 90-day period.

These are commonly cases which involved major issues of national security and/or foreign policy, or very complex technical questions.

Our export license applications are becoming increasingly complex, as the shift to an increasing volume of high technology exports continues.

For all such cases, extended processing time is inescapable, if we are to do our job properly.

We simply cannot allow our national security to be jeopardized by hasty action. On the other hand, rather than issue a denial when a license application raises difficulties, we are trying to make every effort to find a way to approve it. That, too, takes time, but because of the importance of exports to our economy, and my responsibility for carrying out the President's national export policy, we have chosen to risk the delays rather than to issue hasty denials.

We are doing what we can to rationalize and streamline the procedures, but this can do little to forge consensus. Where a strong substantive disagreement exists, whether it is a matter of

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technical assessment or of policy goals, protracted discussion and debate are inevitable.

Nevertheless improved procedures can help to remove nonsubstantive causes of delay.

I should like to indicate some of the improvements that we are working on.

One, we are working to secure delegations of authority from other agencies to empower Commerce to decide certain classes of cases on the basis of precedent, without the need to defer them to interagency review.

Two, we are trying to expand the existing so-called "bulk licensing" procedures to include Communist destinations, which would allow certain types of exports to be made in quantity without the need for individual case reviews.

Three, we are studying "front-door licensing," whereby we would screen all incoming licensing applications and process immediately those to the Free World destinations.

Four, we are instituting a system of administrative deadlines for case review, specifying the time limits within which reviewing agencies would be required to submit their views to Commerce.

I am pleased to report that our efforts to date have yielded significant results. Most dramatic is increased productivity. In 1978 we disposed of 254 applications per working day. In the last 4 months of 1978, we disposed of 289 applications, a productivity increase of about 13 percent.

This has been done with virtually no increase in personnel. Our new computerized license accounting and retrieval system, which should become operational this summer, should yield even greater improvements.

But I would stress that numbers do not tell the whole story. I am pleased with the quality of decisionmaking which is demanded and produced by difficult export licensing matters. We are dedicated to giving the most rigorous analysis of issues and insist on reasoned decisions backed by good judgment, and not more statistics about productivity or delays. This is our best guarantee that the Nation's conflicting interests are well-served.

Turning now to the other issues which you have raised. Mr. Chairman, among the most difficult is the role that export controls should play in promoting human rights abroad. The administration is committed to backing up our human rights goals with action. To that end, we will in some instances seek to bring pressure on certain countries by denying them selected goods and technologies.

But in each instance, we attempt to assess the degree to which we can realistically achieve our policy objectives. Sometimes our analysis concludes that we can have an impact; at other times it concludes otherwise. In all instances, we insist on assessing the situation carefully. We know that the indiscriminate use of export controls to promote human rights abroad, or other foreign policy purposes, can have an adverse effect on the U.S. reliability as a supplier and on our own long-term balance of trade. We insist that those consequences be taken into account before taking action.

Another issue which you identified, Mr. Chairman, is the question of whether export controls should be applied to the sale of petroleum exploration and production equipment and technology.

President Carter has said that energy is a worldwide problem and that our technology is available to share with the rest of the world. In general, we believe that it is to our advantage for all countries to develop their petroleum resources to the maximum extent possible.

Special controls have been imposed on the export of oil exploration and production equipment and technology to the Soviet Union. These controls give the U.S. Government a chance to review the wisdom of these exports on a case-by-case basis. They were imposed, as you know, last summer, at a time of serious strain in our relations with the Soviet Union, arising in part from Soviet human rights abuses.

Nonetheless, all license applications under these controls have been approved.

Another issue is that of our policy toward the U.S.S.R. and the People's Republic of China. Should we permit exports to one which are denied to the other? Present U.S. policy is to maintain a balance that is in our national interest. This means that for both the Soviet Union and China, we will examine every proposed export to assure ourselves that its proposed use is peaceful, that the risks of diversion to military uses are small, and that the consequences of such diversion, if such should occur, are acceptable.

This does not necessarily mean that what we approve for the Soviet Union will also be approved for the People's Republic of China or vice versa. Each decision will depend on the particular circumstances.

Then there is the difficult question of foreign availability. In his national export policy statement of last September, President Carter recognized that the imposition of export controls can have significant adverse economic consequences for the United States. Therefore, he directed that adverse consequences and foreign availability be considered in making foreign policy export control decisions. The President recognizes that where adverse export consequences are severe or where goods are freely available from foreign sources, there may be strong arguments against denying their export from the United States.

Making accurate assessments of foreign availability is far from easy, and it is extremely difficult to determine when foreign availability should outweigh other concerns. There is simply no way to be categorically about these issues, and we have to make the best judgment we can.

Another important issue is whether our national security export controls adequately protect the transfer of so-called "critical technologies." I would emphasize that for many years our export controls have been designed to protect advanced U.S. technologies with important military applications in which the United States enjoys a technological lead.

Indeed, when a license application takes a long time to process, the fundamental issue is frequently the advisability of exporting the technology in question. So I want to emphasize that the idea of controlling critical technologies is in no way a new idea. It has been the policy of the U.S. Government for over two decades.

For nearly 3 years now, the Defense Department has been working to identify with more precision the specific technologies that might be defined as critical, together with the products that could contribute significantly to the transfer of these technologies, and would, therefore, also require controls. The hope is that if we can be more precise about what is critical, and thereafter decontrol items which do not fit into that category.

However, we should be cautious about expecting this effort to lead to dramatic changes until the results of the Defense effort are more nearly complete.

A question frequently raised in connection with the debate over the proper scope of export controls is whether our CoCom partners exercise the same degree of control over exports as do we. We are reasonably confident that they do so in the national security area.

Differences do occur at times, usually arising from questions of interpretation and definition of controlled items. When such differences arise, we do our best to resolve them, and, by and large, we have been successful.

Other differences can arise over the proper scope of export controls in general. While the United States controls exports for both national security and foreign policy purposes, our allies generally limit their controls to national security matters, and even there, their controls are at times not as extensive as ours.

The United States controls certain items unilaterally. The commodity control list contains 38 such items. These are mostly high-technology items that are not available abroad in comparable quality and quantity.

I recently sent to the Congress a special report on the Export Administration Amendments of 1977. That report describes each of these entries and the reason for retaining them.

The United States also imposes controls on re-exports of U.S. goods. It imposes controls on the use of U.S. components in foreign products that will be exported. It imposes controls on exports and re-exports from other countries of U.S. technical data and the products of that data.

Our allies do not impose such controls. They rely mainly on the initial evaluation of the proposed exports to guard against misuse or diversion. Some of our allies have only limited authority to control technology. They have, in general, not followed our lead in imposing export controls for foreign policy purposes.

Some of our closest allies, for example, have made substantial sales to Cuba for many years, while the United States has maintained an embargo.

Nor have they supported our embargoes for human rights purposes on exports to Uganda or to the military and police of South Africa. Instead they have concluded sales which we have forgone.

In general, our allies do not use export controls for foreign policy purposes. On the other hand, CoCom is a voluntary organization, not formed by a treaty, and its bonds are commensurately less binding. Its survival and effectiveness, therefore, depend upon willing cooperation among its members. If we wish it to remain effective, in the main, we must accept a degree of difference.

Turning now to our antiboycott program, difficult as it may be to balance deeply the conflicting interests, we have within limits,

been able to do so. The antiboycott law, enacted 2 years ago, calls upon us to give substance to the careful balance struck in that law and to develop regulations to fulfill its antiboycott goals, while minimizing the impact on U.S. exports.

I believe that we have been fairly successful. In the year since the regulations became effective, U.S. exports to the boycotting countries of the Middle East have risen more than 16 percent. To Saudi Arabia, they have grown by 22 percent; to Kuwait, 36 percent. Clearly, the impact on our trade with these countries has not been the disaster which was predicted.

Moreover, the major Arab countries have made significant changes in their boycott requirements. Although a few still insist on explicit agreements to comply with the boycott, negative certificates of origin are, by and large, a thing of the past. Boycott questionnaires are required less and less often, and U.S. companies repeatedly tell us that, with the backing of the U.S. law, they are often able to resist the boycott demands and still secure business.

On the other hand, certain business transactions have undoubtedly failed where U.S. companies have been unable to comply with boycott demands. By and large, I am satisfied that the antiboycott program is accomplishing its intended goal, with the minimum possible impact on U.S. trade.

The administration will shortly submit proposed legislation to the Congress to extend the Export Administration Act. We believe that our legislative recommendations will complement the administrative improvements to the licensing systems that are currently being developed. The result will be an improved, streamlined licensing system, with fewer delays and more consistency of treatment.

Mr. Chairman, one final note: The Export Administration Act embodies important national concerns. Our responsibility in administering that statute requires us to take all those concerns into account. However, the balance which is struck when national interests conflict depends in part on the environment in which these conflicts arise. Our physical security and foreign policy interests are, of course, paramount. But, I would emphasize that economic performance and political and military power are ultimately inseparable.

In today's world, our economic vitality is increasingly dependent on our ability to export. Today's environment requires that we take seriously the erosion of our power and influence that can come from a failure to meet the export challenge.

We take that challenge seriously and are determined to administer export controls accordingly.

Mr. Chairman, I shall be glad to respond, with my colleagues, to your questions.

[The complete statement of Secretary Kreps and an additional letter follows:]

STATEMENT OF JUANITA M. KREPS, SECRETARY OF COMMERCE

I am pleased to here today, Mr. Chairman, because these hearings address questions of major importance pertaining to the proper balance between the promotion and the control of U.S. exports.

The United States has a vital interest in increasing exports. There is no better evidence of why that is a vital national interest than the record trade deficit, a

dollar under pressure, and increasing competition abroad. It is beyond question that improving our export performance is a high national priority.

At the same time, the United States has a vital interest in controlling exports which might damage the national security or impair U.S. foreign policy. The issues which you have identified illustrate the conflicts which those interests can generate. I shall address some of them in the course of my statement.

The question of the proper balance between export promotion and export control is one upon which there is and probably will always be a wide diversity of opinion.

Some maintain that export controls are too restrictive, that they strangle U.S. trade, that the exclude the U.S. from important markets overseas, and that they depress our export effort and inflict arbitrary delays and denials on U.S. exporters.

Others maintain, with equal vehemence, that U.S. export controls are too lax and that, as a result, the United States is giving away high technology and assisting the military buildup of potential adversaries.

Neither of these extremes is valid, but perspectives are colored by one's view of what export controls are supposed to achieve and one's view of the degree to which they conflict with other goals. Unfortunately, like the famous Swiss army knife, export controls are often looked upon as a tool for everything.

The export control system is variously called upon:

To restrict the flow of militarily significant goods and technologies to potential adversaries even where the items themselves have no direct military application;

To generate caution in cases where civilian goods could have military application but where the military significance is unclear;

To guard against unauthorized re-exports of restricted items from acceptable to unacceptable recipients;

To limit U.S. exports where that would serve U.S. foreign policy interests;

To exert pressure on nations whose human rights practices, or other activities are contrary to U.S. policy;

To engender the cooperation of our allies in restricting militarily significant exports; and

To guard against the excessive export of items in short supply in the United States.

All these objectives require that exports be restricted, sometimes fairly stringently.

At the same time, the export control system is called upon to minimize interference with our export potential:

By keeping all export restrictions to a minimum;

By maximizing certainty in an uncertain world;

By removing controls where similar items are available from non-U.S. sources; and

By processing export applications with dispatch so that U.S. exporters are not hampered by delay.

I need hardly point our that these goals are not always compatible. At times, they are mutually exclusive, and much effort and debate goes into trying to reconcile them. These debates are often long and difficult, but they are legitimate because they arise from genuine differences of opinion among responsible individuals who strive to decide what is in the best interests of the nation.

Of the issues you have identified, Mr. Chairman, perhaps the most central is how to strike the proper balance between the need to act with dispatch and predictability and the need to understand fully the national security or foreign policy consequences of our actions before we act. The reconciliation of those needs simply does not lend itself to categorical solutions.

One of the most common criticisms of the present system is that it sometimes takes too long to reach a decision.

It is true that some cases do take longer to resolve that we would like, but this happens far less frequently than some assume. A study conducted in January of 1978 by the office of Export Administration showed that 73 percent of all cases were processed in 10 days or less, while 96.7 percent were processed in 90 days or less. That leaves only 3.3 percent that took more than 90 days.

It is true that the number of cases taking more than 90 days to resolve has gone up over the last twelve months. By January 31 of this year, 602 applications had been pending for more than 90 days compared to 298 the year before.

But the workload has also increased dramatically. During 1978 we received a total of 65,000 export license applications. This was up from 60,000 the year before. Moreover, during the first six weeks of this year, export license applications were filed at an annual rate of 77,000, up more than 13 percent from last year.

Understandably, those whose applications take a long time to process are displeased, and as I will discuss later, we are examining our internal procedures and working with the other executive agencies with which we consult to minimize the problem. But I think it is useful to put the problem into perspective. The so-called "horror stories" we have all heard about the case processing system apply to only a very small percentage of the more than 70,000 cases that we receive in a year.

Furthermore, they commonly apply to cases which involve major issues of national security or foreign policy or involve particularly complex technical questions, and our export license applications are becoming increasingly complex as the shift to an increasing volume of high technology exports continues.

For all such cases, extended processing times are often inescapable if we are to do our job properly. We simply cannot allow our national security to be jeopardized by hasty action. On the other hand, rather than issue a denial when a license application raises difficulties, we make every effort to find a way to approve it. That, too, take time, but because of the importance of exports to our economy and because of my responsibility for carrying out the President's National Export Policy, we have chose to bear the accusations of delay rather than issue hasty denials.

We are doing everthing we possibly can to rationalize and streamline procedures. But procedures can do only so much to forge consensus, and where strong substantive disagreement exists, whether it be a matter of technical assessment or of policy goals, protracted discussion and debate are inevitable.

Still, procedures can do a good deal to remove nonsubstantive causes of delay. Some of the improvements that we are working on are:

One, securing more delegations of authority from other agencies to empower commerce to decide certain classes of case on the basis of precedent without the need to refer them for interagency review;

Two, expanding existing so-called "bulk licensing" procedures to include communist destinations, thereby allowing certain types of exports to be made in quantity to certain types of consignees in communist countries without the need for individual case review;

Three, "front-door licensing" whereby we would screen all incoming licensing applications and immediately process routine ones to free world destinations; and

Four, instituting a system of administrative deadlines for case review, specifying time limits within which reviewing agencies would be required to submit their views to commerce.

I am happy to report that our efforts to date have yielded some significant results. Most dramatic is the increase in productivity. For 1978 as a whole, we disposed of 254 applications per working day. But for the last four months of the year, we disposed of 289 applications per working day, a productivity increase of over 13 percent. This was done with virtually no increase in personnel. Our new computerized license accounting and retrieval system, which should become operational this summer, should improve that record even more.

But numbers do not tell the whole story. What I am particularly pleased about is the quality of decision-making which we demand on difficult export licensing matters. We are dedicated to rigorous analysis of issues and insist on reasoned decisions backed up by good judgment. That, more than statistics about productivity or delays, is our best guarantee that the nation's sometimes conflicting interests are well-served.

Of the other issues you have identified, Mr. Chairman, among the more difficult is the role that export controls should play in promoting human rights abroad.

The administration is committed to backing up our human rights goals with action, and to that end, we will in some instances seek to bring pressure to bear on certain countries by denying them selected goods and technologies. But, in each instance, we attempt to assess the degree to which we can in fact achieve our policy objectives by doing so.

Sometimes our analysis concludes that we can have an impact; at other times, it concludes otherwise. In all instances, we insist on assessing the situation carefully. We know that the indiscriminate use of export controls for this or other foreign policy purposes can have an adverse effect on the United States reliability as a supplier and on our long-term balance of trade, and we insist that those consequences be taken into account before taking action.

Another issue that you identified, Mr. Chairman, is whether export controls should be applied to the sale of petroleum exploration and production equipment and technology. President Carter has said that energy is a worldwide problem and that our technology is available to share with the rest of the world.

In general, we believe that it is to our advantage for all countries to develop their petroleum resources to the maximum extent possible.

Special controls have been imposed on the export of oil exploration and production equipment and technology to the Soviet Union. These controls give the U.S. Government a chance to review the wisdom of any such export on a case-by-case basis.

They were imposed last summer at a time of serious strain in our relations with the Soviet Union, arising in part from Soviet human rights abuses. Nonetheless, all license applications under these controls have been approved when they were ready for final action.

Another issue is that of our policy toward the USSR and the PRC. Should we permit exports to one which are denied to the other?

Present U.S. policy is to maintain a balance that is in our national interest. This means that for both the Soviet Union and China we will examine every proposed export to assure ourselves that its proposed use is peaceful, that the risks of diversion to military uses are small, and that the consequences of such diversion, if it should occur, are acceptable.

This does not necessarily mean that what we approve for the Soviet Union will also be approved for the PRC, or vice versa. Each decision will depend on its particular circumstances.

Then there is the difficult question of foreign availability, in his National Export Policy Statement of last September, President Carter recognized that the imposition of export controls can have significant adverse economic consequences for the United States. Therefore, he directed that adverse export consequences and foreign availability be considered in making foreign policy export control decisions. The President recognizes that where adverse export consequences are severe or where goods are freely available from foreign sources, there may be strong arguments against denying their export from the United States.

Making accurate assessments of foreign availability, however, is far from easy. And it is extremely difficult to determine when foreign availability should outweigh other concerns. There is simply no way to be categorical about these issues, and we simply have to make the best judgment we can taking all the circumstances into account.

Yet another important issue is whether our national security export controls adequately protect the transfer of so-called "critical technologies." It deserves emphasis here that for many years now, our export controls have been consciously designed to protect advanced U.S. technologies with important military applications in which the United States enjoys a technological lead. Indeed, when it happens that a license application takes a long time to process, the fundamental issue in the debate is frequently the advisability of exporting the technology in question. So I want to emphasize that the idea of controlling critical technologies is in no way a new idea. Indeed, it has been the governing philosophy of U.S. national security export controls for over two decades.

For nearly three years now, the Defense Department has been working to identify with more precison the specific technologies that might be defined as "critical," together with the products that could contribute significantly to the transfer of these technologies and which would, therefore, also require close control. The hope is that if we can be more precise about what is critical, we can decontrol items which do no fit into that category. However, we should be cautious about expecting this effort to lead to dramatic changes until the results of the Defense effort are more complete.

A question frequently rasied in connection with the debate over the proper scope of export controls is whether our CoCom partners exercise the same degree of control over exports as we do. We are reasonably confident that they do in the national security area.

Differences do occur at times, usually arising from differneces of interpretation of the definitions of controlled items. When such differences arise, we do our best to resolve them, and by and large we are successful.

Other differences can arise over the proper scope of export controls in general. While the U.S. controls exports for both national security and foreign policy purposes, our allies generally limit their controls to national security matters, and even there, their controls are at times not as extensive as ours.

The United States controls certain items unilaterally. The Commodity Control List contains 38 such items. These are mostly high technology items that are not available abroad in comparable quality and quantity. I recently sent to the Congress a special report, as required by section 118 of the Export Administration Amendments of 1977. That report describes each of these entries adn the reason for retaining them under unilateral control.

The United States also imposes controls on re-exports of U.S. goods. It imposes controls on the use of U.S. components in foreign products that will be exported. It imposes controls on exports and re-exports from other countries of U.S. technical data and the products of that data.

Our allies do not impose such controls. They rely mainly on the initial evaluation of the proposed exports to guard against misuse or diversion, and some have much more limited legal authority to control technology.

Our allies have in general not followed our lead in imposing export controls for foreign policy reasons. Some of our closest allies, for example, have made substantial sales to Cuba for many years while the United States has maintained an embargo. Nor have they supported our embargo for human rights reasons on exports to Uganda or to the military and police of South Africa, tending instead to conclude sales where we have foregone them. In general, our allies have not chosen to use export controls for foreign policy purposes.

On the other hand, CoCom is a voluntary organization, not a treaty, and its bonds are commensurately less binding. Its survival and effectiveness, therefore, depend upon willing cooperation among its members. If we wish to remain effective in the main, we must accept a degree of difference.

A word about our anti-boycott program:

Difficult as it may be to balance deeply conflicting interests, we are no stranger to the task. The anti-boycott law enacted two years ago called upon us to give substance to the careful balance struck by Congress in that law and to develop regulations to fulfill its anti-boycott goals while minimizing the impact on U.S. exports. I believe we have been successful.

In the year since the regulations became effective U.S. exports to the boycotting countries of the Middle East have risen 16 percent. To Saudi Arabia they have grown by 22 percent; to Kuwait, by 36 percent. So clearly the impact on our trade has not been disastrous as some predicted it would.

Moreover, major Arab countries have made significant changes in their boycott requirements. Although a few still insist on explicit agreements to comply with the boycott, negative certificates of origin are by and large a thing of the past. Boycott questionnaires are required less and less often, and U.S. companies repeatedly tell us that with the backing of the U.S. law, they are able to resist boycott demands and still secure the business. On the other hand, certain business transactions have undoubtedly failed where U.S. companies have been unable to comply with boycott demands. By and large, however, I am satisfied that the anti-boycott program is accomplishing its intended goals with the minimum possible impact on U.S. trade.

The administration will shortly submit proposed legislation to the Congress to extend the Export Administration Act. We believe that our legislative recommendations will complement the administrative improvements to the licensing system that are currently being developed. We believe the result will be an improved, streamlined licensing system with fewer delays and more consistency in our treatment of license applications.

Mr. Chairman, a final note: The Export Administration Act embodies important national concerns. Our responsibility in administering that statute requires us to take all those concerns into account. However, the balance which is struck when national interests conflict depends in part on the environment in which those conflicts arise.

Our physical security and foreign policy interests are, of course paramount. But economic performance and political and military power are ultimately inseparable.

In today's world, our economic vitality is increasingly dependent on our ability to export. Today's environment requires that we take more seriously than ever before the erosion in our power and influence that can come from a failure to meet the export challenge.

We in the administration take that challenge seriously and are determined to administer export controls accordingly.

U.S. DEPARTMENT OF COMMERCE,
ASSISTANT SECRETARY FOR INDUSTRY AND TRADE,
Washington, D.C., March 5, 1979.

Mr. ROBERT W. RUSSELL,
Counsel, Subcommittee on International Finance,
U.S. Senate, Washington, D.C.

DEAR MR. RUSSELL: This is in response to your inquiry of February 15 concerning the likelihood of U.S. Government approval of the export of a 480 channel digital

microwave communications system to the People's Republic of China (PRC) and the U.S.S.R.

There is currently no liensing history for the export from the United States of U.S. designed and manufactured digital communications systems, also known as pulse code modulation systems (PCM), to communist countries. However, the U.S. Government has been involved in cases in which the systems to be exported were designed and manufactured by Western European companies.

In 1977, a firm in Sweden proposed an export of both 120 channel and 480 channel PCM communications systems to Poland. U.S. Government approval was sought because the systems were to incorporate U.S. parts and components. The request was denied for national security reasons. In 1976, Italy submitted a case to CoCom to export a 480 channel PCM communications system to Poland. That proposal was also denied by the United States.

These communications systems incorporated recent high speed semiconductor technology and have uses in high speed computer data transmission which is of particular concern to the U.S. military. In view of this it is likely that we would advocate denial of a proposal by Japan or any other CoCom member nation, including the U.S., to export similar equipment to the U.S.S.R. or the PRC.

Sincerely,

STANLEY J. MARCUSS.

The CHAIRMAN. Thank you very much, Madam Secretary. We very much appreciate your statement.

Have you evaluated the effects of the Foreign Corrupt Practices Act on U.S. trade? We passed this last year, as you recall, the anti-bribery bill, so-called. I'm not aware of any effect from the act. We were assured by the SEC that their investigations indicated that firms that had not used bribery had thrived just as well as those who did.

In any case, what justification can there be for permitting American businessman to pay bribes to make sales abroad? Any?

Secretary KREPS. No justification, Mr. Chairman. I think the question is a complex one. The uncertainties in the law have to do with what constitutes "bribery." The business community has asked for clarification of the law.

The Justice Department is looking at that question. It is not a question of permitting bribery, but rather, a question of defining what constitutes bribery, within the scope of the law.

The CHAIRMAN. Well, do you think, then, that there should be a change in the law as it now stands on the books?

Secretary KREPS. It may not be necessary to change the law. I do think it's important to have the Justice Department consider giving some guidance as to what constitutes bribery, as opposed to what constitutes acceptable business activity.

The CHAIRMAN. That sounds very reasonable. Will you be sure to keep this committee aware of any progress there? We'll ask the Justice Department, too, to followup on this.

Your feeling, then, is that it doesn't require additional legislation, but it should require as prompt action as possible on the part of the Justice Department to make sure that the definition of bribery is widely understood?

Secretary KREPS. I don't want to rule out the possibility of a change in the law. I don't know what the Justice Department can do in order to be more specific. I do have some sympathy with the business position, that they simply have no guidance on certain practices.

The CHAIRMAN. Now, 2 years ago, when Congress adopted the anti-boycott provisions of the Export Administration Act, that was

debated at great length in this committee and, of course, it became law. There was a great hue and cry over the possibility that the United States would lose export business with Arab countries. In fact, the anti-boycott provisions have not had any discernible negative impact on U.S. trade with Arab countries, as your testimony so well indicates.

Does the administration intend to propose amendments to the anti-boycott provisions or support extension of these provisions without change? I ask that because I have here—and I'll put it in the record—letters from the Business Round Table and three Jewish organizations, all agreeing that there should be an extension of this legislation without amendment.

[The information referred to follows:]

THE BUSINESS ROUNDTABLE,
New York, N.Y., February 27, 1979.

Hon. WILLIAM PROXMIRE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR PROXMIRE: I am writing to you to express the views of The Business Roundtable concerning the contemplated extension of the anti-boycott provisions incorporated into the Export Administration Act by amendment in 1977.

As you will recall, The Business Roundtable provided a leadership role for the business community in the process of negotiation and compromise that led to the submission of the Joint Statement of Principles re Foreign Boycott Legislation and subsequent presentation of specific legislative proposals that were adopted by the Congress and embodied in the Export Administration Amendments of 1977. We set upon the course leading to this compromise in the belief that our national interests would best be served by legislation giving adequate recognition to the major ethical, political and economic realities involved in balancing the need for effective controls on foreign boycotts with the need for continued business and trade relationships with and in countries engaging in such boycotts.

The anti-boycott provisions of the law represent a compromise, and as such they necessarily fall short in some respects of what we regard as legitimate business and trade objectives. Nevertheless, in the light of our experience so far, we cannot say that the legislation has not lived up to its characterization by President Carter, on May 3, 1977, as reflecting a "* * * reasonable balance between the need for stringent controls over the undesirable impact on Americans of foreign boycotts and the need to allow continuation of American business relations with countries engaging in such boycotts."

We continue to believe, as stated in the memorandum of April 26, 1977 signed by our representatives and representatives of three leading Jewish service organizations, that the benefits of this compromise legislation could be lost through an atmosphere of confrontation and divisive debate. Accordingly, we believe that an amendatory process would not be desirable in the context of the renewal of the anti-boycott provisions of the Export Administration Act.

Very truly yours,

T. A. MURPHY, *Chairman.*

FEBRUARY 27, 1979.

Senator WILLIAM PROXMIRE,
5241 Dirksen Senate Office Building,
Washington, D.C.

DEAR SENATOR PROXMIRE: We are writing to express the views of the major national Jewish service organizations on the extension of the anti-boycott provisions of the Export Administration Act, which comes up for renewal in the current legislative session and will be considered by your committee.

As you know, the anti-boycott provisions, as amended and strengthened in 1977, emerged after long and serious consideration and reflected a broad national consensus. That consensus was in no small measure the result of your own work and the creative and cooperative efforts undertaken by our organizations and the Business

Roundtable to find common ground in seeking to protect American individuals and businessmen from discrimination and foreign economic compulsion while providing a basis in which U.S. trade relationships could continue. We remain grateful for the active leadership role you played in the process.

Although not all our original objectives were fully reflected in this compromise legislation and the ensuing regulations, we remain hopful on the basis of early evidence, that these provisions, along with other statutory safeguards, can provide an adequate protective framework against unwarranted foreign discriminatory coercion. At present we believe current anti-boycott provisions of the Export Administration Act should be extended without change while ongoing monitoring and evaluation determines more fully their effectiveness.

We are confident that your continued interest in this area will assure strong yet responsible U.S. anti-boycott policy.

MAXWELL E. GREENBERG,
National Chairman, Anti-Defamation League of B'nai B'rith.
RICHARD MAASS,
President, American Jewish Committee.
HOWARD M. SQUADRON,
President, American Jewish Congress.

Secretary KREPS. That would be basically our view as well, Mr. Chairman. We feel that we have been as successful as possible in walking the line between protecting our own business firms from discriminatory action and still protecting the flow of trade.

We do not intend to recommend any basic changes in the legislation.

The CHAIRMAN. Now, in your statement you say the administration is committed to backing up human rights goals with action. Then you spell out very usefully the problems which you have, however.

I agree with the need to expand U.S. exports. We're all concerned with the continuing trade deficit. But I hope you agree that we should not compromise our principles just to peddle our wares, and you seem to say we should not.

Last year, for example, Congress cut off trade with Uganda because of Idi Amin's barbarity. I strongly supported that step. I wonder if we ought not to consider cutting off trade with any nation which engages in a consistent pattern of gross violations of human rights similar to the actions in Uganda.

Secretary KREPS. I certainly have no disagreement, Mr. Chairman, with our actions toward Uganda. The foreign policy provision of the act specifies that we take what action the President thinks appropriate. In general, I think we have to be careful with how we interpret that provision.

But in the case of human rights actions, I do not think we have been out of line with the basic provisions of the act and with the views of people.

The CHAIRMAN. Would it be useful to you, when you think of administering this Act, would it be beneficial to enact an amendment to the Export Administration Act to stop exports to any country whose government engages in a consistent pattern of gross violations of human rights similar to the activities in Uganda?

Secretary KREPS. I have some question about that, because there would be a question of definition. I think that is presently within the discretion of the President, and I would have to think about whether specifying that in the act itself——

The CHAIRMAN. That is the same definition used in our foreign assistance legislation.

Secretary KREPS. Well, then, I would still raise the question of whether that is not an option that is open to the President already.

The CHAIRMAN. It is not an option; it is a direction. It is a requirement with respect to foreign assistance, and I can see why you might have a different standard with respect to trade. Trade is not foreign assistance; it's different. But I just wanted to elicit from you your views, and your views appear to be that the President can act if he wishes, and that is the way it ought to be. Right?

Secretary KREPS. Yes, sir.

I think we have to take care not to overextend our constraints on trade, given the nature of the trade balance we now face.

In general I would not favor further statutory restrictions.

The CHAIRMAN. Madam Secretary, are we maintaining controls on exports to the People's Republic of China with the same rigor that we are controlling exports to the Soviet Union? I think it is very important that we avoid transferring goods and technology to China which could eventually contribute to the military power of Russia.

China may prove to be fickle friend, and could patch up its differences with the Russians overnight, and make available then whatever was purchased in the West to that point.

Why has the U.S. Government been lax in protesting strategic shipments to China by our NATO Allies?

Secretary KREPS. As far as our exports to China are concerned, they, of course, fall in the category of exports to a Communist country. We expect to be evenhanded, utilizing the same criteria of potential military application and use, et cetera.

With reference to the question of what we do about our allies' shipments of goods to the PRC, first of all, it is a question of what control we could have over them. I think the most recent statement here was Secretary Vance's that——

The CHAIRMAN. I understand that we have to approve exceptions to the CoCom list. What I am talking about is whether or not we should provide that this Nation will henceforth firmly resist and oppose shipments to China by any of our CoCom partners, where we would not license similar shipments ourselves.

Secretary KREPS. Could I call on my colleague?

The CHAIRMAN. Yes, Madam Secretary. Mr. Marcuss?

Mr. MARCUSS. The same export controls which we apply, Mr. Chairman, for our own direct shipments to China are applied also to shipments by our CoCOM partners with respect to all the items on the export control list.

There is no difference, and each of the countries within CoCOM have to approve the export of any item on that list by any member country.

Therefore, the United States effectively has a veto in CoCom on shipments of any items on the control list by any of our CoCom partners.

The CHAIRMAN. So then your response is that it would apply to our CoCom partners now, under present law. The problem I have is whether or not we have the same attitude toward the Chinese as

we have toward the Russians as far as policies toward exports are concerned.

Mr. MARCUSS. Well, as Madam Secretary indicated, the same criteria, the same tests are applied, Mr. Chairman, to shipments to either China or the Soviet Union. The item must be basically peaceful in character; the user must be engaged in peaceful, as compared to military activity; the risks of diversion must be small; and the consequences of diversion must be acceptable should diversion occur.

The same tests apply to both China and the Soviet Union.

The CHAIRMAN. How about the approval, for example, of the British Harrier jets to China?

Mr. MARCUSS. The aircraft that the United Kingdom is proposing to sell to China do not fall within the export control list, Mr. Chairman. They are on the international munitions list, which constitutes an entirely separate framework of export controls relative to purely military items.

The CHAIRMAN. I am over my time. But that seems to me that that is where the principal concern would be—military aid—because that is a separate category. Then it seems to me that we had better focus on that.

Mr. MARCUSS. There is an important distinction.

The CHAIRMAN. The thrust of my question was whether or not we should provide military technology to China; because at the present time, our relationship is a little warmer, perhaps, than it is with the Soviet Union, but they're a fickle friend and we ought to treat them alike.

Mr. MARCUSS. As far as so-called dual use and the Commerce Department controls are concerned, I have indicated what our policy is.

As far as items on the munitions list are concerned, and these consist of, military equipment, as Madam Secretary indicated, Secretary Vance has said that questions pertaining to those sales are decisions to be made by each of the individual countries.

The CHAIRMAN. My time is up.

Senator Heinz?

Senator HEINZ. Thank you, Mr. Chairman.

First, Senator Garn would like to submit certain questions to the Secretary which she could then answer in writing.

The CHAIRMAN. Would you do that, Madam Secretary, for the record?

Secretary KREPS. Certainly (see p. 81).

Senator HEINZ. I would like to yield to Senator Cranston.

STATEMENT OF SENATOR CRANSTON

Senator CRANSTON. I would like to make one brief statement. Thank you very much.

First, I want to thank you, Mrs. Kreps, for your testimony. I think it is very helpful. We obviously must balance the values between exporting to help our trade and our economy and protecting our national defense.

I think our national defense rests, in great part, upon the strength of our economy. When the dollar is in the trouble that it is in now, and when we have this horrendous trade imbalance, I

think it is very injurious to our country's position in the world and to our national defense.

We have to review very carefully how all of this is being handled. I wanted to ask you one specific question. If you could give me a response in writing on the matter of delays in processing export license applications: Do you have an estimate on how much business has been lost due to a delay even though the license would be granted eventually because the business opportunity vanished during the waiting period?

If you could give us an answer in writing, I would appreciate it. I have had many complaints from Californians and others about interminable delays.

You have given statistics to show that it hasn't been the general practice, however it has become a serious problem for some exporters.

And you also have given appropriate reasons for the care you've taken. But nonetheless, licensing delays remain a problem.

Secretary KREPS. Senator Cranston, we will provide what we can for the record, although you can understand that it is very difficult to determine exactly why those sales were lost.

[Answer to question of Senator Cranston:]

Question. Do we have an estimate on how much business has been lost due to delay when eventually the license has been granted but the business opportunity has perhaps vanished?

Answer. It is impossible to quantify business lost through delays in licensing. Although some exporters report lost business, we are sure that others do not. We require the return of unused licenses, but exporters are not required to indicate the reasons why the license was not used.

Firms often prefer to have an application processed even if it is delayed, because this provides a possible precedent for future applications on the same item.

In 1978 less than 3 percent of the total applications processed required over 90 days. We are acutely aware of our responsibilities with respect to rapid action on license applications. Accordingly, we are exploring new ways to speed the entire process of license review. Nevertheless, delays in some instances are caused by the need to reconcile opposing positions on the part of concerned Government agencies.

Secretary KREPS. I would like to emphasize one point before you go, sir. It is that we will do what we can to speed up the process.

I think, however, if a case is highly technical and the clearance process between the agencies and with CoCom stretches beyond 90 days, it may become a question of whether we should give the company a negative answer or whether, by taking a little more time and studying the application further, we may be able to approve the license.

I must say, when we put that question to a company, they prefer that we take the extra time. We do conflict a bit on that point. In cases which are very complex, we sometimes keep them around deliberately in order to try to find a way to approve them.

Senator CRANSTON. Thank you very much.

Senator HEINZ. Madam Secretary, along the lines suggested by Senator Cranston, I am wondering if you couldn't supply also for us, rather than just the percentages of licenses that have been approved or subjected to delay, the dollar values that are involved. Would that be possible?

Secretary KREPS. I'll have to check. I would think so. We have those numbers.

Senator HEINZ. Sometimes 3 percent of the applications can be 15 or 20 percent of the dollars. Sometimes it can be a lot less.

Secretary KREPS. Indeed.

[Answer to question of Senator Heinz:]

Question. Rather than supplying just the percentages of approved or delayed cases, could you supply the dollar values involved?

Answer. As I have said, it is impossible to quantify the amount of business lost due to delays. However, the attached table lists the dollar values of 1977 license applications which required over 90 days to process but which were eventually approved.

APPROVED CASES IN PROCESS OVER 90 DAYS—1977

	REGULAR				REEXPORT				Total	
	Bloc		Free World		Bloc		Free World			
	Number	Dollar value	Number	Dollar value	Number	Dollar value	Number	Dollar value	Number	Dollar value
January	20	$556,095	51	$16,496,418	22	$843,615	4	$359,842	97	$18,255,970
February	24	7,937,852	19	14,868,967	16	603,184	1	219,657	60	23,629,660
March	50	2,577,699	11	1,860,593	15	1,161,941	1	30,200	77	5,630,433
April	32	4,027,254	7	2,379,559	20	687,824	1	113,058	60	7,207,695
May	29	6,335,742	12	9,411,505	7	1,130,061	1	805,857	49	17,683,165
June	29	6,073,361	20	3,526,240	10	2,729,673			59	12,329,274
July	89	34,121,535	22	1,120,058	11	982,694			122	36,224,287
August	31	18,256,054	42	7,076,857	14	5,350,385			87	30,683,296
September	36	4,954,198	40	34,121,535	21	11,872,619	3	2,803,984	100	53,752,336
October	28	5,817,457	23	14,155,803	14	2,022,499			65	21,995,759
November	41	24,192,607	41	16,012,636	62	3,892,712	3	288,670	147	44,386,625
December	49	6,484,959	50	1,389,178	36	1,722,563	2	418,084	137	10,014,784
Total	458	121,334,813	338	122,419,349	248	32,999,770	16	5,039,352	1,060	281,793,284

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Senator HEINZ. First, I don't know to what extent you're familiar with the GAO recommendations that essentially provide for a centralization and consolidation of the export licensing authority at the Commerce Department.

Are you familiar with them, generally?

Secretary KREPS. Yes; I am.

Senator HEINZ. I think the sense of the committee, listening to Mr. Staats this morning, was that they were largely favorably impressed with the recommendations that he made.

Would that be a true statement for you?

Secretary KREPS. I think we ought to take it recommendation by recommendation. We do think that it would be good if we could have a wider mandate to give approvals within the Commerce Department. That is one of their recommendations. I think that would help us enormously.

There are several points on this that I think I might prefer not to reply on because the report is now dated. Some of the recommendations that they have made have already been taken into account.

Senator HEINZ. I don't want to get into too wide ranging a discussion. If it would help, maybe you could review the testimony of Mr. Staats today in which he gave a set of specific and up-to-date suggestions, and let us have your comments pro and con on each of them. I think that might accelerate our discussion.

I don't want to get you into the subject too deeply if you're not fully prepared to discuss it—but there is one part of the report, though, that I'd like to address right now.

The Comptroller General said—The discussion in the Export Administration Act, as you are aware Madam Secretary, you have to send to the Congress a semiannual report to the Congress and the President on the use of controls.

The Comptroller General said that the discussion on controls for foreign policy purposes in your report is brief, and they believe inadequate; because it does not discuss, first, the specific foreign policy goals that trade controls are supposedly designed to serve; nor, second, whether they are serving those goals well, or poorly.

How do you respond to that?

Secretary KREPS. Well, it is sometimes very difficult to identify foreign policy goals. For one thing, they may shift from one time to another.

It would help us enormously if we knew precisely what those goals were. Changes in foreign policy come not only from the administration but also from the Congress. For example, it was congressional action that decreed that we would not sell to Uganda.

Congressional action also specified limitations with respect to Exim Bank funding. At any point in time, precisely what is a foreign policy goal and how you honor that goal may be quite difficult to determine.

If it can be done, we would welcome it.

Senator HEINZ. Do you keep track of which exports are withheld, either not permitted or delayed, for foreign policy reasons? As opposed to national security reasons? Do you make that distinction in the way you keep count?

Secretary KREPS. It is not so much a question of what the product is, as it is a question of the behavior of the country in question, or an attempt to influence behavior of a particular group within that country.

So, for example, we do not sell goods to the military or the police in South Africa, but we do sell South Africa other things. We could indicate to you the total value of the human rights denials that we have issued, and I have that number. But I think the cost to the sellers—the U.S. sellers— is of course some multiple of that.

Although we could say it costs us $10 million in denials that we know about, one has to recognize that many sellers do not attempt to come into the market when we restrict the export of U.S. goods.

So we simply don't have any estimates of what it costs.

Senator HEINZ. As I understand it, though, you do have an estimate of how much in the way of value has explicitly been either turned down or delayed, withheld, on a decisionmaking basis, first for foreign policy reasons generally; then second, for that specific category known as human rights. Is that right? You do have those kinds of figures, even if they don't indicate the entire loss to the exporting community?

Secretary KREPS. Yes; and I have those before me if you would like to hear them.

Senator HEINZ. Yes, please.

Secretary KREPS. Foreign policy cases—7 percent of the total free-world cases in 1976; 7 percent in 1977; 12 percent in 1978.

Human-rights cases comprised eight-tenths of 1 percent of the total free-world cases processed in 1976; about 1 percent in 1977; and 2 percent in 1978.

It is clear, from looking at the number of cases, that the foreign policy cases are increasing very rapidly. In 1976, we processed almost 3,300 foreign policy cases. In 1978, we processed almost 6,000 foreign policy cases.

I do not have a breakdown.

Mr. MARCUSS. In the specific subcategory in human rights, which falls within the general category of foreign policy controls, Senator Heinz, the comparable numbers for 1976, 1977, and 1978 are 583 cases in 1976; 423 cases in 1977; and 1,652 cases in 1978.

Senator HEINZ. One of the things you said, Madam Secretary, if I heard it correctly, should be of concern to all of us, is that you felt it was difficult to predict from one time period to the next what our foreign policy considerations were going to be. And would that be true during your tenure as Secretary?

Secretary KREPS. There have been changes. Clearly, we imposed controls on oil and gas technology to the Soviet Union out of foreign policy considerations. I'm not sure when the Congress took its action against sales to Uganda. When was that?

The CHAIRMAN. September of last year.

Secretary KREPS. So, yes; those are two cases in which there was a change in foreign policy.

Senator HEINZ. Do you also have a figure on the dollar value of exports that have been withheld in connection with human rights concerns?

Secretary KREPS. That's the $10 million figure that I gave you, but that's—I stress—only what we've turned down, not the potential that we may have lost.

Senator HEINZ. How are you going to deal, or how do you propose to deal with trying to bring about more consistency in the foreign policy related emphasis that you have to deal with, including human rights? Do you have any suggestions as to how we can include a requirement of greater consistency for exports?

Secretary KREPS. The basic problem, it seems to me, Senator Heinz, is not so much consistency as consensus on what the problem is, given the pace of change worldwide. It is bound to be the case that the Congress and the administration will view developments for foreign policy purposes on a day to day, week by week basis.

Those changes cannot be predicted with any certainty. Now, once a policy has been declared, there are many things we can do to minimize the impact on trade of that decision. We can try to speed up the handling of cases. We can be very sure that we approve all the cases that are acceptable under that rule. But it's difficult for me to see how we can bring about any predictability of foreign policy, given the nature of pace of world events.

Senator HEINZ. Well, Madam Secretary, I'd love to discuss that at a little greater length with you; unfortunately our time has expired.

The CHAIRMAN. Senator Stevenson?

Senator STEVENSON. Thank you, Mr. Chairman.

Madam Secretary, would you concede that those figures about the foreign policy control of human rights, including the controls for human rights purposes, are deceptive because when transactions are subject to uncertainty, to delay, and possible embarrassment, exporters don't export and importers don't import.

Secretary KREPS. I would want to be very sure, Senator Stevenson, that we understood that the actual denials of applications for whatever purpose, including military considerations, are but some portion of the total loss in sales. The difficulty is in estimating what those potential sales would be.

So I can't give you a hard number. But it surely is the case that it is a good deal larger than actual denials, for which we have data of course.

Senator STEVENSON. Do you know of any other country which regards the purchase of its products as a privilege to be withdrawn when the purchaser is unworthy, leaving aside of course the military and national security side.

Secretary KREPS. I do not. I should consult with my colleagues to see if they know of such a case.

Mr. MARCUSS. It is by and large true, Senator Stevenson, that few if any other countries around the world have a system of foreign policy export controls. We, by and large, find ourselves alone in the exercise of that power.

Senator STEVENSON. You said "few." Isn't it a unique notion which implies that to express its displeasure with other nations that the United States should punish itself?

Mr. MARCUSS. I presume that no nation anywhere wishes to inflict wounds on itself.

Senator STEVENSON. Can you think of any nation? The only one that comes to my mind is Japan, but before the arrival of Admiral Perry in 1854. [Laughter.]

Mr. MARCUSS. The implication in your question in part, is that the United States deliberately inflicts wounds on itself through the imposition of foreign policy export controls. The fact of the matter is that the Export Administration Act states it to be U.S. policy to use export controls for foreign policy purposes. The Congress and various administrations through time have concluded that there are certain interests which we can pursue through use of export controls, and they do not regard that in principle as being harmful to the United States, but indeed on balance as possibly beneficial to the United States.

Senator STEVENSON. It says of course it can be used to significantly further the foreign policy interests of the United States. That's a broad proposition with which one cannot reasonably quarrel.

But the concern that I have is that when used indiscretely or freely for noneconomic or strategic purposes, they end up depriving us of not only economic authority but in the end of the political authority, the authority with which to pursue all of our aims as well as our economic objectives in the world, because it happens we have a $30 billion trade deficit and a sinking dollar, and that sinking dollar is the most objective measure there is of the world's confidence in our capacity for leadership and sound economic policy making.

Getting back to the Export Administration Act, Madam Secretary, you said that the administration would have some recommendations for changes; can you tell us today what those recommendations are?

Secretary KREPS. If I may have just a moment, sir.

Secretary STEVENSON. I don't want to go back to your statement. I think you referred to recommendations that would be forthcoming.

Secretary KREPS. Well, it's difficult for us to specify our recommendations until we have a bill, which we don't have yet. In general, we have been working on administrative improvements and processes, but we do not have ready for your consideration the actual provisions of a new law.

We are considering greater emphasis on foreign availability in line with the President's statements. We are concerned with the impact on exports of certain kinds of regulatory actions. But these are issues that we've been discussing for some time in and out of this context.

I cannot specify precisely what we will recommend as a legislative proposal.

Senator STEVENSON. Let me first say, I'll be introducing legislation very shortly to make major changes in the Export Administration Act. We'd be grateful if we could have your comments on that legislation. Comptroller General Staats indicated earlier, as have others, that the responsibility for the formulation of export control policy ought to be identified and be placed in an interagency committee with administration and export policy centered in the Department of Commerce.

Do you support that general proposition?

Secretary KREPS. Yes. I think that we ought to administer the act and have wider latitude in cases upon which we can ourselves act. I think there are several things that we need to do to improve our procedures. But it is inevitable, even so, that interagency consultation and review will be necessary, given the defense implications of most of the cases that we have to handle.

Senator STEVENSON. Should those agencies include the National Security Council? What should the role of the National Security Council be in both the formulation of export control policy and its administration, if any?

Secretary KREPS. The National Security Council has to be involved, it seems to me, in discussions of cases with foreign policy implications, since they are close to the President's formulation of foreign policy. At present, they are advisory members of the operating committee. The National Security Council can give advice on any export license that comes before us by virtue of that advisory role, and they do review virtually all the oil and gas technology cases that come before us.

Senator STEVENSON. Do they review other export license applications?

Secretary KREPS. They do not normally review them. But they can do so if they choose.

Senator STEVENSON. Why are—or let me change that.

What kind of applications are reviewed under the validated license procedure for Argentina, Chile, Uruguay, and El Salvador? Are those crime control and detection?

Secretary KREPS. For the most part they are crime control cases. There may be some other areas that I am not familiar with.

Mr. MARCUSS. For the most part, Senator Stevenson, they consist of crime control equipment.

Senator STEVENSON. How about the least part?

Mr. MARCUSS. With respect to significant transactions with those countries where there are the circumstances involving concern with respect to human rights, we review the transaction from the standpoint of our ability to advance our human rights goals.

Senator STEVENSON. Any oil drilling equipment, energy equipment?

Mr. MARCUSS. I'm not aware of any energy equipment having been applied for with respect to any of those countries, so I can't answer that.

Senator STEVENSON. Does oil drilling equipment have validated licensing procedures for Bolivia?

Mr. MARCUSS. There is a distinction. Any oil drilling equipment which involves sophisticated technology with defense implications is under control for all countries. In the case of the controls issued last August, we added oil and gas petroleum equipment to the list even though they do not involve specific national security implications.

Those controls apply only to the Soviet Union.

Senator STEVENSON. If I could, what's the policy going to be with respect to Iran? Ayatollah Khomeini proposes to deprive women of their basic human rights and all people of due process and follow

of course the law of the Koran. Are we going to deprive Iran of the privilege of buying goods from the United States?

Secretary KREPS. It is difficult to answer that, Senator Stevenson. I don't know of any administration movement in that direction. You'd be interested to know, however, to take one aside, that when I was in the Soviet Union, one of the ministers proposed that the Soviet Union withhold most-favored-nation treatment from the United States until they granted equal rights for women. [Laughter.]

Senator STEVENSON. I thought you were going to suggest that until we adopted a free emigration policy. [Laughter.]

That will come next. My time has expired. But I do have some more questions.

The CHAIRMAN. Madam Secretary, what's your position on the Jackson-Vanik amendment to the Trade Act and on Senator Stevenson's bill, S 339, which some—and I stress some—say would emasculate Jackson-Vanik and, it's alleged, would relieve pressure on the Soviet Union to permit free emigration of Jews and others?

Secretary KREPS. The administration's position is that it is prepared to work with the Congress for resolution of Jackson-Vanik issues. Clearly, we need to do so for the usual reasons with respect to the Soviet Union, but also because we now must deal with the People's Republic of China. With respect——

The CHAIRMAN. Before you get away with that, you say prepared to work with the Congress for the resolution of the problems involved in the Jackson-Vanik amendment. What does that mean? Are you in favor of repealing the Jackson-Vanik amendment or modifying it?

Secretary KREPS. Well, we have said for some time that we would like to have improvement in our relations with the Soviet Union so as to allow us to extend most-favored-nation treatment and bank credits to the Soviet Union.

That position, I think, is firm. We have been pleased with the improvements——

The CHAIRMAN. I'm still not sure what that means, though. Does that mean you favor repeal of Jackson-Vanik, modification of it, or can you work with it the way it is or work around it somehow?

Secretary KREPS. Well, there are several possibilities. One could go with Senator Stevenson's bill, which would eliminate the need for concurrence, or for statements of the usual sort, and I think that is the position that we would favor. We do not have an administration position on this yet, but I think there's a range of possibilities.

The CHAIRMAN. Then as I understand it, you stated there's no administration position on this, but your own personal disposition is that you could go with the Stevenson S. 339; is that right?

Secretary KREPS. I think that moves us in the right direction, yes.

The CHAIRMAN. All right, now, I just wanted to make sure we have a clear record on this human rights situation. You said the denials and stressed the denials would constitute about $10 million. Since we have a $100 billion export, that would be about 1/100th of 1 percent. On the other hand, you stress the denials do not indicate the discouragement, and so forth. If there's a factor of 10, that

would still be 1/10th of 1 percent. That's the price you pay for a human rights policy which would, for example, prevent the South Africans from getting weapons which they can use to suppress the blacks in South Africa.

Secretary KREPS. Mr. Chairman, I would be reluctant to extrapolate that percent.

The CHAIRMAN. You don't think it would be fair to say that it would be a factor of 10 or it would be less than that, more than that? Or you just don't know?

Secretary KREPS. I see no reason to take any particular figure here. It would be totally arbitrary.

The thrust of your question—whether it is a valid proposition to restrain trade for human rights purposes—I have no problem with that proposition.

The CHAIRMAN. Your answer is that it would be?

Secretary KREPS. I think that that's a price that we have indicated, in the past, we are willing to pay. We don't know precisely what the cost is. It is not a policy that we follow blindly. We ought to take into consideration how effective the policy is. But I doubt that we would want to determine our human rights position on the basis of some dollar figure.

The CHAIRMAN. Now, I mentioned in my opening statement an export licensing case that took more than 18 months, a year and a half, to decide.

What purpose is served by holding up an application for a year and a half? Would it not be better to deny the request than keep it pending indefinitely? I have a number of business people in my State—and I am sure this is true elsewhere—who say, "Let's get a decision. If they say 'No,' then we know where we stand." But having this pending for months is not better under those circumstances to have a delay than to have denial. They think they'd be better served to have a clear-cut decision, even if it's denial, than to have to wait for a length of time that long.

Secretary KREPS. Senator Proxmire, they tell us something different. When we ask them the question: "At this point we would have to deny the application. Would you like us to try a little longer?" The answer is always "Yes."

It would make our task much easier simply to have a cutoff date and to deny the applications after a certain point in time. The question is whether that best serves the Nation's interests.

It is our basic position that until we have explored every possibility for approving the license, we should not deny it.

A shorter time frame, a more rigid set of arbitrary deadlines would, I think, not serve our best interests.

The CHAIRMAN. Obviously, it wouldn't. But what I am getting at: I think the consensus of the committee—I can't speak for other members, but I gather this—that we should do everything possible to speed up decisions. And I realize that there are problems involved, but 18 months seems like a very long time; 6 months, 90 days seems excessive.

You say that there were 600 applications pending over 90 days as of June 1978. We received from your office a document listing 250 cases received after June 22, 1977, and pending 90 days or more as

of June 1978. Does that mean there were 250 cases pending for more than a year?

Secretary KREPS. I don't think so, Senator.

The CHAIRMAN. The arithmetic seems to suggest that.

Mr. MARCUSS. I don't know what numbers you have, Senator Proxmire, so I can't really respond.

The CHAIRMAN. Will you check it for the record?

Mr. MARCUSS. I will check that to be sure.

[Answer to question of Senator William Proxmire:]

Question. You say that there were 600 applications pending over 90 days as of June 1978. We received from your office a document listing 250 cases received after June 22, 1977, and pending 90 days or more as of June 1978. Does that mean there were 250 cases pending for more than one year?

Answer. During the period June 1, 1977 through May 31, 1978 there were 397 cases which took over 360 days to process.

The CHAIRMAN. Can you tell us how foreign availability is determined now? Do we ask foreign governments? Do we send U.S. personnel abroad? Do we use the industry technical advisory committees? The GAO didn't know. They couldn't tell us. Can you tell us?

Secretary KREPS. We have two or three sources that we use. The primary one is our own personnel, who are experts in the field of availability of technology elsewhere in the world. That's the first cut.

We also use our business advisory committees for information as to what's available elsewhere.

We use the intelligence community, as well. We get some help from them.

Those are our major sources. It's an assessment which the Commerce Department itself makes.

The CHAIRMAN. My time is up.

Senator Stevenson.

Senator STEVENSON. Thank you, Mr. Chairman.

Mr. Chairman, my amendment to the Trade Act is intended to promote all of the objectives of the United States, including human rights and a free emigration policy in the Soviet Union. And I think that that should be made clear.

I am sure that the Secretary would agree that the implication of this legislation is that continued availability of both credits and MFN would depend upon periodic reviews of the overall relationships of Soviet behavior across the entire range of U.S. interests, of which emigration is one. And, by doing so, it not only opens up economic opportunity for us, but some greater prospect of promoting free emigration from the Soviet Union as well as our other interests. The present policy hurts all interests, including emigration, which has suffered in the Soviet Union, and, by no coincidence, starting at the time of the enactment of this legislation.

So, I don't want to leave the record with any suggestion at all that I am not in support of human rights in the world or any other noneconomic interests. I am very concerned with policy which, it seems to me, effectively promotes none of our interests in the world.

Having said that, Madam Secretary, is the policy of the administration with respect to the PRC and the USSR still one of evenhandedness?

Secretary KREPS. Yes, sir. The administration's policy is to evaluate each application for a license on the same basis. We would look to the same criteria for judgment in the case of the PRC as with the Soviet Union.

There may be cases, of course, in which the capability of one country for using certain technology for military purposes might be different from another, and that might affect the decision. But the same criteria would be used in both cases.

Senator STEVENSON. Am I to infer, then, that the policy being one of evenhandedness, that the administration will not extend MFN and Eximbank eligibility to the People's Republic of China without also doing so for the U.S.S.R.?

Secretary KREPS. It is our hope that we would extend the same treatment on most points to both countries. We, of course, do not have a trade agreement with the People's Republic of China, and accordingly we cannot extend MFN to them. That is somewhere in the future. But by the time we have an agreement we would hope we could deal similarly with the two countries.

Senator STEVENSON. Now, the recent negotiations of the Secretary of the Treasury appear to have succeeded beyond anyone's expectations. That is to say, they are moving more rapidly than I believe was expected, and there is agreement on the major issue, the issue of assets.

If so, when can we expect a position from the administration with respect to the eligibility for MFN of both the People's Republic of China and the U.S.S.R.?

Secretary KREPS. May I call on Mr. Haslam to give you a response?

Mr. HASLAM. I don't have a timetable for you, but I wanted to respond to the previous question. The determination on the part of the administration with respect to whether it makes a recommendation for most-favored-nation treatment turns upon whether it feels that the terms of the Trade Act have been met. Even within an evenhanded approach, it is possible that there might be a differing assessment by the administration as to whether the terms of that act had been met by the People's Republic of China or by the Soviet Union.

I know of no timetable for either country. It depends upon when a judgment has been made by the President that the terms of the act have been met. We can then make a recommendation to Congress.

Senator STEVENSON. You seem to now be suggesting that the administration is considering MFN and credits for the People's Republic of China, but not to the Soviet Union, because the assurances with respect to emigration are available in the one case and not in the other case.

I have been told that when the vice premier was here recently he asked, "How many million do you want?" [Laughter.]

Senator STEVENSON. Certainly, it would be possible, under that act, granted such offers by Teng Hsiao-ping, to grant credits to the People's Republic of China, but it is not possible to obtain such

offers or assurances from the U.S.S.R., and even if the law were to be twisted on the Hungarian model, it would be quickly challenged in court, with results which would probably produce an uneven-handed policy, should it be attempted.

So, am I right in inferring from your comments that the administration is considering an evenhanded policy of credits for China, but not for the U.S.S.R.?

Secretary KREPS. It's Mr. Haslam's problem now. [Laughter.]

Mr. HASLAM. I think that the administration is looking at each country on the merits and has a policy of balanced and evenhanded treatment of both countries. I think that the determination as to whether we can make such a recommendation to Congress will turn upon the recommendations of the Department of State and other participating dpartments of the Government.

Our policy is one of evenhandedness. I think that within that policy if different assessments are reached with respect to the two countries, it does not mean that we cannot go forward with one of them.

Secretary KREPS. Senator Stevenson, could I ask Mr. Marcuss to respond further? He just came back from China with Secretary Blumenthal, and he may have some insight here that he hasn't reported to me yet.

Senator STEVENSON. The waters were muddy. They're mud now. By all means.

Mr. MARCUSS. At least, if they've gone from muddy to mud, they're becoming more solid.

I wanted to just make one point, Senator Stevenson, and that is the question of MFN credits to China. Under the existing law, it does not depend solely, or obviously on numbers, No. 1. No. 2, the question with respect to China is moot until we have a trade agreement, as you know. That's a requirement under the 1974 act.

In the course of our discussions in China on Secretary Blumenthal's trip, we have laid the foundation for negotiations with the Chinese on the trade agreement and have identified the areas that need to be addressed with the trade agreement, and we are beginning the process of discussion and negotiation with the Chinese on a trade agreement.

Until that process is completed, and not until it's completed, no judgment be made about how to proceed in the context of Jackson-Vanik.

Senator STEVENSON. Well, a trade agreement is obviously not a frequent basis for recommendations to the Congress with respect to the law. The law was amended and another trade agreement was subsequently negotiated. I think that's an excuse.

I have one final question, Mr. Chairman.

The Export Administration Act, as you know, prohibits oil exports from the United States. Surplus is building up on the west coast. Does the administration have a recommendation to make with respect to those prohibitions in the Export Administration Act?

Secretary KREPS. The administration is considering the possibility of exporting North Slope oil. Under the act, as I understand it, the President is allowed to export oil only if it can be shown that, by doing so, we could lower costs and prices to the consumer.

We are examining whether or not that would be the case, and will be making a decision. If that is not the case and there is still a need to go ahead, we would, of course, ask the Congress to consider a change in the law.

Senator STEVENSON. OK. Thank you.

The CHAIRMAN. I just have a couple more questions, Madam Secretary, and they relate to some of the questions in my letter of January 5 which were not covered in your statement.

First, what changes in export control policy or the administration of export controls have been made as a consequence of Presidential Review Memorandum 31? Mr. Staats referred to that memorandum in his statement earlier this morning, but it hasn't been made available to the committee.

Secretary KREPS. The results of that study led to two or three things that are unclassified and we can talk about it here:

One, it confirmed the fact that the process by which we handle export licensing is appropriate for case-by-case consideration.

Two, it specified certain streamlining procedures to allow the Commerce Department to handle a wider range of cases.

Three, it institutionalized NSC's role in the procedure, by making the NSC an advisory member of the Operating Committee and the Advisory Committee on Export Policy.

Those are some of the things that came out of No. 31.

The CHAIRMAN. You say that that is the unclassified part? Is there a classified part? I am not going to ask questions about it, but I was going to ask: Are there classified recommendations in addition to that?

Secretary KREPS. Yes.

The CHAIRMAN. In cases in which we have stricter export controls than our allies, what efforts have been made to have those countries adopt strictures equivalent to our own, and with what results? You say in your statement that our allies have not chosen to use export controls for foreign policy purposes. What effort have we made to convince them to join us in controlling exports to Uganda and South Africa, for example?

Secretary KREPS. I don't know of any specific efforts, Mr. Chairman, but I will ask my colleagues if they know of any. The net effect has been no success, if there were such efforts.

The CHAIRMAN. If there were no efforts, normally there is no success.

Secretary KREPS. Well, if we reasoned that our human rights policy set an example, that in itself would be an effort; wouldn't it?

The CHAIRMAN. Well, there is military security, which perhaps would be more persuasive. For example, have we tried to get our NATO allies to join us in controlling the export of oil exploration and production equipment and technology to the Soviet Union?

Secretary KREPS. I don't know of any efforts that have been made, say, by the State Department to have them join us.

Let me see if Stan knows of any.

Mr. MARCUSS. I am not aware of any, Mr. Chairman.

The CHAIRMAN. I think you would probably know something about them. But we will have to ask the State Department, when they appear, about it.

How about the anti-boycott provisions?

Secretary KREPS. Again, I don't know of any efforts. There has been wide discussion of the dilemma that we face in this regard so I know that they are aware of the problem. Whether we actually attempted to persuade our allies to join us in that effort, I don't know.

The CHAIRMAN. How about the Foreign Corrupt Practices Act? That was one in which other countries indicated that there was an alternative approach that was recommended by the Ford administration, that we try to proceed by achieving an agreement, an international agreement, and there was considerable indication of interest and support from foreign countries.

Secretary KREPS. There was a good deal of discussion and support. I had hopes early in the administration that we might be able to build upon that.

I will ask Mr. Haslam, who worked most closely with that effort, to respond.

Mr. HASLAM. There have been discussions conducted by the State Department on a multilateral basis within the framework of the Economic and Social Committee of the United Nations.

You may wish to ask Secretary Vance. There have been discussions of a possible draft convention dealing with this problem and of calling for a meeting of plenipotentiaries, in 1980.

The CHAIRMAN. There have been discussions but no agreement, no actions, and you say 1980 you expect to have some sort of formal discussion?

Mr. HASLAM. I believe the present plan is to have an international conference on the subject. I know of no coordinated international actions that have actually been taken.

The CHAIRMAN. Well, I want to thank you very, very much, Madam Secretary.

The committee will stand in recess until 2 o'clock this afternoon. Senator Stevenson will chair. I can't be here.

[Whereupon, at 12:40 p.m., the hearing was recessed, to reconvene at 2 p.m. the same day.]

[The following new material was received from Secretary Kreps for the record:]

THE SECRETARY OF COMMERCE
Washington, D.C.

Hon. WILLIAM PROXMIRE,
Chairman, Committee on Banking, Housing, and Urban Affairs,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for your letter of March 14 in which you raise several follow-up questions concerning my March 5th testimony on export controls. I apologize for the delay in responding to you.

Our response to those questions are in the enclosed binder. I have also included in this binder our responses to the follow-up questions raised by Senators Heinz and Garn in Senator Heinz' letter of March 12.

Please let me know if I may be of any further assistance with respect to this material.

Sincerely,

JUANITA M. KREPS,
Secretary of Commerce.

U.S. SENATE
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
Washington, D.C., March 14, 1979.

Hon. JUANITA M. KREPS,
Secretary of Commerce, Department of Commerce,
14th Street at Constitution Avenue, NW., Washington, D.C.

DEAR MADAM SECRETARY: During the hearing on March 5, at which you testified I indicated I would submit additional questions to be answered for the hearing record. The Committee would appreciate receiving your reply within one week in order to expedite publication of the hearing record. The questions are as follows:

1. Please provide monthly data for the past three years indicating: (a) licenses pending more than 90 days; (b) licenses pending more than 180 days; (c) licenses pending more than 360 days; (d) licenses pending more than 540 days.

2. Please provide data for each of the last three years indicating total numbers of license applications referred to each Federal agency other than the Commerce Department for review and the number of such applications not returned with comments within 30 days, plus the average time taken by each agency to review export license applications.

3. Please provide monthly data for the past three years categorizing license applications according to whether required for national security, foreign policy or short supply, with appropriate subcategories indicating whether the controlled items were subject to unilateral or multilateral control, whether controlled because the destination was Uganda, or South Africa, etc. Please indicate for each subcategory the number of licenses denied and the number which took more than 90 days from receipt to final disposition.

4. Please list all "foreign policy" controls on U.S. exports and the countries to which they apply, the authority under which they were imposed and the date on which they were imposed. Identify any "foreign policy" controls reduced or removed since January, 1977.

5. Exports of oil and gas exploration and production equipment and technology to the U.S.S.R. or any destination were being monitored without validated license requirements prior to the President's decision of August 1, 1978 to require such licensing. Any militarily significant goods or technology involved in such exports, were already subject to validated license controls. The Administration has not denied any validated licenses for exports of oil and gas exploration and production equipment and technology to the Soviet Union, but the delays entailed in obtaining such licenses may discourage U.S. exports and cause the Russians to turn to alternative suppliers.

How many such license applications have been received since August 1, 1978? Which Government agencies participate in reviewing such applications? Has any agency at any time recommended denial of any such application? If so, what agency(ies) and on what grounds? What is the average time from receipt of such applications until approval? How many applications have taken more than 90 days to approve?

6. Was the foreign availability of oil and gas exploration and production equipment and technology for export to the U.S.S.R. assessed either prior to or after August 1, 1978? Which agency or agencies of the Federal Government participated in such assessment or assessments? Did such assessment or assessments specifically conclude that such equipment and technology was *not* "available without restriction from sources outside the United States in significant quantities and comparable in quality" to that available from the United States? Did such assessment or assessments contain an estimate or estimates of the time which would be required for U.S.S.R. to produce or obtain such equipment and technology from non-U.S. sources if the U.S. were to embargo such shipments? If so, please provide the estimate or estimates?

7. Please respond in detail to each of the cases mentioned in the attached press clippings:

(a) New York Times, June 9, 1978. Why did the Administration approve sale to the P.R.C. of airborne geological survey equipment using an infrared scanning system which was not licensed for sale to the Soviet Union? Has the Administration approved the sale to the P.R.C. of an array processor which would not be licensed for sale to the U.S.S.R.? If so, why?

(b) Washington Post, November 26, 1978. Why did the Administration agree to let the French export technology for use in a Chinese nuclear power plant when such technology would not be Licensed for export from the United States?

(c) Journal of Commerce, February 12, 1979. Has the United States Government agreed to the sale by Japan of a 480-channel digital microwave communications

system? Would the United States Government license the sale by a U.S. firm of a similar system to the P.R.C.?

(d) Wall Street Journal, November 15, 1978. Would the "$3 million large scale computer" sold to the P.R.C. by Hitachi, Ltd. of Japan have been licensed for sale by a U.S. firm? Would the computer be licensed for sale to the U.S.S.R., and if not, why not?

8. Does the United States impose any export controls for national security reasons on items not controlled by CoCom but available abroad in comparable quality and quantity to U.S. items? If so, on what items for what specific purposes?

Thank you for your assistance. Your testimony has been most helpful to the Committee.

All best wishes,

Sincerely,

WILLIAM PROXMIRE, *Chairman.*

[From the Washington Post, Nov. 26, 1978]

U.S. SAYS FRANCE COULD SELL CHINESE AN A-POWER PLANT

(By Thomas O'Toole)

The White House has agreed to let France sell China an American-designed nuclear power plant if China agrees not to extract plutonium from the plant's spent fuel to use in nuclear weapons.

France is still far from reaching such an agreement with China, sources said yesterday, but negotiations between the two countries intensified in recent weeks with the hope that at least a tentative agreement can be reached before the end of the year.

Talks have been under way for at least six months between France and China on the sale of least one 900,000 kilowatt nuclear power plant. The sale would be made by the French firm Framatome, which licenses the technology to build the plant from Westinghouse Electric Corp., the world's largest supplier of atomic power plants.

Westinghouse itself cannot sell China a nuclear power plant because the Chinese would not agree to sale conditions required by the Nuclear Nonproliferation Act passed by Congress last year. That law requires that the United States be allowed to inspect all nuclear facilities operated by a country asking for an export license, to make sure plutonium is not diverted from spent fuel.

France has no such law, but it needs U.S. agreement to export the technology licensed from Westinghouse. The Carter Administration has told France that it will grant export permission only if the French can get China to guarantee that the technology will only be used for peaceful purposes.

China has been reluctant to make such promises, in part because it does not want any foreign eyes "spying" on its nuclear developments. China possesses nuclear weapons and has tested them in the atmosphere.

If France and China agree to terms that prevent plutonium extraction in the absence of inspections, the United States will probably allow the French sale. While final White House approval is based on a more complex set of conditions, the basic stumbling block is the safeguards issue.

Should France fail to get China's guarantees, then the sale of nuclear power to China could come from Canada or West Germany. Both countries are understood to be eager to sell nuclear power to China and neither is bound to licensing agreements the way France is to Westinghouse.

The French are understood to have the inside track on the sale, sources said, because the Chinese prefer the Westinghouse nuclear design over the German or Canadian designs. Presumably, China could also buy enriched uranium from France to fuel the plant. It could not from Canada or West Germany.

It is not known whether energy Secretary James R. Schlesinger discussed the sale on his recent trip to the People's Republic of China, but observers assume he did. What Schlesinger recommended to the White House on the sale, if anything, is not clear.

Opposition to the sale of nuclear power to China has come from the Pentagon and Congress. The Pentagon has opposed the sale on grounds the Chinese can copy reactor, pump and valve designs to produce nuclear-powered submarines.

Some members of Congress oppose the sale of nuclear energy to China because China still tests nuclear weapons and refuses to become party to the Nuclear Nonproliferation Treaty banning the spread of atomic weapons. China has also

shown no interest in joining the International Atomic Energy Agency which polices the spread of nuclear weapons among member nations.

China is understood to want to buy one, and probably two, nuclear plants, each capable of generating 900,000 kilowatts. At today's prices, one plant would cost at least $500 million. Just where China wants to locate nuclear powerplants is unknown.

[From the Journal of Commerce, Feb. 12, 1979]

JAPANESE SEEK TO SELL CHINA MICROWAVE UNIT

TOKYO—Japan's Ministry of International Trade and Industry (MITI) is shortly expected to seek approval of the Coordinating Committee for Export Controls to Communist Countries (CoCom) for the Nippon Electric Co. (NEC) to ship a digital microwave communications system to China.

NEC officials filed a request that MITI apply for CoCom approval after receiving an order from China's water conservancy and power ministry for the system.

Officials of MITI have explained that they expect CoCom to seriously consider giving a special go-ahead for the shipment since the large-scale system would be designed to supply the Chinese with information to be used in controlling the uitilization of river water. Apparently the 480-channel system is to transmit such information to Peking, Wuhan and Shanghai, a distance of 1,500 kilometers.

However, NEC executives are not as optimistic as MITI, pointing out that in issuing such a special permit, CoCom would have to take into consideration the fact that the system which the Chinese want far exceeds the automatic approval level of 30 channels.

[From the Wall Street Journal Nov. 15, 1978]

NATO GROUP MULLS REVISING SALES CURBS ON STRATEGIC TECHNOLOGY TO COMMUNISTS

(By Jack Aboaf)

Special to the Wall Journal

PARIS—The U.S. Europe and Japan are having second thoughts about the usefulness of the strict rules that govern the export of strategic and technologically advanced goods to Communist countries.

The Coordinating Committee on Export Controls, or CoCom, meeting for the first time in three years, is having a fresh look at the restraints in view of the considerable technological progress made by the Soviet Union and other Communist nations in recent years.

With the opening to the West of the huge Chinese market and growing competition among industrial nations, all major members are seeking relaxations from CoCom's list of about 200 restricted items.

One U.S. official said that CoCom revises its restrictive list periodically to take into account new technological advances in various fields. But "despite demands for relaxations, all members agree that certain areas of technology and equipment still need to be controlled," he said in an interview.

The Paris-based CoCom was set up at the height of the Cold War to screen the sale of strategic goods to Communist countries. Its members belong to the North Atlantic Treaty Organization, minus Iceland, plus Japan.

PROCESS IS SLOW

According to CoCom sources, Japan wants to relax restrictions on 53 items out of some 150 Japanese-made products. The U.S. and Britain have presented demands for the liberalization of more than 50 items each, but also are calling for tighter controls on others. France and West Germany each are seeking relaxation on more than 15 items.

"The process of revising the list is slow, as there are different positions and different interpretations and decisions have to be taken unanimously," the U.S. source said.

This CoCom meeting is expected to end by mid-December, but discussions are scheduled to resume in April and to continue through June.

A consensus is already emerging, however, that the origical criteria for imposing embargoes is obsolete, sources said.

The first clear signal of a policy change came from Washington last week, when U.S. Secretary of State Cyrus Vance gave the green light to NATO members to sell arms to China.

"Insofar as other nations are concerned, this is a matter which each of them must decide for itself," Mr. Vance said at a news conference, adding that the U.S. still opposes U.S. arms sales to China or the Soviet Union.

SCOUTING FOR ARMS

The Vance statement was welcomed in Europe, where Britain, France and West Germany are known to be negotiating or contemplating the sale of arms of China.

In the past few months, Chinese civilian and military missions have been scouting Europe for arms, including tanks, missiles and aircraft.

France has agreed to sell China $350 million of "defensive weapons," including antitank and antiaircraft missiles, but so far has resisted a Chinese request for 50 Mirage jet fighters, reportedly under pressure from the Soviet Union.

Britain is discussing the sale of some 80 Harrier vertical takeoff jets, plus the possible production of several hundred more under license in China. Germany also is considering the sale of tanks and other weapons to China.

CoCom sources warned, however, that the new U.S. position shouldn't be taken for granted, and that the sale of some of the weapons to China would still have to be approved by CoCom.

Current discussions within CoCom also involve, the sale of nonmilitary sophisticated equipment to China and the Soviet Union, such as large computers, nuclear power plants and offshore drilling and coal-mining equipment.

Hitachi Ltd. of Japan is said to have received CoCom approval to ship a $3 million large-scale computer to China, while Nippon Electric Co. announced the conclusion of a $16 million order for computer systems and television relating facilities from the Soviet Union for the Moscow Olympics in 1980. Nippon Steel Co. also is waiting for approval for the sale of a computer to China for use at a steel plant.

Control Data Corp. said earlier this month that it had received U.S. government permission to make its computerized "Technotec" data services available to the Soviet Union and Eastern Europe.

France is negotiating the sale of a 900,000 kilowatt nuclear plant to China based on the pressurized water reactor technology developed by Weshinghouse Electric Corp., while both France and Germany are hoping to sell offshore drilling and coal-mining equipment to China.

"Such items wouldn't have made CoCom's agenda a few years ago, let alone getting its approval," one source remarked.

As usual, CoCom's revised and highly technical lists aren't published offically. However, each member country is free to do so.

[From the New York Times]

U.S., in Reversal, Will Sell China Equipment Withheld From Soviet

(By Bernard Weinraub)

Washington, June 8—The Carter Administration, in a review of the export of military-related technology to China, is preparing to approve the sale of some equipment in an effort to improve relations.

Officials said the United States had quietly agreed to a Chinese request for airborne geological survey equipment using an infrared scanning system, which it will not sell to the Soviet Union because of potential military uses.

The United States is also considering approving the sale of another piece of geological surveying equipment known as the array processor. The potential sale of this equipment has stirred a debate within the Pentagon because it may improve China's capacity for antisubmarine warfare. The array processor can be used to detect submarines, but its basic civilian application is in geological exploration of the ocean bed. (Details Page A5.)

DECISION FOLLOWS BRZEZINSKI VISIT

The decision to step up the sale of military-related technology to China follows the visit to Peking last month of Zbigniew Brzezinski, President Carter's national security adviser.

During the visit, the United States delegation discussed the transfer of technology to assist China's modernization campaign. The group included Morton I. Abramowitz, an Asian specialist in the Defense Department who was recently

named Ambassdor to Thailand, and Benjamin Huberman, assistant director of the Office of Science and Technology Policy at the White House.

The issue of technology sales to China is highly sensitive because of its possible impact on relations with the Soviet Union. The United States Government has been divided on the issue, and two policy studies over the last five years have failed to resolve the problem.

Although officials at the White House, State Department and Pentagon were reluctant to discuss the sales, one Government source said of relations with China: "The atmosphere has changed, the atmosphere has improved. The Brzezinski trip obviously helped."

On the Chinese side, officials said, there has been considerable "mellowing and relaxing" since the death of Mao Tse-tung in 1976 in accepting Western proposals involving technology.

One source said the Chinese has been, until last year, "very prickly about national sovereignty," and often refused to accept restrictions placed on companies exporting defense-related technology.

Over the past year, however, Peking has admitted more foreign technicians and has indicated that it would relax its opposition to such restrictions. These include limits on the modification of various equipment, provisions that curb the expansion of computer uses and reports from the companies on how the equipment is being used.

The American decision to sell the airborne geological exploration equipment is a reversal of a decision made before Mr. Brzezinski's visit. In early May, the Government informed the exporting company, Daedalus Enterprises Inc., of Ann Arbor, Mich., that the $2.8 millions sale would be rejected because of the potential military uses of the equipment, which is largely used for exploring for oil.

The equipment involves infrared scanning devices that are placed on planes to detect heat, light and moisture impulses from the ground. The signals are transmitted into magnetic tape recorders, and eventually fed into a computer.

TECHNICAL REASONS CITED FOR DECISIONS

Government sources said that the initial request had been rejected "for technical reasons," and the decision had been reversed also "for technical reasons." But the reversal came about after Mr. Brzezinski's visit to Peking, where Chinese officials said they needed the equipment.

Government sources said the equipment would not be sold to the Soviet Union because of its "more advanced technical state." Sources said the magnetic tape recorders could be potentially useful to military intelligence.

EQUIPMENT FOR CHINA DESIGNED TO ANALYZE A VARIETY OF SIGNALS

(By Malcolm W. Browne)

The technology President Carter reportedly is considering selling to China is based on the ability of computers to extract information from a confused jumble of signals.

The infrared scanning system manufactured by Daedalus Enterprises, Inc., of Ann Arbor, Mich., which the company expects to sell to China, is essentially a television system.

All objects radiate infrared light in direct proportion to the heat they contain. Even a block of ice is hot compared with the temperatures in deep space that approach absolute zero, and it radiates infrared light. This light cannot be seen, but it can be focused with curved mirrors into an invisible image that an electronic sensing tube can perceive.

Electrical signals from the tube are tape-recorded and played back on a kind of television screen, on which they form patterns of heat. These images, photographed from the air, display a thermal picture not only of the ground but also of features beneath its surface.

Earthquake faults can be quickly spotted in such images. These faults have been extensively surveyed in California using equipment similar to that to be sold to China.

Alan K. Parker, president of Daedalus Enterprises, said the technology of the device had been in service for at least 20 years, and no secrets were involved, though the recording of the infrared images is complicated. He said the Chinese became interested in his system after their country suffered a disastrous earthquake two years ago.

The other device that the White House is considering selling to China, called an array processor, is considerably more complicated, however.

Array processing combines very weak signals received from many different sensors, adds them all together, subtracts noise that is mixed with them and produces usable information. Its technology is said to be public knowledge, but its success depends on the versatility and power of the computers used to process information.

RESPONSE TO QUESTIONS OF SENATOR PROXMIRE

Question 1. Please provide monthly data for the past three years indicating: (a) licenses pending more than 90 days; (b) licenses pending more than 180 days; (c) licenses pending more than 360 days; (d) licenses pending more than 540 days.

Answer. Monthly data on cases pending 90 days for 1976, 1977 and 1978 are shown in the Table below:

	1976	1977	1978
January	99	98	77
February	72	58	144
March	76	79	134
April	40	59	124
May	70	59	161
June	41	60	150
July	38	108	193
August	40	88	80
September	59	95	331
October	33	66	312
November	50	145	202
December	71	117	80
Total	689	1,032	1,988

We do not currently compile monthly data on licenses pending for 180 days, 360 days or 540 days.

Question 2: Please provide data for each of the last three years indicating total numbers of license applications referred to each Federal Agency other than the Commerce Department for review and the number of such applications not returned with comments within 30 days, plus the average time taken by each agency to review export license applications.

Answer: We have not in the past compiled monthly data on cases sent to each separate Federal agency and subsequently cleared by them. We do have data on the total number of interagency clearances, as shown in the table below.

TOTAL NUMBER OF INTERAGENCY CLEARANCES

	Fiscal year		
	1976	1977	1978
Communist countries	N/A	2,001	2,435
Free World countries	2,550	3,813	5,292

We recently instituted a monthly "tickler" system for notifying other agencies that they have had certain cases under their review for 30 days or more. The 30 day reports for March and April are attached, and a summary is shown below:

TOTAL NUMBER OF CASES HELD IN AGENCIES 30 DAYS OR MORE

	DOD	DOE	DOS
1979:			
March	99	42	[1] 12
April	111	55	101

[1] Communist country cases only.

We are also keeping track of how long it takes the other agencies to clear overdue cases after notification. A table is attached showing how many cases from the March report had been cleared by April 24.

INTERAGENCY CLEARANCES OF CASES ON MARCH REPORT

	Total as of March	Cleared as of April 14	Percent
Department of Defense	[1] 99	37	37.4
Department of Energy	[1] 42	11	26.2
Department of State	[1] 8	5	62.5
Total	[1] 149	53	35.6
March cases remaining to be cleared as of April 14	[2] 96		

[1] Cases pending over 30 days.
[2] These cases are included in the cumulative monthly count of cases pending on other agencies.

Question 3. Please provide monthly data for the past three years categorizing license applications for national security, foreign policy or short supply, with appropriate subcategories indicating whether the controlled items were subject to unilateral or multilateral control, whether controlled because of destination, etc. Please indicate for each subcategory the number of licenses denied and the number which took more than 90 days from receipt to final disposition.

Answer. We do not have monthly data on the number of cases falling into different policy areas, but we do have yearly data on these categories. The attached Table 1 presents that data.

We do not have data on processing time for cases in different areas of policy review. However, we have attached Table 2 showing the number of cases which required over 90 days to approve broken down by bloc and free world destinations for 1977.

TABLE 1—TOTAL CASES PROCESSED IN THREE MAJOR POLICY AREAS—1976–78

[Calendar years]

	1976	1977	1978
National security policy review:			
Unilateral	N.A.	2,385	
Multilateral	N.A.	1,485	5,177
Total		3,870	
Short supply policy review:			
Unilateral	N.A.	2,405	2,730
Multilateral	N.A.	82	96
Total	994	2,487	2,826
Foreign policy review:			
Unilateral	1,090	1,171	1,457
Multilateral	2,857	3,126	4,947
Total	3,947	4,843	6,404
Including:			
Nuclear	1,904	2,088	1,916
Human rights	594	455	1,681
Middle East	177	93	390
Oil and gas			81
Exemptions to embargoes	131	160	19
Missiles & space	51	330	860

Question 4. Please list all "foreign policy" controls on U.S. exports and the countries to which they apply, the authority under which they were imposed and the date on which they were imposed. Identify any "foreign policy" controls reduced or removed since January, 1977.

Answer. Attached is the information requested, broken down by major programs.

FOREIGN POLICY CONTROLS EXERCISED BY THE DEPARTMENT OF COMMERCE

Program	Authority	Year imposed	
Human Rights:			
South Africa.	Export Control Act of 1949, section 2(b).	1963	Unilateral controls on CCL items that would contribute to implementation of South African racial policies.
	Export Administration Act of 1969, section 3(2)(B).	1978	Embargo all shipments to or for use by or for military and police of South Africa and Namibia.
Rhodesia..	Export Control Act of 1949, section 2(b) (Executive Order 11322, January 5, 1967).	1968	Near total embargo (which was reached after earlier selective controls).
Uganda....	Public Law 95–435, October 10, 1978, amended; Export Administration Act of 1969.	1978	Embargo, except for foodstuffs.
Crime control and detection equipment.	Export Administration Act of 1969, section 3(2)(B).	1974	Controls to Communist countries.
	.....do	1977	Controls to South Africa and Namibia.
	.....do	1978	Controls to remainder of world except NATO members, Australia, New Zealand, and Japan.
Other human rights cases.	Export Administration Act of 1969, section 3(2)(B).	1977	Controls to law enforcement establishments of free world countries (Relaxed to exclude NATO members, Australia, New Zealand, and Japan 1978).
Oil and gas exports to U.S.S.R.	Export Administration Act of 1969, section 3(2)(B).	1978	Control on exports of oil and gas equipment to U.S.S.R.
Embargoed Communist Countries:			
North Vietnam.	Export Control Act of 1949, section 2(b).	1958	Near total embargo.
All Vietnam and Cambodia.	Export Administration Act of 1969, section 3(2)(B).	1975	Near total embargo.
North Korea.	Export Control Act of 1949, section 2(b).	1958	Near total embargo.
Cuba	Export Control Act of 1949, section 2(b), Presidential Proclamation 3447.	1962	Near total embargo (which was reached after earlier selective controls and relaxed slightly in 1975).
Nuclear Nonproliferation:			
All countries.	Export Control Act of 1949, section 2 (b) and (c).	1950	
	Public Law 95–242, March 10, 1978.		(Nuclear Nonproliferation Act).
Regional Hostilities: [1]			
Israel and Arab States.[2]	Export Control Act of 1949, section 2(b).	1967	Commodities that would contribute to tension in the area.
Antiterrorism:			
Iraq, Libya, and PDR-Yemen.	Export Administration Act of 1969, 1977 amendment, section 3(8).	1978	

FOREIGN POLICY CONTROLS EXERCISED BY THE DEPARTMENT OF COMMERCE—Continued

Program	Authority	Year imposed	
Offensive Weapons Systems:			
India.....	Export Administration Act of 1969, section 3(2)(B).	1974	Slight relaxation in 1978.
South Korea.	Export Administration Act of .... 1969, section 3(2)(B).	1975	
Taiwan	Export Administration Act of 1969, section 3(2)(B).	1977	

[1] Monitoring or surveillance of proposed exports to countries that from time to time become involved in domestic or regional tensions may result in controls that are eventually removed. At present, monitorings in effect for Angola, Mozambique, Ethiopia, Somalia.

[2] Arab countries are: Algeria, Egypt, Iraq, Jordan, Kuwait, Labanon, Libya, Mauritania, Morocco, Saudia Arabia, Sudan, Syria, Tunisia; both Yemens, Abu Dhabi, Oman Muscat, and the Emirates.

Question 5. Exports of oil and gas equipment to the U.S.S.R. or any destination were being monitored without validated license requirements prior to the President's decision of August 1, 1978. Any militarily significant goods or technology involved in such exports were already subject to validated license control. The Administration has not denied any validated licenses for exports of oil and gas equipment to the Soviet Union, but the delays entailed in obtaining such licenses may discourage U.S. exports and cause the Russians to turn to alternative suppliers.

(*a*) How many license applications have been received since August 1, 1978? (b) Which Government agencies participate in reviewing such applications? (c) Has any agency at any time recommended denial of any such application? (d) If so, what agency(ies) and on what grounds? (e) What is the average time from receipt of such applications until approval? (f) How many applications have taken more than 90 days to approve?

Answer. (*a*) Soviet Oil/Gas Cases received since August 1, 1978, 113. Dollar value of these cases, $368 million. (*b*) Commerce, Depts. of Defense, Energy, State, Treasury, National Security Council and CIA. (*c*) and (*d*). No agency has taken a final position of denial to date. (*e*) Average length of time to approve from time of submission into OEA has been 46.8 days. (*f*) Twenty three applications have required more than 90 days to process.

Question 6: Was the foreign availability of oil and gas exploration and production equipment and technology for export to the U.S.S.R. assessed either prior to or after August 1, 1978? Which agency or agencies of the Federal Government participated in such assessment or assessments? Did such assessment or assessments specifically conclude that such equipment and technology was *not* "availabale without restriction from sources outside the United States in significant quantities and comparable in quality" to that available from the United States? Did such assessment or assessments contain an estimate or estimates of the time which would be required for U.S.S.R. to produce or obtain such equipment and technology from non-U.S. sources if the U.S. were to embargo such shipments? If so, please provide the estimate or estimates.

Answer: Export controls were placed on oil and gas equipment sales to the U.S.S.R. on August 1 for foreign policy purposes. Before that decision was implemented, various assessments of foreign availability were made but no firm Administration conclusions were reached about whether the items made subject to control were available from foreign sources. Various estimates were made concerning the time it would take the U.S.S.R. to acquire the controlled equipment and technology from non-U.S. sources, but none of those assessments are definitive.

As part of the review of specific license applications conducted under the Soviet oil and gas equipment regulations, foreign availability is considered as one of the factors in those license reviews.

Question 7(a): Why did the Administration approve the sale to the PRC of airborne geological survey equipment using an infrared scanning system which was not licensed for sale to the Soviet Union? Has the Administration approved the sale to the PRC of an array processor which would not be licensed for sale to the U.S.S.R.? If so, why?

Answer: We have a policy of evenhanded treatment for China and the Soviet Union. That policy does not mean that what we would approve for China would necessarily be approved for the Soviet Union, or that what we deny for China would necessarily be denied for the Soviet Union.

Rather, each case is decided on its individual merits, after a careful examination of the proposed transaction from the standpoint of its potential military significance, its appropriateness for the stated end-use, the risks of diversion, and the consequences of diversion should that occur.

Airborne geological survey equipment to which you refer probably would have been denied for the U.S.S.R.

It was decided that PRC could not exploit the strategic capabilities of the survey equipment in the way the Soviets could have done. This is an example of the case-by-case evaluation necessary in reviewing transfers of technology to the U.S.S.R. and the PRC.

Array transform processors for seismic exploration work have been approved to both the PRDC and the U.S.S.R. There have not been any exports approvals for the PRC which would not have been approved to the U.S.S.R.

Question 7(b): Why did the Administration agree to let the French export technology for use in a Chinese nuclear power plant when such technology would not be licensed for export from the United States?

Answer: The Administration agreed to the recent French sale of technology to the PRC only after being satisfied that the two principals had adequately provided for peaceful use and safeguard assurances. The sale furthered French and Chinese cooperation with the U.S. in certain nuclear matters, and thereby served important foreign policy objectives.

Under the U.S. Atomic Energy Act, most U.S. exports of similar equipment to the PRC are now prohibited. The French transaction was not subject to the provisions of that Act.

Question 7(c): Has the United States Government agreed to the sale by Japan of a 480 channel digital microwave communications system to China? Would the USG license the sale by a U.S. firm of a similar system to the PRC?

Answer: The U.S. Government agreed to the Japanese sale of a 480 channel digital microwave communications system to the PRC only after receiving assurances regarding the end-use and non-transfer of the equipment.

The export of such technology to the PRC by a U.S. firm would be reviewed under the same criteria. The particular merits of the case would determine its approval or denial.

Question 7(d). Would the "$3 million large-scale computer" sold to the PRC by Hitachi, Ltd. of Japan have been licensed for sale by a U.S. firm? Would the computer be licensed for sale to the U.S.S.R., and if not, why?

Answer. Our evenhandedness policy for China and the Soviet Union does not necessarily require that what is approved or denied for the other. Rather, each case is decided on its merits, giving special consideration to potential military significance, appropriateness for end-use, risks of diversion, and the consequences should diversion occur.

The Japanese Hitachi computer went to the Chinese weather bureau. A U.S. firm wishing to export a similar computer to the PRC would have to submit an application for a validated license. This application would be carefully reviewed on the basis of the above criteria. It must be remembered that the U.S. computer would not necessarily have the same configurations as the Japanese computer, or be intended for the same end-use.

Any U.S. applications to export large computers to the Soviet Union would be reviewed using the same criteria as above. It is impossible to state definitely whether an application would or would not be approved without reviewing the proposed contract.

Question 8. Does the U.S. impose any export control for national security reasons on items not controlled by COCOM but available abroad in comparable quality and quantity to U.S. items? If so, on what items for what specific purposes?

Answer. Yes, there are a few entries on the Commodity Control List that are controlled for national security reasons even though available abroad. Some such entries have been added to the list pending U.S. attempts to achieve multinational controls in the current COCOM list review. Success in that attempt will reduce foreign availability. Should we be unsuccessful, we will review the need for maintaining controls unilaterally. Examples are flat bed microdensitometers and multispectral image processors, which have significant military and nuclear weapons program uses.

Certain other entries are "baskets" that include a large number of products, many not precisely defined. These baskets are retained to assure that nothing detrimental to U.S. national security is exported. As specified products are identified as nonstrategic, they are removed from these basket entries and decontrolled.

Entries retained in spite of foreign availability include water tube boilers for naval vessels; nonmagnetic diesel engines; compressors, fans, and blowers specially designed for military use; and pressure tubes designed for naval nuclear propulsion. All of these warrant continued control to all destinations because of exclusively military use. In addition, certain fluorocarbons available abroad are retained under control to Communist countries because of uranium enrichment and other significant nuclear uses.

The Department recently issued a report, required by Section 118 of the Export Administration Amendments of 1977, of a review of Both multilateral and unilateral controls. That report listed each of the unilaterally controlled entries and the reasons for retaining them. The section of the report dealing with unilateral controls is attached.

UNCLASSIFIED

Unilateral Review Actions

1. Decontrol actions

The review has resulted in the finding that the commodities covered by the Commodity Control List entries identified below no longer have the capability of contributing significantly to the military potential of other nations to the detriment of U.S. national security and should be decontrolled. Although the commodities will not be under control for national security reasons, and the relevant entries will no longer appear as specific entries on the Commodity Control List, the commodities will remain under control, under other entries, for foreign policy reasons to implement the United States embargo policy toward Southern Rhodesia, Uganda, Cuba, North Korea, Vietnam and Cambodia.

4544B (QSTVWYZ) Semiconductor diodes and thyristors, n.e.s., having a bulk material other than selenium or copper oxide, as follows:

(*a*) Bulk effect devices and oscillator diodes used for the direct conversion of DC to RF power designed or rated for use at output frequencies greater than 300 MHz but not exceeding 1 GHz;

(*b*) Fast recovery diodes having a rated maximum reverse recovery time of less than 2 nanoseconds but not less than 1 nanosecond;

(*c*) Tunnel diodes having both of the following characteristics: (i) a resistive cut-off frequency (F_{RO}) of 20 GHz or less, and (ii) a maximum reverse recovery time of 1 nanosecond or greater; and

(*d*) Parts and accessories therefor. (Announced in Export Administration Bulletin No. 188, dated September 26, 1978.)

4545B (QSTVWYZ) Transistors, n.e.s., having any of the following characteristics:

(*a*) Germanium types having either:

(1) An average f_t in MHz, or

(2) A product of the average f_t in MHz and the maximum collector dissipation in Watts exceeding 1.000;

(*b*) Silicon types having any of the following characteristics:

(1) An average f_t greater than 700 MHz up to and including 2000 MHz;

(2) A product of the average f_t in MHz and the maximum collector dissipation in Watts exceeding 350 up to and including 3000, or

(3) Field effect transistors encapsulated in nonhermetically sealed cases and having a maxumum power dissipation of 500 mW or less and a maximum operating frequency of 250 MHz or less; and

(*c*) Parts and accessories therefor. (Announed in Export Administration Bulletin No. 188, dated September 26, 1978.)

5673D (QSWYZ) Other artificial graphite, whether or not coated or composited with other materials to improve its performance at elevated temperatures or to reduce its permeability to gases, having an apparent relative density of 1.70 or greater when compared to water at 60°F (15.5°C), and with a particle grain size of less than 0.001 inch (1 mil).

4715B (QSTVWYZ) Polyethylene film, sheeting, laminates, or wax containing any boron.

5715D (QSWYZ) Boron n.e.s.

5780E (SWYZ) Prepared additives for synthetic lubricants.

6799D (QSWYZ) Chemicals, as follows:

Organic coal tar and other cyclic chemical intermediates, as follows:
N-Allyl-morpholine; PTH (PTC-S-Aminoethyl) cysteine;
3-(2-aminoethyl) indole hydrochloride;
N, N-Bis(trimethylsilyl) acetamide;
1-Cyclohexyl-3-(2-morpholinoethyl)-carbodiimide
metho-p-toluenesulfonate; Diisopropylbenzene hydroperoxide;
Dimethyl adipimide dihydrochloride; and
p-(p-Ethoxybenzylidene)-amino benzonitrile.

Synthetic organic medicinal chemicals, in bulk, except mixtures and compounds, as follows:
p-Nitrophenyl-B-D-glucuronide.

Organic chemical plasticizers, as follows:
Methyl caproate (methyl hexanoate); Monoglycerides;
Triglycerides; and 2,2,4-Trimethyl-1,3-pentanediol di-isobutyrate.

Miscellaneous organic industrial and other organic chemicals, excluding cyclic, as follows:
Bis(2-ethylhexyl) peroxydicarbonate; di(sec-Butyl) peroxydicarbonate; 1,4-Bis-2(5-phenyloxazolyl) benzene;
Diethylene glycol adipate; Diethylene glycol succinate;
Dimenthyl aluminum chloride; N,N-Dimenthylbenzylamine;
1-Ethlyl-2- 3(1-ethylnaphtho 1,2d -thiazolin-2-ylidene)-2-methyl-propenyl naphtho 1,2d thiazolium bromide; Glycocholic acid (cholylglycine); and Tri-n-ocytaluminum.

Other inorganic chemicals, n.e.s., as follows:
Antimony pentafluoride; Barium fluoride; and Potassium fluoride. (Announced in Export Administration Bulletin No. 183, dated July 5, 1978.)

4801B (QSTVWYZ) Articles of vulcanized and unvulcanized rubber made of fluorinated elastomeric material.

2. New control actions

As part of its continuing review to keep pace with new technological developments, the following entries have been added to the Commodity Control List for national security reasons:

4589B (QSTVWYZ) Flat-bed microdensitometers, image digitizers, or multispectral remote sensing devices, *except drum type or cathode ray tube type microdensitometers,* having *any* of the following capabilities:
(*a*) A recording rate or scanning rate exceeding 100 data points per second;
(*b*) A density resolution greater than .02 in density units;
(*c*) A spatial resolution smaller than 100 microns at the specimen; or
(*d*) An optical density range greater than 0–3; and
(*e*) Parts, components, and assemblies therefor.

4590B (QSTVWYZ) Multispectral image processing systems or digital image display enhancement equipment which provide or accept signals of sufficient composite information that when connected to an optical display device will have *all* of the following capabilities:
(*a*) Image construction of at least 60 Raster lines (i.e., 60x60 resolvable elements, 60x60 resolution cells or Pixels, or 60x60 images);
(*b*) Each image element is capable of being displayed in at least 16 different shades of color or gray; and
(*c*) The system has conversion and synchronization circuitry suitable for driving a TV monitor, storage display, graphic memory, memory refreshment, or other type of optical display devices; and
(*d*) Parts, components, and assemblies therefor.

The equipment covered by these two entries have significant military applications. The devices also are used in a variety of applications in direct support of nuclear weapons programs. These two entries were added to the Commodity Control List in late 1977 as unilaterally controlled items pending submission to COCOM for consideration as additions to the multilateraly controlled list of commodities. They are being retained under unilateral control pending the outcome of the COCOM negotiations. They will be reviewed again should these negotiations fail.

3. Retention of controls

Commodities covered by the following entries have been found to require continued control for national security reasons. The reason for retention follows each entry or group of entries.

4203B (QSTVWYZ) Electric furnaces specially designed for the production or processing of vapor deposited (pyrolytic) graphite or doped graphites, whether as standing bodies, coatings, linings, or substrates; and parts and accessories and attachments, n.e.s.

Pyrolytic graphite furnaces are used in the manufacture of components having significant aerospace and nuclear applications as well as some peaceful uses. The most important graphite forms produced are rocket nozzles and combustion chamber linings, rocket nose cones, and nuclear reactor components. Available information indicates that the United States retains control over pyrolytic graphite production technology, especially for aerospace and nuclear applications. Because these furnaces have significant application in the development and production of components required in military hardware and there is a high degree of unilateral control, this item is retained under validated license control to all destinations.

4240B (QSTVWYZ) Particle accelerators having *all* of the following specification:

(*a*) Peak beam power exceeding 500 megawatts,

(*b*) Output energy exceeding 500 kilovolts, and

(*c*) An output beam intensity exceeding 2000 amperes with a pulse width of 0.2 microsecond or less, and

(*d*) Specially designed parts and accessories therefor.

The particle accelerators covered by this entry are used in nuclear weapons laboratories for applications such as simulation of nuclear blasts. The accelerators also incorporate flash discharge type X-ray systems that are under multilateral COCOM control. While particle accelerators are produced outside the United States, they do not have all of the specifications stated in this entry. Because of the nuclear weapons applications and the lack of full foreign availability, as well as the fact that the accelerators incorporate a multilaterally-controlled component, this entry is being retained on the Commodity Control List without change.

4409B (QSTVWYZ) Water tube boilers, marine type, designed to have a heat release rate (at maximum rating) equal to 180,000 BTU, up to but not including 190,000 BTU per hour per cubic foot of furnace volume; boiler superheaters, feedwater heaters, and economizers therfor; and parts and accessories therefor.

Designed to military specifications for enhanced performance, the boilers and accessories covered by this entry are used almost exclusively in naval noncombatant auxiliary vessels, such as fast support ships for the combat vessels, submarine tenders, ammunition, and attack cargo ships. Such steam generation equipment is not normally used in commercial vessels. Although all major industrial powers supporting a naval service are capable of producing similar equipment, its heavy military use warrants retention of this entry on the Commodity Control List.

4431B (QSTVWYZ) Other marine propulsion steam turbines specially designed for naval use; and parts and accessories, n.e.s.

Designed to meet special technical specifications for enhanced performance, these naval propulsion units are almost exclusively installed in fast noncombatant naval vessels used to support combat ships. Such turbines are not normally used in commercial vessels. All the major industrial nations that support a naval force are capable of producing similar equipment. However, specialized U.S. design and metallurgical know-how are believed to preclude foreign supply of turbines totally comparable to those of U.S. design. This entry, therefore, is retained on the Commodity Control List without change.

5406D (QSWYZ) Diesel engines, nonmagetic, 50 brake horsepower and over, having a nonmagnetic content exceeding 50 percent, up to but not exceeding 75 percent of total weight; and parts and accessories, n.e.s.

The nonmagnetic diesel engine was developed as a special power unit for use in minesweeping craft. The nonmagnetic characteristic, while absolutely necessary for protection from magnetic influence mines, is economically unattractive in commercial use. While such engines can be manufactured in most industrial nations, they are produced only in response to naval service procurement requests. Because of the specialized military application of these engines, the entry is retained on the Commodity Control List without change.

5431D (QSWYZ) Compressors, fans, and blowers, any type, specially designed or modified for military or naval shipboard use; and parts and attachments, n.e.s.

The commodities covered by this entry are gas and fluid moving devices whose performance has been specially enhanced to meet military or naval requirements. There are few, if any, civilian applications. Although produced abroad, their specialized use in naval ships, combat vehicles, missile systems, and other military applications is overriding. The entry, therefore, is retained on the Commodity Control List without change.

4460B (QSTVWYZ) Non Military air craft and helicopters, aeroengines, and aircraft and helicopter equipment, as follows:

(*a*) Other jet, turbo prop, turbo/shaft, and gas turbine aircraft engines, as follows:

(1) Under development for nonmilitary use, experimental or non-certificated, or

(2) Certified engines which have been in civil use for 3 years or less, and

(3) Parts and accessories, n.e.s. therefore and

(*b*) Parts and accessories, n.e.s., specially designed for nonmilitary:

(1) Helicopters over 10,000 pounds weight; or

(2) Helicopters 10,000 pounds or less empty weight or fixed wing aircraft, of types which have been in normal civil use and containing one or more of the items listed in entry No. 1485 or 1501, or Supplement No. 2 to Part 370.

The aircraft engines covered by this entry are retained under full destinational control because many aircraft engines used in the civil sector are based on the advanced technology used in the production of military engines. Information obtained from the engines, such as design scheme, physical characteristics of components, and materials chemistry, could reveal technological advancements in U.S. military engines and thus diminish the western technological lead in this area. The engines covered by part (a)(2) of this entry are limited to those in civil use for three years or less, because after that period of time the above noted technology would in all likelihood be assimilated by the aircraft industry in the restricted destinations.

The commodities covered by Part (b) of this entry are retained under full destinational control because they are airframe parts for aircraft under multilaterial control. These controls are retained to protect any emerging technologies relevant to advanced air frame construction.

5510c (QSWYZ) Doppler sonar navigation equipment; and parts and accessories therefor.

Doppler sonar navigation equipment is used primarily for marine and submarine navigation. When coupled with a digital computer, gyrocompass, satellite receiver, and auxiliary sensors, it creates a high precision integrated navigational system. Such systems have important military applications on naval surface vessels and in submarines, in deep submergence vehicle programs, and in anti-submarine warfare. There is very limited foreign production, and comparability to the U.S. equipment is questionable. In view of the potential military uses and the limited foreign availability, the entry is retained on the Commodity Control List without change.

4529B (QSTVWYZ) Other instruments, n.e.s., for measuring indicating, recording, testing, or controlling electronic, electric, or the electric quantities that incorporate digital computers defined.

This entry is a "basket" that covers physical and electrical properties measuring instruments containing computers or computing elements. These instruments are included in a U.S. proposal for multilateral controls that is currently being considered in the COCOM List Review. It will be reviewed again should the COCOM negotiations fail.

4541B (QSTVWYZ) Other cathode ray tubes with micro-channel plate electron multipliers; and specially designed parts and accessories, n.e.s.

14568B (QSTVWYZ) Electronic devices utilizing analog to digital conversion techniques capable of analyzing transients by sequentially sampling single input signals at successive intervals of less than 50 nanoseconds; and parts and accessories therefor.

4584B (QSTVWYZ) Cathode ray oscilloscopes, associated plug-in units, and external amplifiers and pre-amplifiers containing or designed for the use of cathode ray tubes with microchannel plate electron miltipliers; and parts and accessories, n.e.s.

The electronic instruments and devices covered by these three entries have significant nuclear applications and have been recommended for multilateral control in the current COCOM List Review. They are retained under unilateral control pending the outcome of the COCOM negotiations. They will be reviewed again should these negotiations fail.

5585D (QSWYZ) Photographic equipment, as follows:

(*a*) Other high speed continuous writing, rotating drum cameras capable of recording at rates in excess of 21,000 frames per second, and parts and accessories, n.e.s; and

(*b*) Other 16 mm high speed motion picture cameras capable of recording at rates in excess of 2,000 frames per second, and parts and acessories, n.e.s.

These high speed cameras are used primarily in the areas of ballistics, missile and aircraft development. There is no information presently on indicating that comparable cameras are produced abroad. In view of the strategic used and lack of demonstrated foreign availability, this entry is retained on the Commodity Control list without change.

5596D (QSWYZ) Capacitance strain gauges designed for operation at temperatures of +600° F and over; and parts and accessories therefor.

Capacitance strain gauges, covered by this entry are used in weapons system development, missiles, spacecraft engines and military aircraft engines. They have been developed and produced in the U.S. under military contract and have very limited civilian uses. The one capacitance strain gauge known to be produced abroad is only marginally comparable. Therefore, this entry is being retained on the Commodity Control List without change.

4601B (QSTVWYZ) Aircraft landing mats.

The landing mats covered by this entry are portable and are used almost exclusively for the military, and the patent rights are held by the U.S. Navy. The Department has no evidence of foreign availability. Accordingly, this entry is retained on the Commodity Control List without change.

4635B (QSTVWYZ) Pressure tube, pipe, and fittings therefor, of 8 inches or more inside diameter, having a wall thickness of 8 percent of more of the inside diameter and made of:

(*a*) Stainless steel,

(*b*) Copper-nickel alloy, or

(*c*) Other alloy steel containing 10 percent or more nickel and/or chromium.

The commodities in this entry are used in naval nuclear propulsion applications. They are specialty items not in general commercial use. The Department of Energy urged continued control pursuant to the U.S. government's naval nuclear propulsion policy. Therefore, the entry is retained on the Commodity Control List without change.

4707B (QSTVWYZ) (a) Chemicals, as follows:

(1) Beta-diethylaminoethyl diphenylpropylacetate hydrochloride,
(2) 2-Chloro-10-(3-dimethylaminoproply) phenothiazine,
(3) 2-Chlorophenothiazine,
(4) 2-Cyanoacetamide,
(5) 2-Dicyclohexylcarbodimide,
(6) Diethylmethylphosphonite,
(7) Dihydrodibenzazepine,
(8) Dihydrodibenzocycloheptene,
(9) 10, 11-Dihydro-N, N-dimethyl-5H-dibenzo (a,d) cycloheptent delta 5, gamma-propylamine,
(10) 2-Diisopropylaminoethanol,
(11) Diisopropylcarbodiimide,
(12) 5-(3-(Dimethylamino)-2-methylpropyl)-10, 11-dihydro-5H-dibenz (b,f) azepine,
(13) Dimethylamino propylchloride hydrochloride,
(14) 5-(3-Dimethylaminopropyl)-10, 11-dihydro-5H-dibenz (b,f) azepine,
(15) 10-(3-Dimethylaminopropyl)-2
(16) Dimethyl hydrogen phosphite,
(17) Di-o-toyl carbodiimide,
(18) Diisopropylaminoethylchloride hydrochloride,
(19) Ethylphosphonothioic dichloride,
(20) Ethylphosphonous dichloride,
(21) Lysergic acid diethylamine,
(22) Malononitrile,
(23) Methylbenzylate,
(24) Methyldichlorphosphine,
(25) Methylisonicotenate,
(26) Methylphosphonothioic dichloride,
(27) Methylphosphonous dichloride,
(28) Methylphosphonyldichloride,
(29) N, N-diethylethylenediamine (diethylaminoethylamine),
(30) Orthochlorobenzaldehyde,
(31) Phenothiazine,
(32) Piperidine carboxyl acid,

(33) n-Propylphosphonous dichloride,
(34) 3-Quinuclidinol,
(35) 3-Quinuclidinone,
(36) 2-Trifluoromethylphenothiazine, and
(37) 4-(3-(2-Trifluoromethyl) phenothiazine-10-yl)propyl)-1-piperazine ethanol.

(*b*) Synthetic organic agricultural chemicals, as follows:

(1) Alkyl aryl carbamates (including isopropyl N-phenylcarbamate and isopropyl N-(3-chlorophenyl)-carbamate),
(2) Aminochloropicolinic acid and its salts and esters,
(3) Bromoalkyl pyrimidines,
(4) Cacodylic acid,
(5) Chlorophenoxyacetic and chlorofluorophenoxyacetic acids and their salts and esters, and
(6) Herbicidal or antiplant preparations containing one or more of the above in amounts totaling, alone or in combination with another, 80 percent or more by weight.

The chemicals in part (a) of this entry are important precursors for the preparation of chemical warfare agents. There is no evidence of foreign availability of production quantities. While there are some civilian uses for some of these chemicals; e.g., as laboratory research reagents and as intermediates in pharmaceutical production, their potential for use in the development of chemical warfare agents makes them militarily significant. The commodities covered by part (b) are chemical warfare (CW) agents, their agricultural uses notwithstanding. While it is believed that some of the chemicals are produced abroad, full comparability has not been established. Accordingly, this entry is retained on the Commodity Control List without change. It should be noted, however, that the percentage cut-off of part (b)(6) was raised recently from 30 to 80 percent as a result of the review of this entry.

This is because it was found that chemical preparations containing less than 80 percent of the active ingredient are not suitable for use in chemcial warfare. This change was announced in Export Administration Bulletin No. 189, dated October 26, 1978.

4720B (QSTVWYZ) Radioisotopes, cyclotron-produced or naturally occurring, *except those having an atomic number 3 through 83, and compounds and preparations thereof.*

These commodities are retained under unilateral control because of concern expressed by the Department of Energy that cyclotron technology may advance to the point where isotope production matches that of reactors, in which event these commodities could contribute significantly to the development, production, and use of military hardware. There is no known foreign production.

4721B (QSTVWYZ & Canada) Helium isotopically enriched in the helium-3 isotope, in any form of quantity, and whether or not admixed with other materials, or contained in any equipment or device.

This isotopic component of helium is used in the nuclear weapons program, and, when reconverted to tritium, has added significant strategic application. There is no known foreign availability. Accordingly, this entry is retained on the Commodity Control List without change.

4746B (QSTVWYZ) Polymeric substances, thermally stable, having weight loss of 15 percent or less after exposure for 24 hours to a temperature of 400°C. (752°F.) in air, and manufactures thereof, where the value of the polymeric component, either alone or in combination with other materials included on the Commodity Control List under an Export Control Commodity Number that is followed by the code letter "A", is 50 percent or more of the total value of the materials.

Examples of thermally stable polymeric substances include, but are not limited to, the following:

Polyarlyenesulfones
Polytetraazopyrenes
Polyphenlyene oxides, excluding styrene
Polybenzoxazinones modified forms
Polytriptycenes
Polymetallocenes
Coordination polymers
Fluoroepoxides
Polycarboxlimides
Polyphenylenes
Polyarylethers
Polybenzimidazolones
Polycarboranesiloxanes
Polyboroimidazolines
Polyiminoimidazolidinediones
Polyparbanic acids
Polyaryloxysilanes

Polyaroylanthranilamides
Polyimidazoimides
Polyanthazolines
Polyparaoxybenzoyls
Polymetallosiloxanes
Polyquinazolinediones
Polyquinazolones
Polyboroimidazolines

The polymeric substances and their manufactures covered by this entry possess unique properties needed for missile weaponry and aircraft development. Actual civilian usage of these materials is non-existent or still in the experimental stage. There is no evidence of foreign production of these polymers, and the entry is retained on the Commodity Control List without change.

4754B (QSTVWYZ) Synthetic resins, as follows:
(a) Irradiated polyolefin film, sheeting, and laminates;
(b) Methyl methacrylate, cross-linked, hot stretched, clear, film, sheeting, or laminates;
(c) Other fluorocarbon polymers and copolymers, except polyvinyl-fluoride, solid forms of polychlorotrifluoroethylene, and non-dispersion grades of polytetrafluoroethylene, and the copolymer of tetrafluoroethylene and perfluoroalkyl vinyl ether, and products wholly made thereof; and
(d) Other fluorocarbon polymer and copolymer products, except ethylene/tetrafluoroethylene copolymers, as follows:
(1) products wholly made thereof,
(2) molding compositions containing more than 20 percent by weight of fluorocarbon polymers or copolymers, or
(3) laminates partially made of fluorocarbon polymers or copolymers, including molded, decorative, or laminated with other materials or metals.

The irradiated polyolefin and stretched acryllic products covered by parts (a) and (b) of this entry have predominately military end-use patterns, and the U.S. has unilateral control of their production technologies. They are retained on the Commodity Control List without change. Parts (c) and (d) are, in effect, broad "baskets" for an unknown number of fluorocarbon polymer systems and their manufactures. There is active research and development occurring in this product category for both military and civilian uses. These "baskets" are retained on the Commodity Control List to assure coverage of militarily-oriented products. As non-strategic products are identified, they will be excluded from control.

4755B (QSTVWYZ) Silicone fluids and resins, as follows:
(a) Silicone diffusion pump fluids having the capacity for producing ultimate pressures of less than 10^{-8} Torr; and
(b) Thermally stable silicone resins capable of withstanding temperatures of 400° C (752° F) and greater with weight losses of 15 percent or less over a 24 hour test.

The silicone pump fluid covered by part (a) of this entry is used in environmental test chambers, atomic and nuclear equipment, and thin film deposition equipment for microelectronic and specialized optical devices manufacture. The thermally stable silicone resin covered by part (b) is a specialty aerospace coating. The Department has no evidence of production abroad of comparable products. Accordingly, this entry is retained on the Commodity Control List without change.

4757B (QSTVWYZ) Single crystal sapphire substrates.

These substrates are used in the production of integrated electronic device systems for military purposes. The United States has unilateral control of their production technology, and the entry is retained on the Commodity Control List without change.

5799D (QSWYZ) Other chemicals, chemical materials and products plastic materials, regenerated cellulose, artificial resins, and miscellaneous related materials and products, n.e.s., except those listed in S399.2, Interpretation 24.

This is one of the "basket" entries that is retained on the Commodity Control List because it is impossible to identify all chemicals and related materials that have strategic applications. As specific commodities covered by the "basket" are brought to the Department's attention, either by means of an export license application or inquiry, they are reviewed and, if found to be of a non-military nature, removed from the "basket" and placed in Interpretation 24. Since 1974, a total of 259 items representing several thousand products have been so removed. This process will continue.

4997B (QSTVWYZ) Viruses or viroids for human, veterinary, plant, or laboratory use, *except hog cholera and attenuated or inactivated systems.*

4998B (QSTVWYZ) Bacteria, fungi, and protozoa; *except those listed in S399.2, Interpretation 28.*

The commodities in these two "basket" entries have dual uses; i.e., as precursors for biological warfare agent preparation, or for disease studies and preparation of prophylactic or therapeutic agents. Notwithstanding the possible humanitarian uses, continued control of the commodities in these entries is necessary in order to identify prospective exports that have a potential for use in biological warfare. On a continuing basis, the Department eliminates from control under CCL No. 4998 specific commodities that have primary civilian uses. Although there is some foreign production, it is not as extensive nor controlled for quality as it is in the United States.

4. Modification of Controls

The review of the Commodity Control List entries covering commodities under unilateral control for national security reasons has resulted in the modification of the following entries to reduce their scope. The reduction of controls and the reasons therefor follow each entry.

5391D (QSWYZ) Other general industrial equipment, n.e.s., *except those listed in S339.2,* Interpretation 29; and parts and accessories, n.e.s.

This "basket" entry covers all general industrial equipment not elsewhere specified in individual entries on the Commodity Control List and not specifically exempted from national security controls by inclusion in Interpretation 29 of Part 399.2 of the Export Administration Regulations. This entry, and the other "basket" entries, are needed because it is not possible to identify and categorize everything produced in the United States in terms of the impact exports would have on our national security. However, as peaceful goods are identified from export license applications or inquiries, the Department, in consultation with its advisory Departments and agencies, removes them from control for national security reasons by adding them to the list of decontrolled commodities in Interpretation 29. This entry, therefore, is retained on the Commodity Control List. However, the review uncovered certain peaceful commodities that, although previously exempted from national security controls, were not explicitly listed in Interpretation 29. Accordingly, the following commodities are being added to the Interpretation:

Welding machines, n.e.s.
Gas or liquid supply meters, n.e.s.
Glass working machines and parts, n.e.s.
Cranes, n.e.s., nonmilitary
Searchlights and spotlights, n.e.s., nonmilitary
Special purpose industrial vehicles, n.e.s., nonmilitary e.g. cement mixers, street and airfield cleaning, asphalt mixers, seismograph thumper mounted trucks, mine shuttle vehicles, trucks with derrick assembly and similar equipment for drilling mounted integral to truck frame, etc.
Hand tools, n.e.s.
Valves, plumbing fixtures, cocks, and taps, n.e.s.
Wheel tractors, including garden, log skidders, and contractors earthmoving types, n.e.s.

4585B (QSTVWYZ) Photographic equipment, as follows:

(a) Streak cameras capable of recording events which are initiated by, or synchronized with the camera mechanism (i.e. discontinuous access type), having a design capability for writing speeds of 8 mm per microsecond and above and a time resolution of 10 nanoseconds or less, and parts and accessories, n.e.s.;

(b) Aerial camera film, black and white, sensitized and unexposed, having spectral sensitivities at wavelengths greater than 7,200 Angstroms or at wavelengths less than 2,000 Angstroms;

(c) Aerial camera film, sensitized and unexposed, having resolving powers (using a Test-Object Contrast of 1,000:1) of 100 line pairs/mm or more or with a base thickness before coating of 0.004 inch or less;

(d) Continuous tone aerial duplicating film, sensitized and unexposed, having resolving powers (using a Test-Object Contrast of 1,000:1) of 300 line pairs/mm or more; and

(e) Instrumentation and/or recording film, sensitized and unexposed, having photo-recording sensitivities as based on the reciprocal of the tungsten exposure in meter-candle-seconds at an exposure time of 0.0001 second of 125 or more and

resolving power (using a Test-Object Contrast of 1,000:1) of 55 line pairs/mm or more and with a base thickness before coating of 0.004 inch or less and capable of being processed in solutions with alkalinities of pH 10 or above at temperatures greater than 85°F.

The streak cameras are predominantly used in the United States for military ordnance and for research and development work on weapons and weapons delivery systems. Available evidence indicates that there is only limited foreign availability. Because of the predominant military applications, the entry is being retained on the Commodity Control List without change.

The review of aerographic films covered by parts (b) through (e) has revealed that certain types, which have become more civilian-use-oriented, are now produced abroad. These have been decontrolled. The balance are specifically designed for aerial reconnaissance, for photography from space vehicles and aircraft, and for other strategic purposes, and there is no foreign availability of comparable films. The decontrol action affects parts (b) and (c) of the above entry. Their parts now read as follows:

4585(b) Aerial camera film, black and white, sensitized and unexposed, having spectral sensitivities at wavelengths greater than 7,500 Angstroms or at wavelengths less than 2,000 Angstroms.

4585(c) Aerial camera film, sensitized and unexposed, having resolving powers (using a Test-Object Contrast of 1,000:1) of 200 line pairs/mm or more; or with a base thickness before coating of 0.0025 inch or less.

4717B (QSTVWYZ) Trichlorotrifluoroethane (R-113); dichlorotetrafluoroethane (R-114); and cutting fluids, compounds, solvents or mixtures containing 95 percent or more of either.

These commodities are used in uranium enrichment facilities and gaseous diffusion (isotope separation) operations, and as coolants for nuclear reactors. However, they also have important civilian uses. Moreover, foreign availability exists not only in France, West Germany, Great Britain, Italy, and Japan, but also in the German Democratic Republic, Czechoslovakia, and the USSR. In view of the important civilian uses of these commodities and the foreign availability, continued control to Free World destinations is no longer justified, and the entry has been decontrolled to these destinations. However, the potential for use in the nuclear field warrants continued control to restricted destinations and the entry remains under control to Q, W, Y and Z destinations for national security reasons.

5. Retention of Controls Pending Resolution of Interagency Differences.

In conducting the review of unilaterally controlled commodities, the Department consulted extensively with its advisory Departments and agencies. In certain instances, significant areas of disagreement came to light with respect to the degree of control needed for national security reasons. The Commodity Control List entries covering commodities for which there are unresolved disagreements as of the date of this report are listed below. These entries will remain on the Commodity Control List until decisions are reached. Such decisions will be reported in semiannual reports to the President and the Congress required under Section 10 of the Export Administration Act of 1969, as amended.

5091D (QSWYZ) Measuring instruments designed:

(a) With a short range (0.20 inch or less) linearity of less than 0.1 percent and readout (over ranges greater than 0.20 inch) of 50 millionths of an inch and finer; or

(b) With an angular measuring capability of one second arc and finer; and

(c) Parts and accessories therefor.

5485D (QSWYZ) Fluidic-based aircraft control devices; and accessories, n.e.s.

4522B (QSTVWYZ) Laser interferometers specially designed as feedback components for numerically controlled machine tools; and parts and accessories therefor.

5568D (QSWYZ) Equipment, as follows:

(a) Synchronous motors of any rating having any of the following characteristics:

(1) Synchronous speeds in excess of 3,000 rpm,

(2) Designed to operate between minus 55°C and minus 10°C, or between plus 55°C and plus 125°C,

(3) Of size 11 (1.1 inches in diameter) or smaller, or

(4) Larger than size 20 (2 inches in diameter) having synchronous speeds in excess of 3,600 rpm;

(b) Servo control units, linear induction potentiometers, induction rate generators, synchros, and resolvers; and instruments which perform functions similar to synch-

ros or resolvers with a rated electrical error of greater than 7 minutes of arc or between 0.2 percent and 0.5 percent of maximum output voltage;

(c) Induction potentiometers (including function generators and linear synchros), linear and nonlinear, of size 11 (1.1 inches in diameter) or smaller, or having a rated conformity between 0.25 percent and 0.5 percent, or of more than 13 minutes to 18 minutes;

(d) Induction rate (tachometer) generators, synchronous and asynchronous, of size 11 (1.1 inches in diameter) or smaller, or with a housing diameter of 2 inches and smaller and a length (without shaft-ends) of 4 inches and smaller, or with a diameter-to-length ratio greater than two to one, having a rated linearity between 0.1 percent and 0.5 percent; and

(e) Parts and accessories therefor.

5595D (QSWYZ) Other gravity meters (gravimeters) and parts and accessories therefor.

5635D (QSWYZ) Iron and steels, as follows:

(a) Maraging steel containing 12 percent or more nickel, more than 3 percent molybdenum, more than 5 percent cobalt and less than 0.5 percent carbon; or

(b) Transformation Induced Plasticity (TRIP) steels or penta-alloy ausforming stainless steel containing 8 to 14 percent chromium, 6 to 10 percent nickel, 2 to 5 percent molybdenum, 1 to 3 percent silicon, 0.75 to 3 percent manganese, and 0.15 to 0.35 percent carbon.

4712B (QSTVWYZ) Beryllium oxide ceramic and refractory tubes, pipes, crucibles, and other shapes in semifabricated or fabricated form.

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THE SECRETARY OF COMMERCE,
Washington, D.C.

Hon. JOHN HEINZ,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HEINZ: Thank you for your letter of March 12 in which you raise several follow-up questions concerning my export control system testimony of March 5. I apologize for the delay in responding to you.

Our responses to those questions are in the enclosed binder. I have also included in this binder our responses to the follow-up questions raised by Senator Proxmire in his letter of March 14 and by Senator Garn in the attachment to your letter of March 12.

Please let me know if I may be of any further assistance with respect to this material.

Sincerely,

JUANITA M. KREPS,
Secretary of Commerce.

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
Washington, D.C., March 12, 1979.

Hon. JUANITA M. KREPS,
Secretary of Commerce,
Department of Commerce, Washington, D.C.

DEAR MADAM SECRETARY: I want to commend you once again for your excellent testimony before the Senate Banking Committee on Monday, March 5. As usual, your testimony was a lucid and analytically useful contribution to the legislative process.

Due to the pressures of time I was not able to ask three additional questions which I think are highly relevant to the issue. I would greatly appreciate it if you would answer the following questions for submission to the hearing record.

1. I received a rather lengthy and detailed cable from the American Chamber of Commerce in Sao Paulo, Brazil, and I was wondering if you would care to comment on their problem.

They fear that the announced plans by your Department to close U.S. Trade Centers abroad will have a particularly adverse effect on those companies doing business in Brazil. Their argument is that it may make sense to replace U.S. Trade Centers in Europe with other more effective modes of reaching the European market. But the closure of the U.S. Trade Center Sao Paulo (and this is most likely true throughout Latin America), would significantly handicap U.S. companies doing business there. They note that the Sao Paulo Trade Center has been a huge success since its opening a year and a half ago, and they go on to argue—quite reasonably I believe—that U.S. trade promotion should be tailored to particular markets, not generalized throughout the world.

2. There seem to be two principal categories of countries against which we apply export licensing controls for foreign policy purposes. There are the reprehensible ones, such as Idi Amin's Uganda and Pol Pot's Cambodia, that we simply do not want to have anything to do with. The second category, I believe, would include repressive regimes with whom we still might have some influence and whose policies we think might be amenable to change. It is not clear, however, whether the Carter Administration makes much of a distinction between the two in practice. With the former category of countries, we simply don't want to have any contact or trade, as a signal of our repugnance and censure. But with countries in the latter category, it would seem that we are conducting a much more subtle form of diplomatic signaling. With countries in that category it would seem that we want to signal our disapproval of their present human rights policy and press them for changes, but we certainly *do* want to maintain our diplomatic and commercial contacts with them. In those cases, it would seem that the availability of substitutes for the vast majority of our export products would cause a diminution of our leverage and would have the long-term effect of lessening rather than strengthening our ability to influence their internal policies in a positive way.

How would you respond to that analysis?

3. The most recent GAO report on Export Controls recommends centralizing export license management responsibility in the Department of Commerce, in the Office of Export Administration.

I am introducing legislation to put this recommendation into effect. Would your Department have any difficulty with such an arrangement?

I have enclosed some additional questions for the record from Senator Garn as well.

Thank you again for your cooperation in this matter.

Sincerely,

H. JOHN HEINZ.

Question 1. I received a rather lengthy and detailed cable from the American Chamber of Commerce in Sao Paulo, Brazil, and I was wondering if you would care to comment on their problem.

They fear that the announced plans by your Department to close U.S. Trade Centers abroad will have a particularly adverse effect on those companies doing business in Brazil. Their argument is that it may make sense to replace U.S. Trade Centers in Europe with other more effective modes of reaching the European market. But the closure of the U.S. Trade Center Sao Paulo (and this is most likely true throughout Latin America), would significantly handicap U.S. companies doing business there. They note that the Sao Paulo Trade Center has been a huge success since its opening a year and a half ago, and they go on to argue—quite reasonably I believe—that U.S. trade promotion should be tailored to particular markets, not generalized throughout the world.

Answer. The Department of Commerce is planning a major restructuring of its overseas exhibit activities. The principal objective of this restructuring is to increase the efficiency and flexibility of our resources available for overseas exhibits. Our trade centers, such as the one in Sao Paulo, have been criticized over the years by various outside groups including the House Oversight Committee for their inflexibility. Based on a worldwide perspective, we feel our program of Export Development Offices that utilize offsite exhibits and have only limited exhibit facilities themselves represent a significant improvement over the current trade centers. I should add that in the case of Sao Paulo, this is one of the most expensive facilities that we operate currently around the world. The cost of space and utilities in 1978 exceeded more than a quarter of a million dollars. We are now reviewing options open to us to serve the Brazil and South American markets in the most cost-effective possible fashion.

Question 2. There seem to be two principal categories of countries against which we apply export licensing controls for foreign policy purposes, those so reprehensible (e.g. Uganda and Cambodia) we don't want to trade with them at all, and those which might change their behavior if influenced properly. It is not clear the Administration makes such a distinction in practice. With the latter group, we want to signal disapproval, but we simultaneously want to maintain diplomatic and commercial contacts. However, foreign availability diminishes our economic leverage and in the long term lessens our ability to influence their internal policies in a positive way. What is your reaction to this analysis?

Answer. We believe that foreign availability is an important economic consideration to weigh when contemplating the foreign policy controls which are expressly provided for in the Export Administration Act.

Outside of levying a complete embargo on those reprehensible governments from which we may wish to distance ourselves, there are a number of possible foreign policy reasons for imposing export controls. In some instances, the objective may be to set an example for others to follow. In others, a country may be seeking items we would not wish to sell regardless of whether they are available from foreign sources, e.g. equipment that could be used to inflict torture.

On the other hand, it is U.S. policy to take into account the adverse economic consequences of a denial action for foreign policy reasons, especially when foreign availability diminishes the potency of controls for foreign policy purposes.

U.S. export competitiveness should therefore be an important foreign policy consideration, although there may be some instances when foreign policy objectives fully justify the use of export controls.

Question 3. The most recent GAO report on Export Controls recommends centralizing export license management responsibility in the Department of Commerce, in the Office of Export Administration. I am introducing legislation to put this recommendation into effect. Would your Department have any difficulty with such an arrangement?

Answer. While we agree that the licensing process should be more efficient, we disagree with certain methods proposed by the GAO.

We feel that the Departments of Energy, State, and NASA make important policy recommendations on export controls. Recommendations from Defense do not necessarily cover all the policy options which need to be considered.

Our current contacts with other agencies at policy levels provide a centralized means of eliciting responses through agency channels. We are not convinced that we could expect prompt and thorough responses by submitting cases directly to other agency technicians for review.

A portion of GAO report recommended transferring the management of COCOM exceptions requests from State to Commerce. Because of required complex diplomatic procedures, we are not convinced that such a change would expedite the process. It could very well add to the causes for delay.

We agree that Commerce should be able to act autonomously on applications which have clear precedents. Such cases should not be referred to other agencies—a process which tends to raise diverse opinions even when the commodity has a clear prior licensing history. Commerce has pending in the interagency process a request for Delagations of Authority in such cases.

THE SECRETARY OF COMMERCE,
Washington, D.C.

Hon. JAKE GARN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR GARN: Thank you for your follow-up questions contained in the attachment to Senator Heinz' letter of March 12 concerning my export control system testimony of March 5. I apologize for the delay in responding to you.

Our responses to those questions are in the enclosed binder. I have also included in this binder our responses to the follow-up questions raised by Senator Heinz in his letter of March 14 and by Senator Proxmire in his letter of March 14.

Please let me know if I may be of any further assistance with respect to this material.

Sincerely,

JUANITA M. KREPS,
Secretary of Commerce.

Question. What is your prognosis for the future U.S. trade picture? Is it desirable, as well as possible, for the U.S. to resume a net trade surplus? If so, what are the trends? The predictions for 1979 seem to be for continued improvement. How soon do you expect the U.S. to show a trade surplus?

Answer. (*a*) We see a substantial improvement in the U.S. trade balance over the coming twelve to twenty-four months. It is highly likely, nonetheless, that a sizable deficit in trade will continue to exist during the next two years and beyond. This expectation is base upon the size of the current deficit and the probable continuation of a number of the underlying trends which have contributed to high import growth and relatively low export growth for the United States over the past two decades.

(*b*) It is highly desirable for the United States to take measures aimed at reducing and potentially eliminated the trade deficit. In this regard, attempting to achieve a net trade surplus in the medium to longer-term is an appropriate guideline for policy considerations. The current near-term prognosis is for improvement in the trade picture due to cyclical factors—principally the resumption of relatively stronger growth abroad compared to U.S. domestic economic expansion. However, if unchecked, the longer-term trends point to the perpetuation of deficits for the United States. Actions are desirable to alter in appropriate ways these trends.

(*c*) There are, of course, beneficial consequences for the world economy ensuring from the large U.S. trade deficit. The aid it provides in the way of financing the surplus of the OPEC economies is one such benefit. Another benefit is the effect which the excess of U.S. imports over exports has upon stimulating economic growth in other countries. the relative value of these effects, however, has lessened in the past two years. The petrodollar overhang has been handled with some success by world financial intermediaries, and substantial recovery from the recession of 1975 has occurred in most countries.

(*d*) Further, the large surpluses of Japan and Germany are convincing points arguing that the focus of current attention should be on the benefits of reducing the surpluses of those countries, rather than on benefits to be derived from the maintenance of the U.S. deficit.

(*e*) Reduction in the U.S. deficit, on the other hand, would act to correct adverse consequences which are becoming increasingly severe. The large trade imbalance for instance, causes mounting pressure for depreciation of the dollar, resulting in increasing financial instability in world money markets. It also has the direct consequence of raising the cost, in terms of real resources, of petroleum through consequential OPEC price advances. Overall, the decreased value of the dollar resulting from the massive trade deficits reduces our purchasing power in foreign markets. This means that less in the way of foreign resources are obtained for our domestic productive efforts.

(*f*) Actions furthering a more competivite position in world markets, and a move toward a balanced or surplus trade position are thus of particular importance and value. Over the past two decades, however, the trend for the United States has been one of continually reduced shares of world export markets. A large number of factors have contributed to this trend, including the degree to which advantages in U.S. supply capabilities, costs, technological superiority, and entreprenurial drive have been reduced by vigorous advancements aboard. Added to this in the coming year is the almost certain prospect that foreign economics will grow substantially less rapidly relative to the U.S. economy than has been the case over the past decades. This will act to reduce the comparative demand for U.S. exports.

(*g*) There is little doubt, therefore, that efforts to expand export competitiveness will continue to be appropriate and probably increase in importance in the future. Even under the most favorable circumstances a permanent balanced or surplus trade position for the United States is not envisoned for many years. A surplus may be posted for a period of a year or so due to strong cyclical forces (such as ocurred in 1975), but the underlying trend will most probably be one where the U.S. trade deficit is only slowly erased.

Question 2. The mandate given by the Congress for export controls for matters of national security is relatively clear. Less clear is the use of controls for foreign policy purposes. Would you favor a tightening up of legislative language that authorizes the use of export controls for foreign policy purposes.?

Answer. The Export Administration Act gives a clear mandate for the use of export controls for foreign policy purposes in Section 3(2) where it states that "It is the policy of the United States to use export controls . . . to the extent necessary to further significantly the foreign policy of the United States . . ." We at Commerce, of course, are interested in ensuring that such controls introduce a minimum of uncertainty or unpredictability into the export control system. At the same time, however, we recognize that the shifting demands of US foreign policy require that the President be able to respond flexibly and swiftly to rapidly changing situations. We have been holding extensive discussions within the Administration as to the best way to balance the need for predictability with that for flexibility.

Question 3. How significant has been the cost of export controls for foreign policy purposes on U.S. exports?

Answer. The United States Government imposes foreign policy export controls in the form of complete embargoes and export restrictions which are both subject to change. U.S. concern about international terrorism, human rights, and nuclear proliferation are some of the reasons for these controls. Compared to total U.S. exports in 1977 and 1978, the value of exports controlled for foreign policy reasons was not large. We believe, however, that these costs must be considered when imposing such controls.

Actual denials of licenses for foreign policy purposes amounted to $112 million in 1977 and 1978. This represents the value of applications turned down. It does not include loss of potential exports.

Question 4. Testifying before the full Committee in October, former Secretary of State Dean Rusk made a comment and then posed a question, that I in turn would put to you:

> When we refuse to trade . . . we should recall that we are depriving ourselves of the benefits of that trade, whether in the form of convertible currencies or goods and services which we ourselves need for our own national life. . . . We must . . . ask ourselves what ought to be the policies and practices which justify denying ourselves the benefits of trade. . . . (Oct. 11, 1978, p. 146)

In other words, what policies and practices do you feel are sufficiently weighty to justify the costs of export controls?

Answer. I believe the Export Administration Act itself states very well in its Declaration of Policy which policies and practices are weighty enough to justify the costs of export controls, namely, the need to guard the United States' national security, to further significantly the United States' foreign policy and to protect the domestic economy from the excessive drain of scarce materials.

It is largely impossible to make across-the-board statements about the costs and benefits of export controls because these vary so much from case-to-case. However, the central issue in all export decisions is that of *balance* between these weighty considerations of national security, foreign policy and short supply on the one hand and the pressing need to promote and expand US exports on the other.

In this regard, I call your attention to the President's National Export Policy statement of September 1978. In that statement, he stressed the importance of greater US exports to the economic well-being and international position of the United States and he directed that foreign availability be weighed in all export licensing decisions.

Question 5. In a hearing before the International Finance Subcommittee last May, Gary C. Hufbauer of the Treasury gave his *own* opinion that, "restrictions on the outflow of technology would not be in the national interests. The administrative aspects of a technology licensing system are truly mind-boggling. A Technology Review Board would be a boon to Washington attorneys and bureaucrats, but very costly to firms with technology to sell." Do you differ with this assessment? Can you envision any *practical* and *beneficial* form of export controls of technology?

Answer. We have long experience with a workable system of controls to prevent exports of strategic technical data to Communist countries. Much of the success of

this program lies in the exporter's understanding that such controls are vital to national security. A massive plan to restrict exports of all technology might tempt noncompliance.

We consider our current strategic controls on technology to be both practical and beneficial.

Question 6. Are you aware of any Administration policies, either in your department or elsewhere, to influence exports in order to enforce compliance with President Carter's inflation program?

Answer. The Administration's White Paper concerning the President's anti-inflation program contains, at page 15, reference to a possible requirement that U.S. exporters seeking Export-Import Bank assistance for export transactions in excess of $5 million certify that they are observing the wage and price standards. Eximbank is consulting with the Council on Wage and Price Stability concerning Eximbank's role in the anti-inflation program; however, no certification or other requirement in connection with Eximbank's activities has been adopted at this time.

AFTERNOON SESSION

Senator STEVENSON [presiding]. The committee will come to order.

This afternoon we resume our hearings on export controls and export policy. Our first witness is Duane Sewell, Assistant Secretary for Defense Programs of the Department of Energy.

Dr. Sewell, if you'd like to summarize your statement, we'd be happy to enter the full statement into the record.

STATEMENT OF DUANE SEWELL, ASSISTANT SECRETARY OF ENERGY FOR DEFENSE PROGRAMS, DEPARTMENT OF ENERGY, ACCOMPANIED BY RAYMOND CHAPMAN, DIRECTOR, OFFICE OF INTERNATIONAL SECURITY AFFAIRS, DOE AND PETER BRUSH, ASSISTANT GENERAL COUNSEL, DOE

Mr. SEWELL. Mr. Chairman and members of the committee, let me first introduce two of my colleagues I have here with me: First, Mr. Peter Brush, Assistant General Counsel, from the Office of General Counsel of the Department of Energy, on my right; on my left, Mr. Raymond Chapman, Director of the Office of International Affairs in Defense Programs Department of the Department of Energy.

We're pleased to be here as the representatives of the Department of Energy, to testify on the dimensions of the export control activities within our Department, and to provide you with our views on the proposed extension of the Export Administration Act, and to respond to the questions raised in your letter to Secretary Schlesinger of January 5, 1979.

As Assistant Secretary for Defense Programs, I am responsible for the Department of Energy's nuclear weapons activities and other national security-related matters, including export control functions. All national security determinations required to be made by DOE on proposed Commerce and Nuclear Regulatory Commission exports are made or recommended by my office. Furthermore, DOE has statutory responsibility under section 57b. of the Atomic Energy Act, as amended, for control of nuclear technology exports.

The Department supports the administration's policy of promoting a free and multilateral trading system consistent with national security and other vital U.S. interests. A strong U.S. export sector is essential for improvement in our balance of payments position and attainment of our other economic objectives.

From an energy perspective, U.S. exports of energy-related equipment and technology can play a major role in increasing worldwide supplies of energy and improving the efficiency of energy use. Promoting the transfer of useful and constructive energy technologies is an essential element in the administration's international energy policy.

I'll summarize the next three. In particular: The United States is the world leader in oil and gas technology; the United States is a major world supplier of nuclear reactors; and the United States has

a major commercial involvement in the sale of equipment, services, facilities and technology in virtually all energy-related fields.

Finally, U.S. programs in energy research and development are larger in size and scope than those of other countries.

Although the precise impact of U.S. equipment and technology exports cannot be measured, they will play a central role in increasing world energy supplies. This supports basic U.S. international energy objectives, because our policy is to promote and encourage energy equipment and technology exports wherever such trade is consistent with national security and other vital U.S. interests.

In most instances, exports take place through normal commercial channels and the Government does not need to take explicit action. In other cases, Government support of technology transfer for cooperative efforts has proven beneficial.

The United States has undertaken to develop new energy technologies both through domestic R. & D. programs and through cooperative efforts with other countries. Our international activities include multilateral programs within the International Energy Agency and a series of bilateral arrangements with individual governments. These programs facilitate and accelerate technology development, avoid costly duplication of government programs and facilitate the commercialization of technologies and private international trade in new energy equipment and know-how.

Furthermore, the United States has a number of policies designed to support energy development in the less developed countries. DOE and AID are working with a number of developing countries to assist them in dealing with their energy problems and to encourage the expanded use of established and new energy technologies. DOE is expanding its R. & D. in technologies which may be applicable to the developing countries.

The Department realizes, however, that other essential national interests often conflict with the goal of export promotion. The U.S. Government has a responsibility to ensure that exports do not:

Enhance the military capability of countries hostile to the United States;

Accelerate the spread of dangerous nuclear technologies and materials;

Undermine U.S. foreign policy goals;

Or drain scarce commodities or equipment from critical U.S. programs.

The export control system, in which DOE is a major participant, is designed to balance these sometimes conflicting objectives.

As I indicated previously, DOE plays an active role in Government export control and administration activities, and participates in most of the interagency advisory export policy committees within the executive branch. Our role in these export policy forums is to provide expert technical advice in areas where we have unique competence and to give policy advice on those matters affecting the national security and energy.

The active role of DOE and its predecessor agencies in export matters evolved initially from this country's nuclear proliferation concerns dating back to the Atomic Energy Act of 1946. At that time, the Congress placed stringent controls over nuclear materi-

als, specially designed components and equipment, and technology that could be used in the production of special nuclear material.

Because we recognized that many commodities of a multipurpose nature could be used in both nuclear and nonnuclear applications and were not controlled by the Atomic Energy Act, we found it necessary to utilize the export control authority of the Export Control Act administered by the Commerce Department to monitor the exports of nuclear-related items.

Since the early fifties, Commerce's export control statute has played an important role in controlling the export of numerous multipurpose items not controlled directly by the Atomic Energy Act that could have sensitive nuclear applications. These controls are not necessarily for the purpose of impeding or denying exports, but rather, to insure through prior review that the exports are for legitimate civil applications and will not be used for purposes contrary to U.S. nonproliferation and national security objectives.

The passage of the Nuclear Non-Proliferation Act of 1978, which amended the Atomic Energy Act of 1954, formally established Commerce's responsibility to control all export items, other than those licensed by the NRC, which could be of significance for nuclear explosive purposes. Procedures for the interagency review of exports, also called for by the act, have been established by the executive branch and were published in the Federal Register on June 9, 1978. The DOE is the principal agency for the executive branch in the technical review of thousands of Commerce cases screened annually under these procedures.

The DOE also provides continuing advice to Commerce and State on the proposed nuclear-related exports to the Communist countries within the framework of this Government's participation in multilateral embargo controls—CoCom—and provides assistance to the Department of State in developing and negotiating changes to the embargo list.

A second area of essential interest to the Department of Energy has been the export of nonnuclear energy-related equipment and technology to the U.S.S.R., other Warsaw Pact countries, and the People's Republic of China.

In a strict energy sense, the United States has an interest in maximizing the supply of internationally traded energy. Increased energy supply reduces the political and economic power of OPEC and generally eases pressures on world oil prices.

By the same token, the United States has an interest in reducing worldwide demand for imported oil and increasing export supplies of competitively priced petroleum.

When the United States deals with the U.S.S.R. and China, however, we cannot take a narrow energy perspective. Our relations with these countries will determine the security of the United States and the rest of the Western world.

Most of the energy-related equipment sold by U.S. companies to the Soviet Union is usable only for the direct purposes for which it is intended. Such equipment is licensed without difficulty or objection.

Some equipment, however, such as seismic exploration systems or advanced computers, has broader uses beyond the stated purpose. In particular, the transfer of some state-of-the-art industrial

technologies may lead to a significant improvement of Soviet military capabilities. We must scrutinize such transactions with the greatest of care to insure that no damage is done to our national security interests.

Validated licenses are now required for the export of oil and gas-related equipment to the U.S.S.R.

The West may face serious energy problems in the future, which might threaten political and economic disruption, unless we make major efforts in the energy area. We are concerned that the Soviets face a similar set of problems, but delayed in time.

The United States must make every effort to insure that the participation of the U.S.S.R. in world energy markets is constructive and cooperative. We pay particular attention to the Soviet energy development to insure that the Soviets do not use their energy potential in a destabilizing manner. In this context, therefore, our energy-related export control policy does not operate independent of foreign policy considerations.

The United States faces a similar set of energy, foreign policy and national security concerns with regard to China. The sale of U.S. equipment, technology and services to the Chinese energy industry can have a direct and beneficial impact on world energy supplies. Nonetheless, we must also be careful that such exports are consistent with our national security.

Given the complexity of these problems and the need to achieve a delicate balance of national interests, applications referred to DOE are reviewed on a case-by-case basis. Foreign policy determinations in particular require careful analysis of the specific circumstances of the time.

In conducting reviews of export cases, the DOE does give heavy weight to foreign availability of comparable products. Every channel is used in determining such availability. In a few cases where foreign availability is established, but national security concerns are overriding, the U.S. Government makes appropriate approaches through diplomatic channels to competing supplier countries and requests that they cooperate in withholding their exports.

The DOE has taken measures to expedite the processing of export license applications. Efforts are underway to provide a computerized tracking system within DOE to determine the status of each case. Also, DOE, in conjunction with other agencies, has established time limits for the various steps of the review process.

A third area of interest to DOE has been the protection of the domestic economy. The Export Administration Act and the Energy Policy and Conservation Act of 1975 require the control of commodities if necessary to protect the economy from an excessive drain of scarce materials. Exports were monitored carefully during the 1973–74 oil embargo to insure that they were consistent with the national interest.

Since the embargo, DOE and its predecessors have not found it necessary to exercise controls over energy equipment and technology for short supply reasons, nor do we consider such restrictions likely or appropriate except under the extreme conditions envisioned by Congress when the legislation was passed.

In the same regard, DOE, through its membership on the National Advisory Council, reviews proposed Eximbank loans for energy-

related equipment to insure that such exports do not involve equipment in short supply for the U.S. program.

The statutory authorities outlined in this statement represent the full range of existing controls on energy-related equipment and technology.

Finally, from my discussion of DOE's role in export matters, it is evident that the Export Administration Act is an important tool for implementing U.S. policies and objectives. Therefore, DOE supports the extension of the act in a form which will not only facilitate trade, but will also assist in furthering U.S. nuclear nonproliferation policy and our national security and foreign policy interests.

Thank you, Mr. Chairman. This concludes my testimony. I will be happy to answer any questions.

[Complete statement of Mr. Sewell follows:]

Statement by
DUANE C. SEWELL
ASSISTANT SECRETARY FOR DEFENSE PROGRAMS
DEPARTMENT OF ENERGY

before the

COMMITTEE ON BANKING, HOUSING & URBAN AFFAIRS
U. S. SENATE

March 5, 1979

Mr. Chairman and Members of the Committee:

I am pleased to be here today as the representative of the Department of Energy to testify on the dimensions of export control activities within our Department, to provide you with our views on the proposed extension of the Export Administration Act, and to respond to the questions raised in your letter to Secretary Schlesinger of January 5, 1979.

As Assistant Secretary for Defense Programs, I am responsible for the Department of Energy's nuclear weapons activities and other national security-related matters, including export control functions. All national security determinations required to be made by DOE on proposed Commerce and Nuclear Regulatory Commission exports are made or recommended by my office. Furthermore, DOE has statutory responsibility under Section 57b. of the Atomic Energy Act, as amended, for control of nuclear technology exports.

The Department supports the Administration's policy of promoting a free and multilateral trading system consistent with national security and other vital U.S. interests. A strong U.S. export sector is essential for improvement in our balance of payments position and attainment of our other economic objectives. From an energy perspective, U.S. exports of energy-related equipment and technology can play a major role in increasing worldwide supplies of energy and improving the efficiency of energy use. Promoting the transfer of useful and constructive energy technologies is an essential element in the Administration's international energy policy.

In particular:

- The U.S. is the world leader in oil and gas technology. As the first major oil and gas producer in the world, the United States has dominated the development, production and export of oil and gas equipment for most of this century, and in some significant areas, the U.S. remains the sole source of supply for critical equipment in production volume.

- The U.S. is a major world supplier fo nuclear reactors, reactor technology, nuclear fuel and enrichment services.

- The U.S. has a major commercial involvement in the sale of equipment, services, facilities and technology in virtually all energy-related fields. We are, for example, a major supplier of seismic and other survey equipment used in resource exploration and of the advanced computers used to process geological data. U.S. firms compete successfully for major engineering

contracts in energy-related fields such as the construction of dams, thermal power plants, liquefied natural gas facilities, ports and other facilities.

Finally, U.S. programs in energy research and development are larger in size and scope than those of other countries. We are moving rapidly in the development of solar and geothermal energy and of synthetic fuels from coal. In addition, the U.S. has major programs to develop longer-term energy technologies such as fusion and ocean-thermal energy systems. Exports of these technologies and related equipment will become increasingly important over time in changing the energy mix of the world economy.

Although the precise impact of U.S. equipment and technology exports cannot be measured, they will play a central role in increasing world energy supplies. This supports basic U.S. international energy objectives because our policy is to promote and encourage energy equipment and technology exports wherever such trade is consistent with national security and other vital U.S. interests. In most instances, exports take place through normal commercial channels and the government does not need to take explicit action.

In other cases, government support of technology transfer for cooperative efforts has proven beneficial. The U.S. has undertaken to develop new energy technologies both through domestic R&D programs and through cooperative efforts with other countries. Our international activities include multilateral programs within the International Energy Agency and

a series of bilateral arrangements with individual governments. These programs facilitate and accelerate technology development, avoid costly duplication of government programs and facilitate the commercialization of technologies and private international trade in new energy equipment and know-how.

Furthermore, the U.S. has a number of policies designed to support energy development in the less developed countries. DOE and AID are working with a number of developing countries to assist them in dealing with their energy problems and to encourage the expanded use of established and new energy technologies. DOE is expanding its R&D in technologies which may be applicable to developing countries.

The Department realizes, however, that other essential national interests often conflict with the goal of export promotion. The U.S. Government has a responsibility to ensure that exports do not:

- enhance the military capability of countries hostile to U.S.;
- accelerate the spread of dangerous nuclear technologies and materials;
- undermine U.S. foreign policy goals, or
- drain scarce commodities or equipment from critical U.S. programs.

The export control system, in which DOE is a major participant, is designed to balance these sometimes conflicting objectives.

As I indicated previously, DOE plays an active role in Government export control and administration activities, and participates in most of the interagency advisory export policy committees within the Executive Branch. Our role in these export policy forums is to provide expert technical advice in areas where we have unique competence and to give policy advice on those matters affecting the national security and energy. The active role of DOE and its predecessor agencies in export matters evolved initially from this country's nuclear proliferation concerns dating back to the Atomic Energy Act of 1946. At that time, the Congress placed stringent controls over nuclear materials, specially designed components and equipment, and technology that could be used in the production of special nuclear material. Because we recognized that many commodities of a multipurpose nature could be used in both nuclear and non-nuclear applications and were not controlled by the Atomic Energy Act, we found it necessary to utilize the export control authority of the Export Control Act administered by the Commerce Department to monitor the exports of nuclear-related items. Since the early 1950's, Commerce's export control statute has played an important role in controlling the export of numerous multipurpose items not controlled directly by the Atomic Energy

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Act that could have sensitive nuclear applications. These controls are not necessarily for the purpose of impeding or denying exports, but rather to ensure through prior review that the exports are for legitimate civil applications and will not be used for purposes contrary to U.S. nonproliferation and national security objectives.

The passage of the Nuclear Non-Proliferation Act of 1978 which amended the Atomic Energy Act of 1954, formally established Commerce's responsibility to control all export items, other than those licensed by the NRC, which could be of significance for nuclear explosive purposes. Procedures for the interagency review of exports, as called for by the Act, have been established by the Executive Branch and were published in the Federal Register on June 9, 1978. The DOE is the principal agency for the Executive Branch in the technical review of thousands of Commerce cases screened annually under these procedures.

The DOE also provides continuing advice to Commerce and State on proposed nuclear-related exports to the Communist countries within the framework of this Government's participation in multilateral embargo controls (COCOM), and provides assistance to the Department of State in developing and negotiating changes to the embargo list.

A second area of essential interest to the Department of Energy has been the export of non-nuclear energy-related equipment and technology to the USSR, other Warsaw Pact Countries, and the People's Republic of China.

In a strict energy sense, the U.S. has an interest in maximizing the supply of internationally traded energy. Increased energy supply reduces the political and economic power of OPEC and generally eases pressures on world oil prices. By the same token, the U.S. has an interest in reducing worldwide demand for imported oil and increasing export supplies of competitively priced petroleum. When the U.S. deals with the USSR and China, however, we cannot take a narrow energy perspective. Our relations with these countries will determine the security of the U.S. and the rest of the Western world.

Most of the energy-related equipment sold by U.S. companies to the Soviet Union is usable only for the direct purpose for which it is intended. Such equipment is licensed without difficulty or objection. Some equipment, however, such as seismic exploration systems or advanced computers. has broader uses beyond the stated purpose. In particular, the transfer of some state-of-the-art industrial technologies may lead to a significant improvement of Soviet military capabilities. We must scrutinize such transactions with the greatest care to insure that no damage is done to our national security

interests. Validated licenses are now required for the export of oil and gas-related equipment to the USSR.

The West may face serious energy problems in the future which might threaten political and economic disruption unless we make major efforts in the energy area. We are concerned that the Soviets face a similar set of problems, but delayed in time. The U.S. must make every effort to insure that the participation of the USSR in world energy markets is constructive and cooperative. We pay particular attention to Soviet energy development to ensure that the Soviets do not use their energy potential in a destabilizing manner. In this context therefore, our energy-related export control policy does not operate independent of foreign policy considerations.

The U.S. faces a similar set of energy, foreign policy and national concerns with regard to China. The sale of U.S. equipment, technology and services to the Chinese energy industry can have a direct and beneficial impact on world energy supplies. Nonetheless, we must also be careful that such exports are consistent with our national security.

Given the complexity of these problems and the need to achieve a delicate balance of national interests, applications referred to DOE are reviewed on a case-by-case basis. Foreign policy determinations, in particular, require careful analysis of the specific circumstances of the time.

In conducting reviews of export cases, the DOE does give heavy weight to foreign availability of comparable products. Every channel is used in determining such availability (intelligence, commercial, and publications). In a few cases where foreign availability is established but national security concerns are overriding, the U.S. Government makes appropriate approaches through diplomatic channels to competing supplier countries and requests that they cooperate in withholding these exports.

The DOE has taken measures to expedite the processing of export license applications. Efforts are underway to provide a computerized tracking system within DOE to determine the status of each case. Also, DOE in conjunction with other agencies, has established time limits for the various steps of the review process.

A third area of interest to DOE has been the protection of the domestic economy. The Export Administration Act and the Energy Policy and Conservation Act of 1975 require the control of commodities, if necessary, to protect the economy from an excessive drain of scarce materials. Exports were monitored carefully during the 1973-74 oil embargo to ensure that they were consistent with the national interest. Since the embargo, DOE and its predecessors have not found it necessary to exercise controls over energy equipment and

technology for short supply reasons, nor do we consider such restrictions likely or appropriate except under the extreme conditions envisioned by Congress when the legislation was passed.

In the same regard, DOE, through its membership on the National Advisory Council, reviews proposed EXIM Bank loans for energy-related equipment to ensure that such exports do not involve equipment in short supply for the U.S. program.

The statutory authorities outlined in this statement represent the full range of existing controls on energy-related equipment and technology.

Finally, from my discussion of DOE's role in export matters, it is evident that the Export Administration Act is an important tool for implementing U.S. policies and objectives. Therefore, DOE supports the extension of the Act in a form which will not only facilitate trade but will also assist in furthering U.S. nuclear non-proliferation policy and our national security and foreign policy interests.

Thank you, Mr. Chairman and Members of the Committee. This completes my testimony. I would be happy to answer any questions you may have.

Senator STEVENSON. Thank you, sir.

You just said that DOE supports the extension of the act in a form which will not only facilitate trade, but which will also assist in furthering U.S. nuclear nonproliferation policy and our national security and foreign policy interests.

What is that form? Do you have any suggestion for changes in the Export Administration Act, or means by which the procedures for the formulation of export control policy and its implementation could be improved?

Mr. SEWELL. We have no specifics that we have developed at this time. It primarily is in nuclear-related areas that we have the most interest.

Senator STEVENSON. But no suggestions for any changes in the Export Administration Act? Do you expect to offer the committee some? As you know, it will expire on September 30, 1979.

Mr. SEWELL. Yes, I understand that. I would be happy to offer the comments from the Department of Energy for the record as soon as proposed legislation is received. I do not have any to give you at this time.

[The following responses to questions were subsequently received for the record:]

Department of Energy
Washington, D.C. 20545

April 2, 1979

Honorable Adlai E. Stevenson
Committee on Banking, Housing
and Urban Affairs
U.S. Senate
Washington, DC 20510

Dear Senator Stevenson:

This is in response to your March 14, 1979 letter which provided additional questions as follow up to my testimony of March 5. The questions you raised and our answers are as follows:

Q 1. Apart from statutory responsibilities under the Atomic Energy Act and the Nuclear Non-Proliferation Act, and apart from short supply controls, what authority does the Department of Energy have to review export licenses?

A 1. In my testimony I indicated that the Department of Energy and its predecessor agencies relied heavily on the Export Administration Act and the earlier Export Control Act of 1949 to control multi-purpose commodities that could be used directly or indirectly in the production of special nuclear material or for the development of nuclear explosive devices.

Proposed exports of such commodities specifically identified by AEC and subsequently by ERDA and DOE were referred to us by Commerce beginning in the late 1950s for the purpose of ensuring that exports of certain commodities were not destined for foreign enrichment or nuclear explosive activities. This review procedure, initiated between the Department of Commerce and the AEC was the beginning of this government's efforts to restrain sensitive foreign nuclear activities through the export control process. It has continued through the decades and, as you know, was recently formalized in Section 309.(c) of the Nuclear Non-Proliferation Act of 1978. Thus the keystone statutes used by DOE to implement, through export controls, this government's nuclear nonproliferation policies and objectives are the Atomic Energy Act, as amended by the Nuclear Non-Proliferation Act, and the Export Administration Act.

DOE's authority to review Commerce export cases also derives from Section 5(a.) of the Export Administration Act which states that "in determining what shall be controlled or monitored under this Act, and in determining the extent to which exports shall be limited, any department, agency, or official making these determinations shall seek information and advice from the several executive departments and independent agencies concerned with aspects of our domestic and foreign policies and operations having an important bearing on exports." Commerce does seek DOE's information and advice on thousands of export cases each year through formally constituted interagency policy review channels. DOE's policy and technical views are sought on proposed exports because DOE is the technical expert in sensitive nuclear technologies affecting our national security, e.g., nuclear explosives, uranium enrichment, nuclear fuel reprocessing, and heavy water production, and is one of the major technical agencies having statutory responsibility in matters affecting the national security, i.e., developing and producing nuclear weapons. In addition, Commerce seeks our advice because we possess a higher level of technical expertise in certain state-of-the-art technologies than any other U.S. government agency, such as, large, high performance computers, high precision numerically controlled machine tools, and high precision diamond turning technology.

The Mutual Defense Assistance Control Act of 1951 (Battle Act) provides for the embargo of atomic energy materials, among other things, to countries threatening the security of the U.S. This act, which is the statutory basis for U.S. participation in COCOM, authorizes and directs the Administrator of the Act (State) to seek the views of appropriate agencies with regard to embargoing strategic materials, including atomic energy materials. DOE and its predecessor agencies have been the principal advisor to the Department of State in implementing the provisions of the Battle Act and U.S. participation in COCOM with regard to atomic energy embargo list items and atomic energy-related items. As such, DOE is the principal agency reviewing COCOM atomic energy and atomic energy related cases, as well as COCOM cases involving technologies where DOE has particular competence.

Finally, DOE is the Executive Branch Agency that implements U.S. government policy restrictions on U.S. naval nuclear propulsion assistance abroad. As such, regulations were promulgated, at the request of DOE (AEC), in Commerce's export regulations and State Department's Munitions Control regulations to control the export of naval and maritime nuclear propulsion technology and major hardware components. Proposed export cases of identified technologies and components are referred to DOE by Commerce and State for our review.

Q 2. Does the Department of Energy review export licenses which are not nuclear-related, and not short supply related, and if so, what types of applications, to what destinations, and under what authority? How many such non-nuclear-related export license applications has the Department reviewed each month since its inception?

With regard to non-nuclear energy cases, we review only Commerce cases destined to the USSR involving special purpose equipment or technology for oil and gas exploration and production, or cases where the end use or end-user indicates that the commodity will be used for oil and gas exploration or production. DOE's review of non-nuclear energy cases results from Commerce's authority under Section 5(a) of the Export Administration Act to ". . . seek information and advice from the several executive departments" and independent agencies concerned with aspects of our domestic and foreign policies and operations having an important bearing on exports."

Commerce seeks DOE's technical expertise on cases involving oil and gas equipment and technology and our advice on the national security risks involved in any such exports as well as our foreign policy views. By the nature of our statutory and technical programmatic responsibilities, DOE views are essential and unique among the various agencies consulted by Commerce on this type of case. Approximately 16 cases of this type are reviewed each month.

Q 3. You imply in your testimony that the Department of Energy concerns itself with national security matters not involving nuclear-related exports and not involving domestic short supply considerations. Why? Does the Department of Energy attempt to determine whether exports of non-nuclear related energy equipment and technologies to communist countries enhances the military capabilities of such countries? If so, why is that determination not the responsibility of the Department of Defense?

You state in your testimony that: "The transfer of some state-of-the-art industrial technologies may lead to a significant improvement of Soviet military capabilities. We must scrutinize such transactions with the greatest of care to ensure that no damage is done to our national security interests." Is such assessment and scrutiny with respect to non-nuclear-related exports the responsibility of the Department of Energy or the Department of Defense? To the extent the Department of Energy is currently reviewing non-nuclear-related exports for national security purposes, should not such activity be transferred to the Department of Defense?

A 3. The DOE reviews non-nuclear energy cases for national security and foreign energy policy reasons. This review is undertaken by DOE at the request of the Department of Commerce pursuant to Section 5(a) of the Export Administration Act, and because of DOE's statutory energy policy responsibilities. Within the areas of our particular expertise evolving principally from DOE's responsibilities in energy and in designing and manufacturing nuclear weapons, DOE provides advice to Commerce on whether a proposed export may enhance the military capabilities of Communist Countries. DOE's judgments on national security risks are not considered alone by the Commerce Department but along with the views of the Department of Defense. DOE's review of these cases does not preclude Commerce from seeking the views of the Department of Defense which we understand they do. Both agencies, DOD and DOE, have significant statutory responsibilities in maintaining the common defense and security of the U.S. As such, we believe that it is proper that both agencies should be consulted by Commerce on matters affecting the national security.

Q 4. You note in your statement that: "Applications referred to DOE are reviewed on a case-by-case basis. Foreign policy determinations in particular require careful analysis of the specific circumstances of the time." Does the Department of Energy attempt to determine the foreign policy implications of non-nuclear-related exports--in particular of exports of oil and gas exploration and production equipment and technology to the USSR? If so, why is such determination not the responsibility of the Department of State? To the extent the Department of Energy is currently reviewing non-nuclear-related exports for foreign policy purposes, should not such activity be transferred to the Department of State?

A 4. DOE does not make independent foreign policy judgments, but makes a significant contribution to the foreign policy review process.

Export Administration Bulletin 185 of August 1, 1978, requires validated export licenses for oil and gas exploration and production equipment to the USSR in order "to provide for the prior review of proposed exports to the USSR, Estonia, Latvia and Lithuania of petroleum and natural gas exploration and production commodities and related technical data to assure that their export would be consistent with the foreign policy objectives of the United States."

The Department of Energy reviews license applications for such licenses in order to determine:

- the national security implications of the sale,

- the anticipated impact of the export on the Soviet energy industry, and

- the expected effect of changes in Soviet energy production on world oil supply and demand and other international energy problems within DOE's area of responsibility.

DOE's expertise in these areas represents a necessary contribution to the license review process. Based on these judgments, as well as evaluations by other agencies, a determination can be made as to consistency of the export with U.S. foreign policy objectives.

Q 5. You state that: "The sale of U.S. equipment, technology and services to the Chinese energy industry can have a direct and beneficial impact on world energy supplies." Does the Department of Energy also believe that the sale of U.S. equipment, technology and services to the Russian energy industry can have a direct and beneficial impact on world energy supplies, and if not, why not?

A 5. The Department of Energy encourages the development of increased supplies of internationally traded energy at competitive prices. The significant oil resource potential of the People's Republic of China and the relatively low technological level in Chinese industry provide an opportunity for substantial increases in production through the rapid introduction of western equipment and methods. We believe that a significant share of the increased output would be sold on the world market to earn foreign exchange, with benefits to China and the U.S.

The effect of energy-related exports to the Soviet Union is less clear. Given the increasing stringency of energy supplies in the Soviet economy and the prospect of increasing shortages over time, the Soviets might use most of the incremental oil production which might result from liberalized U.S. export policies to maintain domestic energy consumption levels and thus boost economic growth. The benefits to the world energy market would in our view be slight.

In both cases, however, the U.S. should weigh the potential energy benefits against foreign policy and national security problems which might accompany energy-related exports to either country.

Q 6. You state that: "The transfer of some state-of-the-art industrial technologies may lead to a significant improvement of Soviet military capabilities. We must scrutinize such transactions with the greatest of care to ensure that no damage is done to our national security interests. Validated licenses are now required for the export of oil and gas-related equipment to the USSR."

Should we not also take "the greatest of care" with respect to transfer of technology which could lead to a significant improvement of Chinese military capabilities? If so, why are validated licenses not required for the export of oil and gas-related equipment to the PRC?

A 6. The United States should take steps to ensure that exports to all countries are consistent with our national security. In the case of the USSR, the determination was made that the state of Soviet military industry, the use of military power by the USSR and the state of U.S./Soviet relations justified a case-by-case review of the sale of oil and gas related equipment and technology to ensure that we were not harming ourselves through such transactions.

Conditions in China and current U.S./Chinese relations, however, do not indicate a need for the same case-by-case judgments of energy-related exports at this time. Unless present circumstances change, DOE does not believe that a validated license requirement is necessary.

Q 7. Did the Department of Energy recommend disapproval of the Dresser Industries case on any grounds other than or in addition to the concern that the equipment or technology might possibly be used for nuclear-related purposes by the USSR? If so, please specify those grounds, the date(s) on which disapproval was recommended on such grounds, and if Energy later changed its recommendations, the reasons therefor.

A 7. On May 30, 1978 the Department of Energy, after a review of the technical and policy implications of a Dresser Industries request to export technical data and equipment to establish a rock bit plant in the USSR, concurred in a Commerce recommendation to approve the technology transfer. On June 18, 1978, a Department of Energy staff member concurred in the approval of a follow-on request by Dresser to export a computer numerical controlled (CNC) electron beam welder intended as a adjunct to the technology package. However, senior level review and additional evidence concerning both the sophistication of the electron beam welder and its associated computer controller in the design and production of nuclear and other sophisticated weapons caused DOE on June 28, 1978 to withdraw its concurrence and recommended that the application be returned to the applicant without action or denied at this time pending further review of the application. This position was specifically reaffirmed on August 4, 1978, in a letter from Donald M. Kerr, Acting Assistant Secretary for Defense Programs, to Commerce Deputy Assistant Secretary Stanley Marcuss.

Q 8. What is the projected completion date for Presidential Review Memorandum Number 44? Why has there been such extensive delay in preparation of the memorandum, which I understand would lay the basis for a U.S. policy toward exports of energy-related equipment and technology?

A 8. Presidential Review Memorandum Number 44 was initiated under the aegis of the National Security Council and DOE is only one of the participating agencies in the review. I therefore request that you refer any questions relating to PRM 44 to the NSC.

If I can be of any further assistance please let me know.

Sincerely,

Duane C. Sewell
Assistant Secretary
for Defense Programs

Senator STEVENSON. I'll be introducing legislation, hopefully this week, to overhaul the act. I'll send you a copy of that, and we would welcome any comments from the Department of Energy.

Mr. SEWELL. We'd appreciate that.

Senator STEVENSON. Now, I welcome the general proposition, namely, that it's in the interest of the United States to promote increases in energy production on a local basis. But you also qualify that general proposition with comments about national security and foreign policy and other vital U.S. interests.

You said: "Our policy is to promote and encourage energy equipment and technology exports wherever such trade is consistent with national security and other vital U.S. interests."

Where is such trade inconsistent with national security and other vital U.S. interests?

Mr. SEWELL. When the items traded, in our judgment, can be used, particularly in the nuclear area, for enhancement of a country's nuclear weapons development. We certainly look at those extremely carefully, and in some cases have recommended that licenses not be given for reasons of national security. That's an example of the type of thing we look at.

Senator STEVENSON. Can you suggest any countries to which exports of oil and natural gas extraction equipment would not be consistent with national security and other vital U.S. interests? Or the exports of factories which make such equipment?

Mr. SEWELL. I believe the only place we are reviewing that at this time is the Soviet Union.

Senator STEVENSON. Is that the only country for which validated license procedures are required, the Soviet Union?

Mr. SEWELL. For the oil equipment, that's the only one we have; yes.

Senator STEVENSON. Have any license applications for exports of oil equipment to the Soviet Union been rejected?

Mr. SEWELL. No.

Senator STEVENSON. You said the Department and the Government have responsibility to insure that exports do not enhance the military capability of countries hostile to the U.S., or that they do not undermine United States, foreign policy goals.

Could the Dresser Industries case do either—enhance the military capability of the Soviet Union or undermine our foreign policy goals? What was the position of the Department on that transaction?

Mr. SEWELL. Initially, DOE recommended denial because of concern over ramifications of the total package from Dresser. Later interagency discussions of all the pros and cons were conducted after which there was no objection to the approval of the export.

Originally, we had concerns over the electron beam welder, and the associated computer control. We came to the conclusion, after quite an extensive review, that this equipment was specially designed to weld drill bits and would require extensive modification if it were put to any end use other than that stated at the time the purchase was consummated. The other part incidentally—the tungsten carbide, technology—we did not object to since that was generally available to the Soviet Union, as far as we could tell. They have gotten that already.

Senator STEVENSON. I still don't quite understand what the concerns of the Department of Energy were, what dissipated those concerns, and why the Department of Energy, in this case, was expressing a judgment on matters affecting foreign policy and national security.

Mr. SEWELL. The prime difficulty we had, as I said, was with the computer-controlled equipment and the capabilities that it might give the Soviet Union, primarily in the area of national defense—if we were to give them computer capabilities that were beyond what the Soviet Union had and could be used in the national defense area.

Senator STEVENSON. Why was that of concern to the Department of Energy?

Mr. SEWELL. Because we are looking at it from the national defense standpoint, and one of the key things in the national defense area—particularly in nuclear weapons—is the use of computers. That's one of the areas where the U.S.S.R. production of that equipment is quite a way behind the United States. Computers are used extensively in the design of nuclear explosives.

Senator STEVENSON. Doesn't the Department of Defense look at it from that standpoint? Why would the Department of Energy get involved?

Mr. SEWELL. The Department of Energy has the responsibility for the U.S. Government in the design of the nuclear weapons, not the Department of Defense.

Senator STEVENSON. Was that the concern about the electron beam welder?

Mr. SEWELL. The electron beam welder had associated with it this computer control. It's a piece of equipment that went with the electron beam welder.

Senator STEVENSON. The concern of the Department of Energy was that that computer might be used for nuclear purposes by the Soviet Union?

Mr. SEWELL. That's correct.

Senator STEVENSON. What finally dissipated those concerns—that you finally went along with it?

Mr. SEWELL. We did finally go along with it, because in looking at it in more detail, we came to the conclusion that it would take a major amount of changing and extensive modifications to it to be utilized in a weapon program; therefore we thought it was worth the risk.

Senator STEVENSON. Why, if validated license procedures pertained to the Soviet Union, don't they pertain to the People's Republic of China?

Mr. SEWELL. I'm sorry, I can't answer that.

May I call on my colleagues?

[No response.]

Senator STEVENSON. As you know, the Export Administration Act contains the provision in the law which governs exports from the United States of oil; and as some of us had predicted, failure to build the Trans-Canada Pipeline is now producing surplus oil in the west coast.

What is the policy of the Department of Energy with respect to swaps or exports of Alaskan oil, and are you suggesting that we amend that provision in order to facilitate that policy?

Mr. SEWELL. Let me call upon Mr. Chapman to answer that question.

Mr. CHAPMAN. The question of exporting Alaskan oil is presently under study by the administration, and we'd be happy to answer the question at a future time when it's decided in what way we might approach this issue.

Senator STEVENSON. This is getting to be a familiar refrain.

Well, I have a special reason for concern in these cases, partly because I have been trying a long time to get an expression of export policy out of this administration; but on this particular matter, I went on the floor once and won a battle for the administration.

They'd asked me to seek provisions in the law that would make exports from Alaska possible. Ever since I won that battle, they've backed off of exports from Alaska.

It makes a lot of economic sense. At least we have a pipeline. That would even obviate the need for another very expensive pipeline or some other expensive transportation system; and, of course, in times of emergency the experts could determine that anytime we wished to divert the oil from Alaska, either through the canal or all the way around South America, to the Middle West regions where it's needed.

I think I don't follow any of the administration feeling on the issue. I can't understand why they can't express it publicly.

Now, this act is expiring. We're running out of time. If we're going to want to change it, you'll have to let us know pretty soon. We've been waiting a long time.

Do you have any idea when we will get a policy on this question out of the administration?

Mr. SEWELL. I'm sorry, I do not.

Senator STEVENSON. Have human rights considerations intervened anywhere in the world to prevent exports of energy-related equipment?

Mr. SEWELL. That is certainly a part of the consideration as far as foreign policy is concerned; yes.

Senator STEVENSON. In what countries?

Mr. SEWELL. The U.S.S.R. has been the one country so far.

Senator STEVENSON. But not Libya?

Mr. SEWELL. I'm sorry.

Senator STEVENSON. Human rights considerations don't prevent us from exporting oil equipment to Libya or Iraq?

Mr. SEWELL. Not to my knowledge.

Senator STEVENSON. How about a friendly country, like Argentina?

Mr. SEWELL. Not to my knowledge.

Senator STEVENSON. Has any consideration yet been given to the policy with respect to Iran, under its new regime?

Mr. SEWELL. If it has, I'm not aware of it.

Senator STEVENSON. That makes an interesting case in point. Ayatollah Khomeini is attempting to establish the law of the Koran, which presumably, by the standards which prevail in most

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of the world, is not amoral, and yet it implies deprivation of what we would regard as basic human rights, such as due process, the rights of women.

I'm curious as to why the administration doesn't have that question under active review, its concern for human rights being what it is. Does this policy only apply to the U.S.S.R.?

Mr. SEWELL. It's the only place where the policy has been applied to date; yes.

Senator STEVENSON. But there, of course, it was for strategic reasons as well.

Mr. SEWELL. Yes.

Senator STEVENSON. Senator Proxmire has some additional questions.

Last September this committee tried to find out what the administration's policy is toward export which support energy development in Communist countries, especially China and Russia. We were told the issue was under review.

Has Presidential Review Memorandum No. 44 been completed? Is there a policy?

Mr. SEWELL. Let me turn to Mr. Chapman to answer that question.

Mr. CHAPMAN. Presidential Review Memorandum No. 44 has not been completed. However, the policy of the administration is, as we stated in our prepared text, basically the contribution of oil and gas technology and the ultimate contribution to international world energy supplies is in our common interest.

We would approach both China and the Soviet Union with essentially the same criteria for export. However, we would review each case individually on a case-by-case basis to determine if the conditions associated with those criteria are satisfied.

Senator STEVENSON. If the criteria are the same, why are the validated license procedures in effect only with regard to the Soviet Union?

Mr. CHAPMAN. The only requirement with regard to a validated license for oil exploration and production is the Soviet Union; that's correct, sir.

I was referring to the criteria themselves for the potential export of oil technology or strategically significant technologies. I didn't mean to confuse the answer by implying that we're currently controlling oil and gas technology exports to the PRC.

Were we to have a requirement for such a validated license to the PRC the criteria for evaluating those exports would be the same.

Senator STEVENSON. Do you know when the PRM will be completed?

Mr. CHAPMAN. I have no way to judge when it will be finished, sir.

Senator STEVENSON. Senator Proxmire also asked: Is it in the interest of the United States to help the Russians to maintain energy self-sufficiency and energy exports to Eastern Europe?

Mr. CHAPMAN. I would think it would be in the U.S. interest to have Soviet exports of oil for Eastern Europe, because in that respect, it reduces their demand on the overall world supply.

Senator STEVENSON. This is also a question from Senator Proxmire: The DOD is currently required by statute to respond within 30 days to license applications referred from the Commerce Department.

Would the Energy Department have any objection to be subject to a similar requirement?

Mr. SEWELL. We would have no objection. And, in fact, I believe that that is the situation. I would expect that there may be some cases of a nature that could require more than that, but it seems to me they could be handled on a exception basis.

Yes, we would be willing to go along with that.

Senator STEVENSON. He notes that, according to the GAO report of last October, a large number of licenses under review by the Energy Department took more than 90 days to process.

Mr. SEWELL. I believe that is right. But I think the situation has improved since that time. We have put into effect some procedures which give a better time response than we had prior to that.

Senator STEVENSON. Now, getting back to nuclear exports, there aren't any anymore, are there? Haven't we given that business—all of it—to our competitors?

Mr. SEWELL. No, I don't think that you can say that.

There are certainly some technologies involved in export of nuclear types of equipment that I believe are not generally known on the outside.

Senator STEVENSON. What role does the Department of Energy play with respect to the export of nuclear reactors?

Mr. SEWELL. Let me turn to Mr. Chapman, who reviews these.

Mr. CHAPMAN. Yes, sir; referring to the previous question, there were nearly 6,000 nuclear export license applications processed last year.

Senator STEVENSON. How many nuclear reactors?

Mr. CHAPMAN. There was really only one nuclear reactor proposed for export.

Senator STEVENSON. Aren't most of the nuclear exports related to earlier sales of nuclear reactors?

Mr. CHAPMAN. Most of them are related to parts components, new components, and fuel.

Senator STEVENSON. And we had one nuclear reactor sale last year?

Mr. CHAPMAN. I'm not sure the sale was actually consummated.

Senator STEVENSON. One that may have been consummated.

Mr. CHAPMAN. U.S. nuclear reactor sales are virtually nonexistent.

Senator STEVENSON. Why is that—inferior technology? Is the Westinghouse light water reactor noncompetitive, priced out of the market even with the devalued dollar?

Mr. SEWELL. I don't know the reason for that, but what you say is certainly a fact.

Senator STEVENSON. It doesn't have anything to do with export controls?

Mr. CHAPMAN. It may be, in part, the conditions that must be met under the Nuclear Nonproliferation Act before the export can be approved.

Of course, I don't believe that there were more than seven nuclear reactors exported last year by even foreign countries.

Senator STEVENSON. Well, the tragedy, to my way of thinking is two-fold: One, we just might not have energy sufficient for our needs in the short term with the growing possibility of political instability, of which Iran is certainly an example; it could make it an inhospitable place for the United States and other friendly countries.

Secondly, the attitude toward exports is motivated, by a reasonable concern about nonproliferation, but it's producing proliferation, because exports from other nations are frequently not as adequately or easily safeguarded as those from this country—like the Canadian CANDU reactor, for example.

The technology in some ways is economically more attractive enriched uranium, and it's easily safeguarded. Other countries are now going to plutonium, because we haven't made ourselves a reliable supplier of enriched uranium.

Is there anything we should be doing about this for the sake of energy in the world, for the sake of nonproliferation, plus our economic opportunity associated with exports of nuclear equipment and fuel?

Mr. SEWELL. I think the question is: Are we doing something about that? We are following the general guidelines that are required by the policy of the Administration as far as nonproliferation is concerned. Those are the internal things that we follow in giving or refusing to give licenses to such items.

Senator STEVENSON. Gentlemen, we do have some additional questions. Senator Heinz has some questions. We'll submit those to you for the record.

[The following information was received for the record:]

DEPARTMENT OF ENERGY,
Washington, D.C., March 29, 1979.

Hon. H. JOHN HEINZ,
U.S. Senate, Washington, D.C.

DEAR SENATOR HEINZ: I wish to thank you for your letter of March 12, 1979, concerning my testimony before the Senate Banking Committee relating to proposed amendment of the Export Administration Act.

With regard to your questions concerning the Dresser Industries sale of rock bit technology to the USSR, the tungsten carbide technology provided by General Electric (a subcontractor to Dresser Industries) could be used in the hardening of projectiles. However, our review of this case indicated that the Soviet Union is advanced in the theoretical aspects of this technology and possibly may lead the U.S. in the more fundamental aspects of tungsten carbide technology. Furthermore, tungsten carbide technology is available from several sources throughout the world, including Japan, Sweden, West Germany, Israel, South Africa and the U.S., and had been previously provided to the Soviets by Sandvik in Sweden (the world's largest producer of tungsten carbide). For these reasons the Department of Energy raised no objection to the export of tungsten carbide technology.

With regard to your question concerning the assertion of the GAO that no individual or office is responsible for ascertaining foreign availability, the Division of Politico-Military Security Affairs (PMSA) of the Office of International Security Affairs within DOE has the responsibility of coordinating all technical, political, economic and strategic evaluations (including foreign availability inputs) relating to export requests referred to DOE by other agencies. As I stated in my testimony the Department of Energy is sensitive to the availability of comparable items from other than U.S. sources. Each of the individuals within PMSA is responsible for searching all available sources (including intelligence, open literature and supporting documentation from the applicant) in determining the existence of comparable foreign products and weighing the potential impact on each case. In addition, we

rely heavily upon the expertise of our laboratories and contractors in evaluating the comparability of foreign suppliers and request the support of independent contractors when the situation warrants.

In a limited number of cases DOE has opposed the licensing of an export notwithstanding the availability of comparable foreign products when we believe the export of certain items to a particular destination would be inimical to the U.S. national security. In such cases the U.S. Government has approached the foreign suppliers through diplomatic channels and have sought their cooperation in denying the exports.

DOE is presently instituting changes in its review procedure which we believe will aid in expediting the export review process. We are currently establishing a computerized management data system which will aid in tracking the status of each application referred to DOE for review and will provide a licensing history of similar items exported to a particular destination. In light of the above I do not believe that it is necessary at this time for Congress to earmark funds in the DOE budget for this specific activity.

I hope that I have answered your questions to your satisfaction. If I can be of further assistance please let me know.

Sincerely,

DUANE C. SEWELL,
Assistant Secretary for Defense Programs.

Senator STEVENSON. Thank you very much.

Mr. SEWELL. Thank you, Mr. Chairman.

Senator STEVENSON. The committee will recess until Dr. Perry, our next witness, has arrived.

[Brief recess.]

Senator STEVENSON. The committee will come to order. Our next witness is Dr. William Perry, the Undersecretary of Defense for Research and Engineering.

Please proceed, Dr. Perry. If you'd prefer to summarize, we'd be happy to enter your prepared statement in the record.

STATEMENT OF WILLIAM J. PERRY, UNDERSECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING, ACCOMPANIED BY RUTH DAVIS, DEPUTY UNDERSECRETARY FOR RESEARCH AND ADVANCED TECHNOLOGY; AND ELLEN FROST, DEPUTY ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC AFFAIRS

Dr. PERRY. Mr. Chairman, what I would prefer to do is enter my written statement for the record and at this time simply summarize briefly the points which I consider to be the highlights in this testimony.

May I start off by introducing Dr. Ruth Davis on my right, who is the Deputy Undersecretary for Research and Advanced Technology; and Dr. Ellen Frost on my left, Deputy Assistant Secretary for International Economic Affairs, who will be supporting me and assisting me in answering any questions you may have today.

The Export Administration Act of 1969 has two major thrusts which sometimes stand in conflict with each other. One is to encourage trade and further sound growth and stability of our domestic economy. The other is to restrict trade by controlling the export of those goods and technologies which would make a significant contribution to the military potential of controlled countries.

We believe strongly in Defense that our national security is dependent to a very great extent on our military technological superiority, which in turn is based on maintaining technological leadtime. Therefore we have a very keen interest in the second

aspect or the second thrust of this act, which is restricting the transfer of technology to certain countries.

And with this concern in mind, the Secretary of Defense has issued an interim policy statement on export control. I would like to read one sentence of that to you at this time since it highlights the point I've just made.

It says, and I quote:

> Defense's primary objective in control of exports of U.S. technology is to protect the United States lead time relative to its potential adversaries in the application of technology to military capabilities.

Relative to this point, I note that since 1970, the Soviet Union has acknowledged its need for U.S. and Western industrial and technical expertise and equipment. And they have undertaken and opened an aggressive campaign to seek both of these. During this same time period, there has been a steady decline in government support of military related R. & D. in our industry, and a subsequent decline in U.S. industrial competitiveness in the international and domestic marketplaces.

These two different phenomenae have combined to make the Soviet market particularly attractive to U.S. industry in the last few years. And these marketplace forces coupled with the 1972 United States-Soviet Union agreements on scientific exchange have created an unexpectedly favorable climate for the export of U.S. technology to the Soviet Union and its Warsaw Pact allies. Therefore, the problem of restricting technology transfer and restricting the sale of technical goods has become much more difficult in the last 5 years or so.

The problem can be stated as follows: We are trying to control goods and technology which significantly affect military potential and significantly contribute to military potential. The application of this principle obviously requires a high degree of subjective judgment. The question remains: What is significant and when is technology militarily effective?

I would like to suggest to you that there has been an evolving change in the view of the Department of Defense on this issue. Traditionally DOD has made a conservative judgment on that point. By conservative, I mean we have sought to avoid risks, and to put it in the vernacular, it means that when in doubt we said no.

That had, of course, the effect of reducing U.S. sales and an adverse effect on our industry in the last few years. We have come to believe that there is no way for the Department of Defense to really avoid risks. The most we can hope to do is make an intelligent balance of the various kinds of risks involved.

To illustrate this, I would like to observe that this year the Soviet Union will spend about 75 percent more than the United States in what we call military investment; that is, the research and development and the production of military equipment. The aggregate effect of this disparity over the last 5 years has been that they have produced more than twice as many tanks, airplanes and missiles as has the United States. They may not be competitive in their industry for producing commercial products, but they are certainly very effective competitors in their industry for producing defense products.

So that is the problem that we are dealing with and have dealt with for a number of years. In the last few years there has been an interesting and ominous twist in that now, besides challenging us in the quantity of their equipment, they are beginning to challenge us in the quality of their equipment.

In the last few years they have introduced, in a state of advanced tests, very accurate guidance systems for their ICBM's and multiple reentry vehicles (so-called MIRV's) on their ICBM's and SLBM's. They have recently begun testing a look-down, shoot-down radar, which will enable them to engage low-flying bombers and tactical aircraft in the U.S. forces.

All of these are areas of technology in which the United States held an unquestioned lead a few years ago. Our technical dominance in these fields resulted from our dominance in the field of micro-electronics and the computer industry. We are now being challenged in general on technology, and we're being challenged specifically in our semiconductor industry and our computer industries.

I'd like to put one quote into the record, which I think gives you the context of this challenge. This is a quote from Chairman Brezhnev, and he says:

> The center of gravity in the competition between the two systems is to be found precisely in the field of science and technology, making the further intensive development of the latest scientific and technical achievements not only the central economic, but also a critical political task, and giving the questions of scientific and technical progress decisive significance.

So this is the nature of the challenge. I give you both the philosophical underpinnings for it and the fiscal underpinnings for it—which is the disparity in spending—and the results of it as we have been seeing it in the last few years.

Our response to this in Defense has three components to it which are relevant to an Export Administration Act. First of all, we are embarked on a program of greatly improved cooperation in arms with our allies. Second, we are working hard to build the technological base in U.S. industry, and third, we are working to control the export of military technology to the Soviet Union and their allies.

Let me take each of these three points and discuss them very briefly, since they are the keystone of our policy.

The first one, the improved armament cooperation with our allies, involves more technology transfer to those selected nations with whom we have alliances and with whom we have reciprocal agreements for a two-way flow of information. This has been extremely effective in allowing each of the countries in the alliance to increase the effectiveness of their R. & D. programs and the equipment that they produce from it. It does, however, have risks associated with it because it increases the risk of a leakage of that technology simply because there are more countries who we're not involved with. So we achieve a gain, improved cooperation; but we take a risk, and the risk is one of leakage.

The second point, building our technology base. We in the Defense Department fund a very substantial program of technological development in the United States for defense purposes. And in fact in the last few years we have funded that program at a small real

growth rate. On the other hand, we depend to a very great extent on the health of U.S. industry for the bulk of our technology.

I have already mentioned technology critical to the semiconductor industry and to the computer industry. It is those technologies which allow us to have an edge in the capability of our weaponry over the Soviet Union. And yet in the semiconductor field, defense represents only 7 percent of the sales of that industry. Therefore, we have only a very small influence on the developments of that industry and, to a very great extent, we are simply dependent in defense on that industry being able through commercial means to maintain its own health; that is, to increase its sales and to increase its profits so that it will continue to make its own investments in research and development.

To a very great extent, the profits and the sales of that industry hinge on their ability to effectively sell to international markets. Therefore, we are faced with a dilemma. On the one hand we would like to see the increasing profits and sales and vitality of this industry for our own interests in defense. And on the other hand we are very much concerned about that technology being released, either directly or indirectly to Soviet bloc countries. So that's the nature of the dilemma that we are faced with.

It was against that background that the Secretary of Defense issued his policy on export controls. Now, I have already read to you one sentence from it which had to do with restricting or tightening the transfer of technology. Now let me read the other part of it which has to do with making it more available on a selected basis. It says, for example, that Defense will support the transfer of critical technology to countries with which the United States has a major security interest. That statement is the underpinning for our cooperation, for our armament cooperation program with our allies, and has led in the last year or two to an increase in cooperative programs and to an increase in technology transfer from the United States to our allies and from our allies to the United States.

The second statement says that Defense will place primary emphasis on controlling exports to any country of design and manufacturing know-how, of keystone manufacturing, of inspection and test equipment, and of sophisticated operation and application of maintenance know-how. The point I want to make about that statement is that what we are trying to control is knowledge, not products. And we control products only to the extent that it is necessary as a prominent part of controlling the flow of knowledge.

Therefore, we hope with that policy to be able to not only reduce the bureacracy and delay in getting approvals for our industries for sales, but to increase the total number of cases in which they can sell the products, provided that we can be assured of adequate controls on the transfer of knowledge—on the transfer of technology.

In the implementation of this policy, there has been a number of significant steps taken in the last year, the first of which is that we have restructured our organization in Defense somewhat to put a stronger emphasis on the separate components of technology and policy in evaluating each proposed transfer.

And we have added staff to both these areas to try to accelerate the processing of cases. In the last year we have identified a list of 15 military-critical technololgies which we will use in developing and reinforcing the critical technology approach. This list is provided in the written statement that I have passed on to you.

Subsequent to that current list of technology, we have gathered together a group of technical experts, both from the Government and from industry, to delineate what we call the keystone products in the critical components. We are well underway in this project now and expect to have a definitive list prepared before this summer.

In addition to that, we continue to support the preparation of the 1978 CoCom list review which we expect to have completed in August of this year.

Finally, we have begun significant efforts to streamline and expedite the processing of cases. Relative to that, I would like to read you two statistics which I think reflect improvement in that regard. In the first three quarters of 1978, only 72 percent of the cases which were presented to Defense were closed within our 30-day target time. In the last quarter of 1978, 98 percent of them were closed within 30 days.

In summary, then, I would like to conclude that the Defense Department has two objectives which stand in some conflict with each other in this field: The first is to retard as much as possible a technological buildup in the Soviet Union to the extent that technology could be used against us in a military way. The second objective is to facilitate the continuing development of U.S. industry technology on which we depend so critically.

Our principal problem is to effect the proper balance between these two conflicting objectives. That is our goal and I believe it is in the national interest that we succeed in doing that. I also believe we are achieving a good measure of success, although I could not say I'm satisfied in totality with the position we are in at present.

We have a difficult problem. We have made, I believe, significant progress in the last year or two. We have more progress that we need to make.

With that, Mr. Chairman, I'd like to leave myself open for questions from the committee.

[The complete statement of Mr. Perry follows:]

THE DEPARTMENT OF DEFENSE

STATEMENT ON THE

DEPARTMENT OF DEFENSE EXPORT CONTROL POLICY

BY

THE HONORABLE WILLIAM J. PERRY
UNDER SECRETARY OF DEFENSE FOR
RESEARCH AND ENGINEERING

BEFORE THE

COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS

UNITED STATES SENATE

MARCH 5, 1979

Mr. Chairman and Members of the Committee:

I am pleased to appear today to respond to your invitation to the Secretary of Defense to discuss the dimensions of export policy within the jurisdiction of the Department of Defense (DoD). I am accompanied by Dr. Ruth Davis, Deputy Under Secretary for Research and Advanced Technology and Dr. Ellen Frost, Deputy Assistant Secretary for International Economic Affairs.

In accordance with your invitation, I shall first comment on the responsibilities of DoD for export control and the manner in which we now carry out these responsibilities; then my testimony will directly address, as you asked, the nine questions posed in your letter of January 5, 1979.

The Department of Defense and Export Control

This year marks the tenth year in which we have been operating under the provisions of the Export Administration Act of 1969. Although this Act has been amended in a number of respects, there has been no retreat from its statements highlighting Congress's interests in using export controls "to the extent necessary to exercise the necessary vigilance over exports from the standpoint of their significance to the national security of the United States." In this Act as amended, Congress specifically stated its finding that "the defense posture of the United States may be seriously compromised if the Nation's goods and technology are exported to a controlled country (country to which exports are restricted for national security purposes) without an adequate and knowledgeable assessment being made to determine whether the export of such goods and technology will make a significant contribution to the military potential of such country."

The Secretary of Defense was assigned the responsibility for this assessment and for recommending to the President that exports be disapproved if they make such a contribution which would prove detrimental to the national security of the United States. I believe that the 10 years since the enactment of the Export Administration Act have shown that we have, in DoD, exercised export controls to protect our national security while still meeting the Act's stated policy of encouraging trade to further the sound growth and stability

of our domestic economy as well as to further our national security and foreign policy objectives.

Recently, both the Secretary of Defense and I have increasingly stressed the dependency of our national security on our military technological superiority, which in turn, is based on maintaining our technological lead time. With this concern in mind, the Secretary of Defense issued an "Interim DoD Policy Statement on Export Control of United States Technology" on August 26, 1977. In this policy statement, the Secretary emphasized that:

> "Defense's primary objective in the control of exports of U.S. technology is to protect the United States' lead time relative to its potential adversaries in the application of technology to military capabilities."

The exercise of export controls for such a purpose is a key ingredient in our efforts to positively affect the future military balance between ourselves and the Warsaw Pact nations. I believe that we must use in ncert all the mechanisms available to us to maintain our present qualitative military advantage over the Soviets and to stop the worsening numerical military imbalance between ourselves and the Soviets. The primary mechanisms that we can apply are (1) real increases in our research, development and acquisition resources, (2) improved armament cooperation with our NATO Allies, (3) direct support to enhance and exploit our fundamental domestic

advantage in both commercial technology and our unsurpassed diverse industrial base and (4) controls over the export of military critical technologies and critical products of direct military significance.

The policies and programs which we are presenting to Congress this year recommend the concerted utilization of these four mechanisms as the best means for achieving our national security objectives.

As can be seen, export controls must figure prominently in our national security calculations. The importance of such controls has been increasingly evident as the Soviets began, about 1970, to drop their long term pretense that the Communist Bloc was achieving technological and production self-sufficiency through its indigenous capabilities. They acknowledged their need for U.S. and Western industrial and technical expertise and equipment and began openly and aggressively to seek both. During this same time period there has been a steady decline in government support of military-related R&D in our industry. This was accompanied by a subsequent decline in U.S. industrial competitiveness in the international and domestic marketplace which, in turn, has contributed to the growing unfavorable balance of trade. These two separate phenomena combined to make the Soviet market particularly attractive to U.S. industry in the last half decade. Such marketplace forces when coupled with the 1972 US-USSR agreements on scientific exchanges helped create an unexpectedly favorable climate for the export of U.S. technology to the Soviets and its Warsaw Pact Allies.

It was against this background that the Secretary of Defense's Interim Policy on Export Controls, to which I referred earlier, stated that "Defense will place primary emphasis on controlling exports to any country of ... design and manufacturing know-how; of keystone manufacturing, inspection and test equipment; and of sophisticated operation, application or maintenance know-how." The Interim Policy also notes that "Defense will support the transfer of critical technology to countries with which the U.S. has a major security interest..." The Secretary's Policy Statement also identified "critical technologies" as that selected set of technologies over which we would exercise strong export controls so that we could simultaneously relax control over other technologies and on many existing products now controlled.

Our experiences have supported the seeming correctness of these assertions. The Interim Policy Statement in August 1977 has particularly reinforced the need for emphasis on a selected set of technologies, and we have thus placed emphasis on technological-military considerations in our recommendations for approval or disapproval of individual exports.

We note, for example, that from September 1, 1977 to August 31, 1978, some 43 percent of the export applications on which DoD has had to make recommendations have involved computer technology or products. Similarly, some 14 percent or 173 applications during the same period have involved requests for manufacturing technology or manufacturing facilities. Sixty-three of the applications have

been made for export to the Soviet Union; 13 have been made for export to the PRC. Monetarily, the majority of the proposed exports to the PRC have been for oil exploration or seismic data collection activities; the majority of these type exports proposed for Russia have been for chemical processing and automotive applications.

Just recently on June 12, 1978, DoD issued technical guidelines to be applied when considering the export of array transform processors, a computer product in high demand by the PRC and USSR but of great military significance to the U.S. These guidelines strongly urged industry to supply computer services rather than equipment to customer countries. In addition, distinctions in export controls were cited based on specific technical and performance characteristics of array transform processors. We intend to issue similar guidelines to assist in export decisions in other technology areas in great demand and having military significance to the U.S.

We have also been able to identify 15 current Military Critical Technologies from the several hundred candidate technologies considered. With this identification completed in January 1979, we are now recommending the most feasible ways of delineating the keystone equipment, technical know-how and technology transfer mechanisms on which controls must be enforced if we are to restrict the export of these 15 Military Critical Technologies. Simultaneously, we are

asking for an assessment of the present Commodity Control List maintained by the Department of Commerce to ascertain those products on which export controls can be relaxed.

I am pleased, as a result of our activities, to report that we have encountered no overriding obstacles in our effort to introduce or reinforce controls on military critical technologies as a significant component of the government's export control process. I believe that our efforts as they progress will make the exercise of controls on exports an even more effective contributor to achieving and maintaining a military advantage over the Soviets and other potential adversaries. I am committed to taking the necessary steps to so do.

Answers to Questions Posed by the Chairman

I shall now respond to the specific questions posed in your letter of January 5, 1979.

Question 1

> Should exports of goods or technology which do not make a "significant contribution to the military potential of any other nation or nations which would prove detrimental to the national security of the United States" be restricted on national security grounds nonetheless, and if so, under what circumstances and pursuant to what authority and criteria?

The answer to this question turns on the definition of "national security" and the differences ascribed to the meaning of "military potential" vis-a-vis national security. Generally "national security" implies a broader scope than "military capability or potential."

Examples which come readily to mind include production capability for nuclear materials not specifically identified for military use but susceptible to diversion to ends detrimental to U.S. national security. Examples can also be drawn from the areas of space platforms and technology. I believe that we need to restrict exports on national security grounds encompassing a wider range of technologies and products than "military significance" alone.

The authorities and criteria to be invoked already exist in some instances as just illustrated. Where circumstances warrant, either new executive policy or Congressional acts would seem to be the natural vehicles.

DoD has confined its attention to making recommendations for export controls based on the military significance of the proposed export, in line with the perceived intent of the Export Administration Act of 1969 as amended.

Question 2

> With respect to countries to which exports are restricted for national security purposes, under which authority and criteria should exports of specific goods and technology be approved for one such country but disapproved for another? In particular, on what basis are exports approved to the Peoples' Republic of China which are denied to the USSR?

For items presently listed as subject to export controls, i.e., already assumed to have potential military significance, DoD reviews proposed exports to assess whether the likelihood of diversion from

the stated civil end use to a military use is sufficient to recommend denial.

Judgment exercised is based on criteria such as:

1. Is the item appropriate (in quantity, quality, demonstrable need, design, etc.) to the stated civil end-use?

2. Is there any evidence that the stated end-user is engaged in military or military support activities to which this item could be applied?

3. How difficult would it be to divert this item to military purposes?

4. Could such diversion be carried out without detection?

5. Is there evidence of a serious deficiency in the military sector which this item, if diverted, would fill?

6. Is technology of military significance not already available extractable from this item?

7. Can safeguards be imposed to prevent a presumed diversion?

Exports to the Peoples' Republic of China are subjected to the same kind of scrutiny as are those to the USSR. Where differences in restrictions appear, the reason is a different judgment as to the likelihood of occurrence of diversion. As a result, it is not unusual for an export to be approved for one of these countries but disapproved for the other where different end use applications change our assessment of possible diversion to military use.

Question 3

> What contribution have exports of U.S. goods and technology during the past 30 years made to Soviet military potential?

The answer to this question has been provided to the Committee separately. I can say generally that the export of U.S. goods and technology to the Soviet Union has paralleled the political relations between the two countries. One can see a gradual lessening of restrictions on trade during the past 30 years with a marked increase in trade during the last 7 years which has been the era of detente.

Question 4

> Do exports which enhance Soviet capabilities for energy resource exploration and production make a significant contribution to the military potential of the Soviet Union which would prove detrimental to the national security of the United States? In particular, does the so-called "Dresser case" involve the export of goods or technology which would make a significant contribution to the military potential of the Soviet Union?

The answer to the first part of Question 4 has been provided to the Committee separately. The "Dresser case" export does not significantly contribute to Soviet military capabilities because it only increases the non-critical Soviet oil production capability. The Soviet military consumption of oil is a very small fraction of their total production capability.

Question 5

> What steps has the Department of Defense taken to implement the President's directive of September 26, 1978 to "take export consequences fully into account when considering the use of export controls for foreign policy purposes?"

The use of export controls for foreign policy purposes is not a matter which falls under the purview or within the responsibility of DoD.

Question 6

How does the Department of Defense evaluate the contribution of a proposed export to the military potential of a foreign nation?

I will confine my response here to instances in which the foreign nation is the USSR, a Warsaw Pact country, the PRC or another selected country to which exports are restricted from time to time for national security purposes. As you know, the prudent transfer of technology to NATO countries is a key component of our armament cooperation program.

For countries to which exports are restricted, the DoD procedures for identifying export applications of significance to our national security begin with DoD participation in the review and continual updating of the various export control lists. An item is placed on the U.S. Commodity Control List and, if our COCOM partners agree, on the COCOM List, if its unrestricted export could make a significant contribution to the military potential of another country which would be detrimental to our national security. The basic assumption here is that adding significantly to the military capability of a Communist country is, by definition, detrimental to our national security.

To date, judgment used in placing an item on the Commodity Control List is based on whether in the USSR, the Warsaw Pact

countries, or the PRC, the item (1) has or could have predominant or important application in military and military support end-uses, (2) is not available in adequate quantity and quality either from their own production or from other countries, (3) has no adequate substitutes or (4) provides access to militarily significant technology not already available.

Question 7

> What steps have been taken by the Department of Defense pursuant to the Secretary's memorandum of 26 August 1977 entitled "Interim Policy Statement on Export Control of United States Technology" and the February 1976 report of the Defense Science Board Task Force on Export of U.S. Technology entitled: An Analysis of Export Control of U.S. Technology--a DoD Perspective? Has the Department developed a list of "critical technologies" and implemented procedures for restricting the export of such technologies as well as decontrolling the export of non-critical technologies?

First I would point out that the Secretary's Interim Policy Statement reflected some of the philosophy and actions recommended by the referenced Defense Science Board Report. We have now identified a list of 15 Military Critical Technologies which DoD will utilize in developing and reinforcing the Critical Technology Approach as a significant component of the U.S. Government's export control process. This list of Military Critical Technologies is provided in the attachment. DoD staff as well as volunteer industry association technical experts have already delineated some of the keystone products and critical components in 8 of these 15 Military

Critical Technologies over which export controls have been or can be exercised. Technology transfer mechanisms have been identified and procedures are being developed for exercising control, as appropriate, over these mechanisms.

I anticipate, as resources become available, an acceleration in the categorization and gradation of military critical technologies and products as well as in the suggestion of procedures for controlling their export.

We have begun the implementation of the Secretary's Interim Policy through three Memoranda of Understanding dated November 1977 and March and April 1978 between myself and the Assistant Secretary for International Security Affairs. These memoranda allow me to provide DoD's technical recommendations for export approval or disapproval and to coordinate DoD's technical policies and positions in export matters.

I would add here that an Interagency Task Group on Critical Technology Implementation has been established under DoD leadership. Under present Export Administration Act provisions, the implementation of a critical technology approach to export control requires actions by the Department of Commerce to adjust the U.S. Commodity Control List and by the Department of State to negotiate with our Allies appropriate changes in the international embargo list. Some actions have already been taken to achieve these results.

We have undertaken efforts to decontrol the export of non-critical technologies through our activities in support of the 1978 COCOM List Review now in process and planned for completion in August 1979.

Question 8

> When reviewing export license applications how does your Department assess the availability of competing goods or technology from foreign countries, and what weight is given to foreign availability?

DoD policy and practice with regard to foreign availability assessments made by other agencies varies with the military applicability of the technology in the case. In general, if a technology involved in a case is new and is applicable to military capability, foreign availability will be independently verified by DoD. In cases where the technology is not advanced and the potential for military application is low, foreign availability assessments made by the Department of Commerce are accepted by DoD.

Question 9

> What steps has your Department taken to expedite the processing of export license applications?

As you know, our role is to weigh the national security aspects of a proposed transaction and inform the Department of Commerce that we have no objection, have no objection provided certain conditions are imposed or that we object to approval of the case. What we have recently done to speed our operations is to:

1. Clarify and strengthen the directives dealing with the export control responsibilities of various Defense components.

2. Engage the attention and active participation in the export control process of policy level officials in the Military Services and the Defense Agencies.

3. Increase the number of delegations of authority to both State and Commerce to act on cases under certain guidelines established by Defense, and

4. Add to our staff resources as well as institute procedures to assure more timely technical evaluations of export cases.

To check our progress, we conducted an analysis of DoD's performance for the period January 1, 1978 to September 30, 1978. Figure 1 presents a summary of what we discovered.

Our objective is to provide the DoD position on a case to the Department of Commerce within 30 calendar days. The average time was 29 days, but this is a situation where averages can be deceiving. As you can see, only 72 percent of the cases were closed within 30 days. Some cases took as long as 165 days. Approximately 40 percent of the cases are routine and closed within the first week.

Since October, we have made further progress as Figure 2 shows. The average time per case has been reduced from 29 days to 12 days, and 98 percent of the cases are closed in 30 days instead of 72 percent. Approximately half of the cases are closed during the

FIGURE 1

AGE OF DOD EXPORT CONTROL CASES (JAN—SEP 1978)

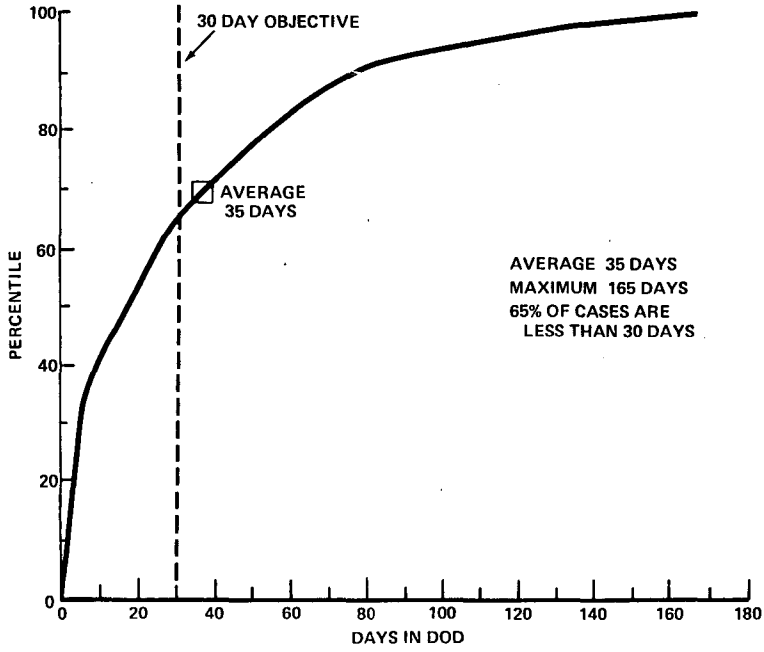
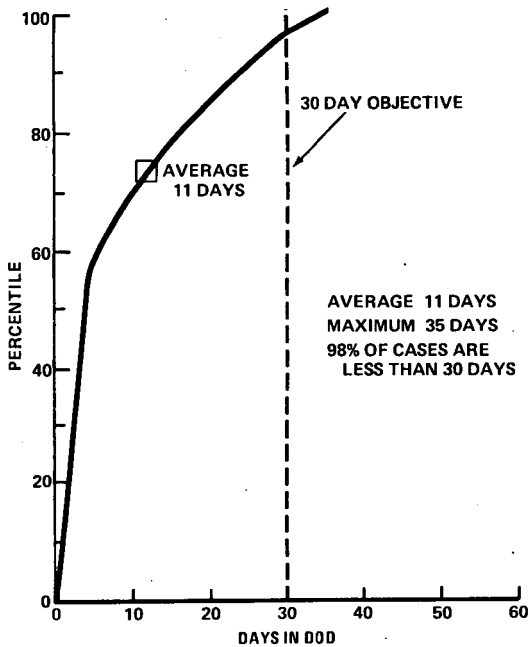


FIGURE 2

AGE OF DOD EXPORT CONTROL CASES (OCT–DEC 1978)



first week. Lastly, the oldest case has been reduced from 165 days to 35 days.

DoD is making a concerted effort to reduce the time required to process a case. We are trying to meet the criticism of timeliness head on. The results to date suggest that we are succeeding.

Concluding Statement

To summarize the Defense position, Mr. Chairman, we believe that export controls form an important, although not always fully recognized element in our defense structure. As I emphasized earlier, in order to preserve that margin of military power required by the deterrent strategy upon which our security depends, it is not enough to maintain our Defense establishment. We must also retard as much as possible the technological build-up of forces which are or may be arrayed against us. An effective system of export controls of strategic commodities contributes directly to our national security. It is in our national interest that such a system be continued.

Attachment

ATTACHMENT

MILITARY CRITICAL TECHNOLOGIES

1. Computer Network Technology
2. Large Computer System Technology
3. Software Technology
4. Automated Real Time Control Technology
5. Materials, Structures, Fabrication, Processing and Manufacturing Technology
6. Directed Energy Technology
7. LSI-VLSI Design and Manufacturing Technology
8. Military Instrumentation Technology
9. Telecommunications Technology
10. Guidance and Control Technology
11. Microwave Componentry Technology
12. Military Turbine Engine Technology
13. Fiber Optics and Advanced Optics Technology
14. Sensor Technology
15. Undersea Systems Technology

Senator STEVENSON. Thank you, Dr. Perry.

As you know, the Export Administration Act expires soon. Does the Department of Defense have any recommendations for changing it?

Dr. PERRY. Yes. We would have some recommendations on it. First of all, we recommend, of course, that the Export Administration Act continue. We would have some recommendations for changing the provisions in it.

I would like to refer to Dr. Frost to comment on that.

Dr. FROST. Senator Stevenson, we are still in the course of comparing notes with other agencies on necessary changes. I think one change we would like to see is a broad endorsement of our general approach emphasizing controls on technology. That's one revision that we have already proposed in the interagency group.

I don't think we are proposing any further significant changes at this time.

Senator STEVENSON. We have heard from a number of sources that the National Security Council is exercising an operational role with respect to export control policy. Some have suggested that its actions are occasionally in conflict with the pronounced policies of the administration, in which the secretaries are bypassed and that this new role for the NSC, which, of course, is not accountable to the Congress, was never intended by the law.

What is the present role of the NSC in this process, and what should it be?

Dr. PERRY. Mr. Chairman, the NSC functions as an adviser to the President. The President, of course, is responsible, under the Export Administration Act, for the enforcement of that act and for making the determinations. He has delegated the responsibility for the administration of the act to the Department of Commerce, which actually reviews the cases and processes them. We make our comments, for example, our recommendations to the Department of Commerce.

I would estimate—I would say that the role that the National Security Council is involved in and the one which they appropriately should be involved in is advising the President of any foreign policy impact of any of the cases before them. The great majority of cases would be considered to have no particular foreign policy impact. Some of them do. And we in Defense do not try to make a judgment on those issues. We are looking at the military potential of systems, and we consider our job to be one of advising the Department of Commerce or the President, if necessary, on the military potential of the systems.

Senator STEVENSON. You made various references to exports of technology to the Soviets and the Soviet bloc. Are those the only countries with which the Department of Defense is concerned? Why not the PRC?

Dr. PERRY. No, the PRC is also on the list. The application is actually to more than communist countries; it's to any countries where we feel there would be an adverse national security interest in the transfer of technology.

The People's Republic of China, the transfer of technology to the People's Republic of China, has to be treated with the same criteria as the transfer to the Soviet Union. The results of the evaluation of

the criteria may be different. There is a different circumstance with that country. But when we look at it in Defense, we have to look at the same criteria for transferring it to the People's Republic as we do for the transfer to the Soviet Union or to Czechoslovakia.

Senator STEVENSON. I am glad to hear you say that the criteria are the same. How does the Department of Defense assess the availability of technology from other sources? There is continuing evidence to indicate that exports of technology-intensive products are controlled from the United States notwithstanding that they're available from other countries, even from the Soviet bloc countries. And what isn't available from other sources anymore?

You mentioned, yourself, the declining competitiveness of the United States and the qualitative competitiveness of the Soviet Union. This year, I believe, the Japanese have come onstream with a fourth generation of computer technology which is about the highest of its kind. We do the work on industrial innovation and technology and the basic science in another committee. We've been looking into the competitiveness also, and we don't find much that's unique or superior from the United States anymore.

How do you determine the availability from other sources?

Dr. PERRY. When the case is one which has a potentially significant military impact to it and in which case the foreign availability should be a prominent consideration, we seek advice from the intelligence community on their best judgment of the foreign availability of the equipment.

Senator STEVENSON. Now you have given me something to do as chairman of a third subcommittee, on the quality of American intelligence. [Laughter.]

Is it the Agency, the CIA, that does this?

Dr. PERRY. We would go to the Defense Intelligence Agency, first of all, but we often seek independent advice from the CIA, depending on which agency has the better background on a particular question being considered. We are, by no means, limited to going just to the DIA.

Senator STEVENSON. Do you think those intelligence sources are adequate? You don't consult with the Commerce Department on the question of availability?

Dr. PERRY. Our first point of contact is the Commerce Department. But if the case has significant military potential to it, we will also go to the Defense Intelligence Agency or the CIA for further advice. Which one has better information on the problem depends on which country it is and which technology it is.

But the Department of Commerce would routinely make that assessment and share it with us.

In cases like the Dresser case, for example, which is a major case—and we had a major controversy; it revolved particularly around the issue of foreign availability—we sought a detailed and comprehensive assessment of foreign availability from both DIA and CIA, in addition to the assessment made by the Department of Commerce.

Excuse me, Mr. Chairman. Dr. Frost would like to add a comment to that.

Dr. FROST. I am well aware of the criticism of the way we handle foreign availability. What I was going to add is that, as you know, the act speaks of items or technology from foreign sources that are "comparable in quality and in significant quantity." Those words have proven very difficult to define, and I suggest that the disagreement that surfaces sometimes between us and industry is really a disagreement about the facts. If we're really sure about what we're talking about, then the question of foreign availability becomes a lot easier to decide. But frequently, what we have to rely on is one businessman's trip to a trade fair where one particular piece of equipment was being displayed. We don't know whether that implies mass-production capability or simply prototype-production capability.

Similarly, it's very difficult to determine the quality differences unless you have the foreign-made or Communist-made product in hand.

Since facts are so difficult to obtain—that leads to your followon question about adequacy of intelligence resources—I think that we generally feel that they are not adequate. However, the vast range of cases and the enormous variety of fields in which these cases fall might lead to a situation of diminishing returns. That is to say, in order to improve the quality of intelligence by a factor of *x*, you might have to devote so many more resources to it that it would not become feasible.

Senator STEVENSON. Does this process, at any stage, ever consider the possibility that the control of technology will simply stimulate the Soviet Union or whichever country to develop the technology? Hasn't that, in fact, been the result of export controls of, for example, synthetic diamond production equipment and wide-diameter pipe manufacturing equipment? Everytime I go over there, they always laugh at our export controls. As a matter of fact, they thank us for encouraged them to become the world's largest diamond producers. The aluminum industry is another example of our export control. Do we take into any account such a possibility?

Dr. PERRY. I think it's a fair assumption that when we deny the transfer of technology on a technology which is critical to the Soviet Union, say, that that will indeed stimulate them to develop it themselves.

On the other hand, from a military point of view, at least, from the military vantage point, the issue is not so much whether the Soviet Union will at some time achieve that technology, but rather whether we can maintain a technological lead, whether we can maintain a time advantage and, therefore, tying up their R. & D. resources to arrive at technology 5 years later than we have, we would consider desirable rather than undesirable results.

So, I would argue that the restrictions, intelligently applied, even if they lead to stimulation, are still in the best national interests of the United States.

Senator STEVENSON. Export controls are not used to prevent the transfer of technologies to Iran. As a matter of fact, the technologies of even weapons flow to Iran—the AWAC system, the Phoenix system, and what else—does this process consider the internal dynamics and potential for political instability of another country, the possibility, among other things, that these weapons or technol-

ogies could be used for military purposes and be turned around on us or transferred as a result of such political events to countries which are hostile? How are those considerations taken into account by this process?

Dr. PERRY. We attempt to take that into account, Senator Stevenson, but I would be the first to admit that the crystal ball is very murky in trying to predict what the dynamics of international relations will be 5 to 10 years hence.

For example, we considered a case of a sale of a product to the People's Republic of China, wherein the end use was a geological survey use, which we considered to be no military threat. On the other hand, you could make a case that the product might be diverted to a military use, but it seemed clear that in this particular case, that the People's Republic of China did not have the capability, the technical capability, to affect the diversion; whereas the Soviet Union might very well have had that capability.

So, you could raise the question, then: What if the Soviet Union and the People's Republic of China patched up their differences and became allies again sometime in the future, would we then be letting ourselves open for a retransfer of the technology from China to the Soviet Union? That's the sort of dynamics that we try to contemplate.

Senator STEVENSON. Isn't that more properly a function of the State Department?

Dr. PERRY. Yes. When I say "we," I am talking about the process broadly. The whole issue of the foreign-policy aspect of this is a function of the State Department, but we look specifically at the technology, at the diversion question, the diversion of technology. We do want to also consider the retransfer, the transfer to another country. In this case, I think it's fairly clear that while that sort of a retransfer or rediversion might ultimately take place, it seems a safe conclusion that the time that it would take place would be such that the criticality of the technology would long since have passed.

Senator STEVENSON. The Comptroller General of the United States this morning expressed some skepticism about your critical-technologies approach. I asked him why he was skeptical. He just said that on the basis of the track record that so far he didn't think it was going to succeed.

Could you respond to that assessment?

Dr. PERRY. I would estimate his judgment is wrong on that.

Senator STEVENSON. Well, how is it coming?

Dr. PERRY. It's coming slowly because it's a very difficult process. I come to my judgment not on where we are right now, but on the rate of progress that's being made, and I have confidence that we will have achieved these workable systems for applying the critical-technology approach this calendar year.

So, it's been a long time in coming. The BUCY report, for example, which was the genesis of the critical-technology approach, is 3 years old. We have been trying in this administration for 2 years to implement various aspects of those recommendations. I think we are probably within striking distance of it now.

Senator STEVENSON. In time for the next CoCom review?

Dr. PERRY. I think that it will certainly have a profound impact on the next CoCom review.

I might add to that that even if we have reached the stage where we are completely satisfied with what we have, we have to deal with quite a large group of parties interested in the CoCom review process.

And there is the problem of education and support among other CoCom members, as well.

Nonetheless, my bottom-line assessment is that we will have a workable system this year; and that it will have a significant impact on the next CoCom list.

I would like to invite either Dr. Davis or Dr. Frost to comment on that last point.

Dr. DAVIS. Let me make a couple comments on following up on what Dr. Perry said, if I may. We have identified, from a list of over 800 candidates, some 15 technologies which we would classify as being "military-critical."

It is a tremendous step forward in a process which has never been undertaken anywhere before. It is also very difficult to estimate time for something that has never been done before.

We are very pleased that, as we went along in developing this critical-technology process, we have been able to interact directly between my office and the ongoing CoCom list review, and make available to participants the knowledge that we had gained—limited though it might be.

And I think there has been an impact on the ongoing CoCom list review of the insights we have gained.

The next CoCom list review, which would not occur for another 3 years, would certainly be the direct beneficiary of what we hope will be a different type of export control process than the one in place—namely, one which emphasizes the control of technology, rather than just the control of products.

Senator STEVENSON. As you know, and as I believe Dr. Perry mentioned earlier, technological innovation is proceeding rapidly in the world, and more rapidly in some parts than in our own country.

Does this exercise consider availability and do so on a continuing basis? What's "critical and not available" now might tomorrow be available from other sources.

Is it continually updated to consider that fact of availability?

Dr. DAVIS. Let me answer your question in two parts.

What we are doing now is being done for the first time. In selecting out the 15 militarily critical technologies, we have done two things.

First of all, we have made it easier for the intelligence community to focus its resources on the 15 most critical of the 1,800-or-so technologies on which their effort might otherwise have been diffused.

Second, we have separated out the different facets of the process in order to avoid confusion of objectives. The determination of the "military-critical technology," per se, does not depend on its foreign availability. It depends on the comparability between our technological state of the art and theirs, and our military capability and theirs.

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Once you have these military-critical technologies, then the judgment factors on which components, or which products, or which parts of the knowledge are inherent in the technology to export them can be determined.

That judgment then is based on foreign availability, the probability of diversion, et cetera. We have taken our 15 military-critical technologies, have asked the intelligence community to identify for us both the comparable states of the art in the United States, the free world, and the Communist countries or the U.S.S.R.; and simultaneously with that—because there is a subsequent step to that process—foreign availability.

They are in the process of so doing, and we will have a first answer to that—a first intelligence estimate—for the major components of these particular technologies within the next month or so.

That is a tremendous step forward, from my point of view, to have a semiquantitative estimate in a set of 15 very highly critical technologies.

The second part of your question is: Will this be a part of the ongoing process? Namely, foreign availability.

The answer is very definitely "Yes," assuming that the critical technology process itself becomes embedded in our export control process.

I hope the latter occurs. And if the latter occurs, then the former must. The judgment that comes into deciding on a case-by-case basis what you will export is highly dependent on the foreign availability.

Senator STEVENSON. Which is fluid?

Dr. DAVIS. It is fluid, it is technology dependent, it is time dependent, and quite frankly it is case-by-case dependent. There are no generalities that one can make that make one feel comfortable when one comes to dealing with foreign availability.

Senator STEVENSON. Thank you.

Now some questions from other Senators.

"Secretary Perry, I was intrigued by a reply which your Department sent in response to GAO's October study on Export Control Policies. It said, 'Export control policy is generally determined on a case-by-case review basis where precedents are set which involve policy judgments.'

"The GAO's comment on that description of your process was that they believe that policy should be applied to, not determined by, case-by-case review.

"I must say that I agree wholeheartedly with GAO's analysis of this process. I think it points out a basic weakness of the system.

"How would you respond to the GAO?"

Dr. PERRY. I would like to ask Dr. Frost to comment on that.

Dr. FROST. In principle, Senator Stevenson, my sympathies are entirely with your point of view.

Senator STEVENSON. Excuse me, but I was asking this for Senator Heinz, which is not to suggest that I don't agree with him.

Dr. FROST. Logically it would seem as if policy should be evolved by policymakers and filtered down into the nitty-gritty world of cases.

However, of all the areas of policy that I have worked in before, technology transfer is somewhat unique. That is, the meaningful

generalizations that one can develop are too broad to be relevant to any particular case. And, conversely, the more specific the policy that you try to derive from the top down, the less relevant it is to a whole bunch of other cases that happen to fall outside of that field.

My own feeling is that, much as I agree with the sentiment behind the question, you are in trouble whenever you depart too much from the realities of technology transfer, that is, the cases. I don't think you can make very wise policy judgments in this area unless you have waded through the cases, so to speak, unless you roll up your sleeves and actually come to grips with how you define "foreign availability" in this particular case.

So the job for the manager in Government agencies is to try to keep in touch with the details of the cases, while keeping in mind the larger policy significance of the questions being discussed.

It is a very difficult job. But there has to be a constant give-and-take between policymakers and the people processing the cases. Otherwise, we become divorced from reality.

So I feel that the statement quoted on the part of DOD is in fact the correct answer.

Senator STEVENSON. This morning, the Comptroller suggested an interagency committee to establish policy; and that the Commerce Department can implement the policy with technical experts from other departments, and the other departments will reimburse them.

Again, I don't think you would be very enthusiastic about that approach?

Dr. PERRY. I wouldn't be.

Dr. FROST. No, I wouldn't be, either. There are a lot of suggestions for organizational changes floating around. My own feeling is that many of them disguise a desire to change the policy. I do not think it is so much an administrative problem; I think it is more disagreement on how to decide particular cases.

Senator STEVENSON. And for Senator Garn: "No. 5 on your list, Dr. Perry, of military-critical technologies appears to be a catchall. What sort of export technology could not be included under the category 'materials, structures, fabrication, processing and manufacturing technology' "?

Dr. PERRY. That is just the title of something which has a fairly clear definition to it. I will let Dr. Davis describe it for you in a little more detail.

Dr. DAVIS. Each of these areas is too broad to serve as something to control through the export control process. They however do define a specific area in which one wants to identify, first, the components which are critical and noncritical. For example, diffusion bonding in the area of materials, structures, and fabrications, and processing, et cetera, might be one over which we did not want to exercise any control because it was not critical.

Second, an area which involves the manufacturing of certain types of composites using 3-axis NC—numerical control—tools, might be an area in which we not only do, but would want to continue to exercise control.

This particular title, interestingly enough, was a title chosen by a combination of industry and Government people who are best able to identify an area of exportable technology. It is an area of

industry which works together in terms of the kind of business it engages in, and in terms of the kind of products it produces.

The work in that area has proceeded to the stage of identifying not only some 14 or 15 component technologies, but within them a significant number of products, some of which would be critical, and some of which would not be critical, and therefore would either be susceptible to export controls or not, depending upon whether they fell into the critical or the noncritical categories.

Senator STEVENSON. Dr. Perry, on page 4 of your prepared statement you imply that the 1972 U.S.-U.S.S.R. agreements on scientific exchanges have contributed to a drain of U.S. technology to the Russians.

Was that the impression that you intended to leave?

Dr. PERRY. The statement made there is that they created a favorable climate. A more important part of that favorable climate was the need for U.S. industry to find markets for their products.

So I would like to put that in perspective—the perspective being, that the agreements themselves did not cause the export of U.S. technology. They simply created a climate which made that more feasible.

Senator STEVENSON. It created a climate within which what happened?

Dr. PERRY. It created a climate in which the transfer of technology was simply made more feasible, more attractive. But the stronger driving force which led to that transfer was the marketplace pressure to sell products to the Soviet Union, and that resulted from the decline in industrial competitiveness, which I mentioned earlier on the same page.

Senator STEVENSON. But does this phenomenon give you reservations about the wisdom of entering into an exchange and cooperation agreement? If that is the consequence in the Soviet Union, are you concerned about it in the Peoples Republic of China?

Dr. PERRY. I think it is an area where we have to proceed very cautiously when we are dealing with a country that we consider to be a potential military competitor.

I would emphasize again that the main thing we are trying to control in technology transfer is knowledge. And the scientific exchange agreements can be a medium for the tranferring of knowledge of the most fundamental kind.

I would offer the opinion, however, that our principal thrust of controlling knowledge transfer to the Soviet Union is not at the scientific level; it is at the manufacturing and processing level, because that is the area where I believe we have the greatest advantage over them.

Senator STEVENSON. Are you referring to turnkey sales?

Dr. PERRY. Not only the sale of turnkey, but the sale of data packages, the sale of software, the sale of services, of allowing U.S. technicians and engineers to help another country develop their own plants. I think those are the areas where the transfer is much more critical than in the scientific exchange area.

Senator STEVENSON. We do have some more questions. I will have to submit them in writing. We would appreciate it if you could answer them.

Dr. PERRY. We would be happy to answer them for the record, Mr. Chairman.

Senator STEVENSON. Thank you.

Dr. PERRY. Thank you very much.

Senator STEVENSON. The committee is adjourned.

[Whereupon, at 3:50 p.m., Monday, March 5, 1979, the committee was adjourned, to reconvene at 10 a.m., Tuesday, March 6, 1979.]

[The answers to questions submitted to Dr. Perry follow:]

ADEQUACY OF CONTROLS

Senator PROXMIRE. You stated in your testimony that the Russians were now challenging us generally in technology and specifically in semiconductors. To what extent is their challenge the result of inadequate controls on the transfer of U.S. technology abroad? Does the Department of Defense believe tighter U.S. controls on technology transfer would have significantly delayed or reduced the Russian challenge?

Dr. PERRY. The Soviet challenge to U.S. technology superiority results from an intensive, often clandestine, effort on the part of the Soviets to obtain specific technologies to enhance their military capability. Their successes to date, however, have been chiefly in the acquisition of equipment. Soviet attempts to acquire the know-how to make full use of the equipment, in other words to acquire the requisite technology, have had only limited success. U.S. controls over technology transfer, in the judgment of the Department of Defense, have been instrumental in frustrating these Soviet efforts.

SEMICONDUCTOR EXPORTS

Senator PROXMIRE. You mention that the semiconductor industry obtains only 7 percent of its sales from the Defense Department and that "the profits and sales of that industry hinge on their ability to effectively sell to international markets." You seem to be suggesting that in order to keep ahead of the Russians in semiconductors we have to sell them semiconductors. Is that what you are suggesting, and if so, how can such exports be permitted without further aiding the Russians in closing the military technology gap?

Dr. PERRY. We are suggesting that our Government should not interfere with the international market for semiconductor products if these products can be sold without the release of technology for their manufacture. We believe that most semiconductor products can be exported without releasing such know-how. This know-how is released by sale of specific manufacturing methods, training programs and active seller-customer interactions. If semiconductor exports to Russia do not involve manufacturing, training, or active interactions, we do not believe that they will aid the Soviets in closing the military technology gap.

TECHNOLOGY APPROACH AND CoCom

Senator PROXMIRE. If the United States converts its export control lists to integrate the military critical technology approach the Defense Department recommends, could we not get badly out of step with out CoCom partners? Would not the unilateral U.S. control lists be likely to increase, not decrease, at least until CoCom adopts the U.S. approach? Does the Department of Defense favor a ban on the sale of critical technologies to any country including any CoCom country, which fails to adopt the same critical technology approach?

Dr. PERRY. The basic principle that controls should emphasize technology rather than products is accepted by the majority of our CoCom partners. We do not feel that implementation of this approach would increase unilateral controls, even during its implementation stage. Our experience has been that where the technology approach is applied it tends to narrow rather than broaden controls. The whole concept is designed to control the export of selected technologies to potential adversaries. There is no intent to ban the sale of such technologies to any of our CoCom allies and the Defense Department is in agreement with this principle. However, consistent with Secretary Brown's 26 August 1977 interim policy statement on exports of U.S. technology, we would have to insist on sanctions against a CoCom member judged guilty of flagrantly violating or disregarding CoCom rules and agreements.

FOREIGN AVAILABILITY AND DRESSER CASE

Senator PROXMIRE. You said during the hearing that the top controversy in the Dresser case "revolved particularly around the issue of foreign availability." Did the Department initially conclude that the Dresser case involved exports "which would make a significant contribution to the military potential of any other nation or nations which would prove detrimental to the national security of the United States"? If not, why was it necessary to assess foreign availability? Was the Dresser case considered a national security case or a foreign policy case?

Dr. PERRY. The DOD concluded initially and finally that the exports involved in the Dresser case would not make a significant contribution to the military potential of the Soviet Union. This conclusion included an assessment that Dresser equipment which could conceivably be diverted to the manufacture of military hardware was available to the Soviet Union from sources outside of CoCom. Foreign availability is an assessment made if the technology involved has military applicability; hence, such assessment is made on most cases submitted for DOD evaluation. The Dresser case was evaluated by DOD on the basis that it was a national security case.

ARMOR-PIERCING MISSILES ON DRESSER CASE

Senator PROXMIRE. In your testimony you stated that the Dresser case did not involve technology which would make a significant contribution to the military potential of the Soviet Union. How do you answer the concerns of some experts that the metallurgical technology is also applicable to the fabrication of armor-piercing missiles that might be significant in tank warfare?

Dr. PERRY. In drawing our conclusions on the Dresser case, we were well aware of the fact that armor-piercing missiles are fabricated using metallurgical technology similar to that employed for rock drill-bit manufacture. This fact was pointed out by DOD metallurgists. DOD experts responsible for technology pertaining to armor-piercing missiles, however, pointed out that Dresser technology did not significantly add to the military capability of the Soviets. The assessment by these technologists was based on armor-piercing missiles using tungsten-carbide metallurgy; that technology used in the Dresser drill bits is 30-year old technology, is not state-of-the-art, and the capability to manufacture such missiles exists throughout the world.

TRADE DEFICIT AND DECLINE OF MILITARY RELATED R. & D.

Senator PROXMIRE. You mention on page 4 of your statement that there has been "a steady decline in Government support of military-related R. & D." and link that decline to "a subsequent decline in U.S. competitiveness in the international and domestic marketplace which, in turn, has contributed to the growing unfavorable balance of trade." In my view, military-related R. & D. has been excessive and wasteful in the past. I am astounded that you would try to blame the trade deficit on cuts in the Defense budget. Please provide for the record the analysis of the U.S. trade balance and competitiveness upon which you based your assertion.

Dr. PERRY. It is the DOD view that decline of military-related R. & D. has contributed to the narrowing of the technology gap between U.S. and Soviet military capability. It is also the DOD view that a decline in U.S. competitiveness in the international marketplace has also contributed to a narrowing of this gap. The common impact on U.S.-Soviet technology gap in the only linkage intended in the statement between the two separate phenomena. The DOD does not feel that Defense budget cuts have had direct or overall impact on the trade deficit and did not mean to imply such an assertion in the statement.

DEGREE OF CoCom COOPERATION

Senator HEINZ. What is the degree of cooperation we receive from our fellow CoCom members?

There have been reports that CoCom guidelines are sometimes ignored by our allies. Is this accurate?

Could you tell this committee which of our allies is least cooperative in the control of the export of critical technologies and how this affects our policy?

Dr. PERRY. A recent example demonstrates the degree of cooperation typically received from our CoCom partners: It involves export to U.S.S.R. of certain acoustic systems for which export had been previously denied to a U.S. firm. A firm from a CoCom partner then obtained approval to export a competitive product without CoCom clearance because host government authorities concluded that the product was outside the scope of CoCom control. The U.S. firm informed Department of Commerce and Department of State contacted CoCom. The CoCom partner promptly stopped shipment of the items pending resolution of the CoCom embargo status.

This case is typical of a number of cases in which legitimate variances in interpreting CoCom lists may have resulted in the appearance of deliberate circumvention. Also typically, CoCom has been an effective forum for airing the difference and we are well on our way to solving the problem.

You also ask for comments on the validity of allegations that CoCom guidelines are ignored. I feel that the allegations are generalizations of incidents such as those given above which are based on valid variances in interpreting guidelines. We have no examples of deliberate avoidance of CoCom guidelines except for covert, illegal exports wherein specific exporters successfully circumvented their export control systems and these are reduced by the CoCom agreements.

I must avoid directly answering the last part of your question by stating that all CoCom partners cooperate extensively in controlling export of embargoed technologies. The term "critical technology," however, has not yet been defined within the CoCom, and so there is no export control to assess.

RESPONSIBILITIES FOR FOREIGN AVAILABILITY

Senator HEINZ. The GAO asserts that there is no one individual or office charged with the task of ascertaining foreign availability of products or technologies and that this causes needless delays while Defense officials assigned the task complete other responsibilities they consider to be of higher priority.

How would you respond to that criticism?

Would you think that it would be a good idea for Congress to set aside a line in the DOD budget for a particular individual or office to handle that task?

Dr. PERRY. It is likely to be counterproductive to establish a specific office to handle the assessment of foreign availability. The GAO report you mentioned also states that "while the presence of foreign availability is a relatively easy assertion to make, it is not nearly so easy to prove." Experience has shown that access to a wide range of sources including the whole intelligence community and its sensitive source information is often necessary to establish foreign availability. This can best be accomplished by going to individuals who have the expertise and information needed to make a meaningful assessment. Given the variety and number of commodities whose foreign availability must be determined, it is unlikely that the necessary expertise could be found in one individual or even assembled in one office. Since the individual experts are included in the budgets for their organizations, I see no advantage to a separate budget line for foreign availability assessment.

PRC/SOVIET UNION CRITERIA

Senator HEINZ. Given the differences their levels of sophistication, are there any essential differences in the criteria used to judge the military applicability of the technology we license for export to the Soviet Union and the People's Republic of China?

Dr. PERRY. No.

RE-EXPORT LICENSING

Senator HEINZ. Why is the United States the only CoCom country which requires "re-export licensing?"

Would you agree with the State Department suggestion that this additional licensing could be more effectively handled within the CoCom exception request system?

Dr. PERRY. The particular mechanisms used to control re-export of embargoed technologies and products are of no concern to DOD provided that they do control re-exports effectively. I suggest you contact DOS for the specific rationale for countries not requiring re-export licensing.

DOD considers U.S. re-export licensing procedures more effective than CoCom exception procedures and prefers the current system. CoCom exception cases have only minimal documentation and often do not identify items by country of manufacture.

UNILATERALLY CONTROLLED ITEM REVIEW

Senator HEINZ. The GAO report notes that in 1977 Congress directed that all unilaterally controlled items be reviewed by December 31, 1978, to determine whether the controls were still warranted. Yet the GAO went on to note that little has been done to comply with this mandate. As of August 1978, reviews of only 6 of the 38 such categories has been completed and the remaining 32 categories were not expected to be completed by the end of 1978.

What you say is the reason for this inability to carry out the will of Congress? Is it simply a lack of personnel, or does it go deeper?

Dr. PERRY. Because the review is not a DOD responsibility, I cannot give the reason for its not being completed except to say that in June 1978 Congressional testimony, a Department of Commerce official stated that the reviews are affected by the multinational CoCom review which is not expected to be completed before mid-1979.

ARMOR-PIERCING TECHNOLOGY PROVIDED BY DRESSER

Senator HEINZ. There is still a question in my mind concerning the Dresser Industries case which I hope you can clear up.

It was argued by some that the tungsten-carbide technology involved in the plant construction had applicability for armor piercing. How accurate was that assertion? Did we go ahead with the licensing on the grounds that the Soviets would simply turn to the Swedes to get the very same technology?

Dr. PERRY. The tungsten-carbide technology involved in the Dresser case is applicable to armor-piercing artillery. The DOD approved the application on the basis that the Soviet Union had the armor-piercing artillery technology involved; the armor-piercing artillery technology involved was not advanced and was available throughout the world. Further, the tungsten-carbide artillery shell is not state-of-the-art and capability to increase its production was not viewed as an enhancement of military capability.

ENERGY RESOURCE TECHNOLOGY

Senator HEINZ. In your view, would it be in the national interest of the United States to provide the technology necessary to facilitate the development of the energy resources of the Soviet Union, insofar as such technology would not have applicability to the military sphere.

As you know, there seems to be a debate in the Administration—of which Dresser case was but one example—concerning whether it is in our national interest to help the Soviets to continue to be energy self-sufficient in the mid to late 1980's. One side apparently feels that an energy deficient Soviet regime would have to devote precious resources away from the military and into the civilian economy, making them more malleable on a whole range of issues, while the alternative analysis holds than an energy-short Soviet Union would be more abrasive and competitive in pursuit of available energy resources in the Middle East and elsewhere.

It would be most useful to hear your opinion on this subject to help clarify the issue.

Dr. PERRY. Both arguments have merit and it remains to be determined which one is in our best national interest. Strategically, however, the debate is of limited importance. Substantial additions to the Soviet oil production would not necessarily increase Soviet military capabilities directly, in peace or war, because Soviet military forces will continue to have priority over nonmilitary requirements just as military related consumption will have priority over civilian consumption. And in the event of a decline in overall production, a realignment of relative consumption priorities would allow for satisfaction of military and military related production.

EXPORT TO THE PRC

Senator GARN. In the consideration of controls on exports to the People's Republic of China, will the impact of potential exports upon the security of Taiwan, as well as upon the security interests of the United States, be taken into account?

Dr. PERRY. As you know, the law requires that licensing decisions be based on foreign policy as well as U.S. military security considerations. For each export case that DOD evaluates, we furnish sufficient information regarding military potential of the export that impact on foreign policy can be assessed.

MEASURES TO MAINTAIN ADVANTAGE

Senator GARN. In your written testimony, you list four measures that you consider necessary for the United States to maintain a qualitative military advantage. These include (1) a real increase in research and development, (2) improved cooperation with NATO, (3) support to enhance and exploit our advantages in commercial technology and industrial base, and (4) export controls. How would you rank these? Which is the most important? If you had to do without one of these measures, which would it be?

Dr. PERRY. The measures were not designed for ranking. They are mutually supportive and deletion of any one in its entirety would jeopardize our qualitative advantage. I hope cuts in none of these important thrusts are necessary.

ARMS BALANCE

Senator GARN. Is it the policy of the Defense Department to rely on technological advantage to compensate for numerical inferiority in the arms balance with the Soviet Union?

Dr. PERRY. Our investment strategy provides selective concentration on those technologies which have the potential of multiplying the effectiveness of our forces. In addition, the strategy includes more effective exploitation of our industrial base and increased cooperation with our allies in the development and procurement of weapons.

TRADE BENEFITS

Senator GARN. Testifying before the full committee in October, former Secretary of State Dean Rusk made a comment and then posed a question, that I in turn would put to you: "When we refuse to trade * * * we should recall that we are depriving ourselves of the benefits of that trade, whether in the form of convertible currencies or goods and service which we ourselves need for our own national life * * *. We must * * * ask ourselves what ought to be the policies and practices which justify denying ourselves the benefits of trade * * *?" (Oct. 11, 1978, p. 146.)

In other words, what policies and practices do you feel are sufficiently weighty to justify the costs of export controls?

Dr. PERRY. Embargoes can cost in terms of trade benefits, but while our quality of life may depend upon foreign trade, our existence as a nation depends upon maintaining our national security. This requires that we control the export of those technologies and products which, in the hands of a potential adversary, could reduce our military technological lead time. Because the quantity of items to be controlled for this strategic purpose is only a very small part of our foreign trade, this is one area where the costs of controlling exports are justified.

I would point out that we are developing a selected set of technologies over which we would exercise export controls so that we could simultaneously relax control over other technologies and on many existing products now controlled. I believe this would reduce any loss of benefits from controls.

TECHNOLOGY OUTFLOW RESTRICTIONS

Senator GARN. In a hearing before the International Finance Subcommittee last May, Gary C. Hufbauer of the Treasury, gave his *own* opinion that, "restrictions on the outflow of technology would not be in the national interest. The administrative aspects of a technology licensing system are truly mind-boggling. A Technology Review Board would be a boon to Washington attorneys and bureaucrats, but very costly to firms with technology to sell." (May 16, 1978.)

Do you differ with this assessment?

Dr. PERRY. Unrestricted outflow could cause irreversible damage to military security of the United States. It is essential we protect lead time in military critical technology. We are developing the critical technology approach to export controls in order to have a better tool for applying controls in a judicious and cost-effective manner.

CONTROLS FOR INFLATION

Senator GARN. Are you aware of any administration policies, either in your Department or elsewhere, to influence exports in order to enforce compliance with President Carter's inflation program?

Dr. PERRY. No, not that I am aware of.

CONTROLS FOR HUMAN RIGHTS

Senator GARN. Generally speaking, has the use of export controls for human rights purposes enhanced U.S. security or been in any way detrimental to U.S. security interests?

Dr. PERRY. I consider the impact of export controls for human rights purposes neutral to U.S. national security.

U.S. EXPORT CONTROL POLICY AND EXTENSION OF THE EXPORT ADMINISTRATION ACT

TUESDAY, MARCH 6, 1979

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, D.C.

The Committee met at 10 a.m. in room 5302, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Stevenson, and Tsongas.

The CHAIRMAN. The committee will come to order.

We are delighted to have this morning the distinguished Assistant Secretary of the Treasury for International Affairs, Fred Bergsten, whom we all know is highly competent in this area and has a most interesting statement. Go right ahead, Mr. Bergsten.

STATEMENT OF C. FRED BERGSTEN, ASSISTANT SECRETARY OF TREASURY FOR INTERNATIONAL AFFAIRS

Mr. BERGSTEN. Thank you, Mr. Chairman.

It is a pleasure for me to testify before this committee on U.S. export control policy and the Export Administration Act. I will focus my comments this morning on the economic issues involving the potential use of export controls, and more specifically the question of controls on U.S. technology exports raised by the chairman. I will also address the related issue of foreign government intervention into technology transfer and U.S. policy in this area.

ECONOMIC CONSIDERATIONS

Export controls, regardless of the reason for their imposition, are undesirable on purely economic grounds for a number of reasons.

As you are well aware, the United States is currently suffering a substantial deficit in its balance of trade. I will not discuss the causes of the deficit in detail with you today. But it is clear that we must act to rectify that imbalance and that increasing U.S. exports is the most constructive way to achieve that goal.

Last September, the President announced a comprehensive program to encourage U.S. exports. In his statement, the President declared that "it is important for this Nation's economic vitality that both the private sector and the Federal Government place a higher priority on exports." If we are to increase exports sufficiently to correct our trade imbalance, we must evaluate carefully any contemplated export controls.

Political and security goals may, at times, conflict with purely economic goals. But we must pay greater attention to the purely

economic drawbacks of controls, especially in view of our current trade position. We must never forget that a strong trade position, a strong dollar, and a stable international monetary system—which requires a stable dollar—are also crucial to the foreign policy and national security of the United States.

In imposing export controls on a product, we are not simply losing foreign exchange earnings on that product. There are cumulative, long-range, negative repercussions as well.

First, export restrictions call into question the reliability of the United States as a supplier of products to other countries. Those countries are likely to develop alternative sources for a controlled product. They may also develop alternative sources, or substitutes, for other products which they import from the controlling country and which they fear may be subjected to controls as well.

One clear example is soybeans. The main effect of the U.S. controls over soybeans exports in 1974 was not a reduction of inflation in the United States. It was to induce Japan to turn to other sources, particularly Brazil, for soybeans and to invest huge amounts to develop alternatives to U.S. production. Few U.S. policies in recent memory have represented such folly.

Second, imposition of export controls by one country can trigger emulation and successive waves of retaliation by other affected countries, and thus hurt the long-run economic interests of the country that originally imposed controls. Even the United States, which produces a wide range of primary and manufactured products, is dependent on imports for a number of key products. The U.S. export controls on soybeans and other products in 1973–74 clearly added to the legitimacy of such action by those who applied similar controls to oil and other products soon thereafter.

Widespread use of export controls could in fact parallel the widespread use of import controls in the 1930's, with potentially disruptive implications for the world economy. It is obvious that no one is now contemplating any such extensive use of export controls, but it is well to remember that even seemingly small steps in this direction—like seemingly small steps to apply import controls—can have very far-reaching consequences for U.S. economic and political interests.

We do see one exception to the general rule that export controls are undesirable on economic grounds. Controls over either exports or imports can be an appropriate measure if they are used as a lever to gain access for U.S. products to foreign markets which are unfairly restricting entry of U.S. exports. Alternatively, they can be used against countries which are restricting exports of commodities to the United States.

CONTROL OF EXPORT OF TECHNOLOGY

I have dealt so far largely with export controls applied for reasons of short supply, but the chairman has raised a number of questions concerning the use of such controls vis-a-vis technology transfer.

The Export Administration Act of 1969, as amended, provides specifically for the use of controls on the export of "goods and technology which would make a significant contribution to the

military potential of any other nation or nations which would prove detrimental to the national security of the United States." There has been some concern expressed that controls should also be placed on the export of commercial technology in order to maximize U.S. competitiveness in international markets. Proponents argue that transfer of commercial technology has cost the United States economy both exports and jobs.

Controls on exports of commercial technology clearly would be contrary to our traditional policy of seeking to minimize the barriers to the international movement of goods, services and capital. But on a more pragmatic level, I think there are also several considerations which raise considerable doubts about the utility of any such restrictions:

(1) It is justifiable even in principle to restrict exports of technology if and only if U.S. firms possess uniquely the technology and all readily substitutable technologies. If foreign producers hold equivalent or substitutable technologies, U.S. exporters will simply lose business to foreigners.

(2) Technology is easily replicated and patents provide only limited protection against such replication. Therefore, any control would be effective only for a limited time.

(3) Private business firms invest in the development of new technologies only if they expect to earn a return on this investment. Multinational firms which perform a high percentage of total U.S. industrial research and development, obtain, on average, more than one-third of their returns from the use or sale of the technology in foreign markets. Restraint on the export of technology would create a clear disincentive for investment in new technology, with a consequent loss of potential future benefits to the U.S. economy and U.S. competitiveness.

(4) In some cases U.S. firms have begun to license, sell, or otherwise transfer overseas recently developed technologies in advance of competitive development of technologies elsewhere, but we believe these represent only a tiny minority of all cases of technology transfer. While it might in principle be in the national interest to identify and stop such cases of premature technology transfer, we doubt whether it would be possible to administer such a program in a manner which doesn't make the cure worse than the disease. While we may be able in theory to identify certain exports of technology which would not be in the national interest, to identify such cases in actual practice is another matter.

(5) Finally, contrary to what some would have us believe, U.S. exports of manufactured goods embodying advanced technologies have consistently exceeded U.S. imports of similar goods throughout the past decade. (See table 1.) Although the balance of trade in these goods declined slightly from 1975 through 1977, the surplus remained impressively high (at almost $14 billion in 1977) and we expect that the data for 1978 will show a reversal of this trend and a still higher surplus.

Indeed, U.S. exports of technology-intensive manufactured goods have been a source of strength in our balance of payments at a time when the overall picture has often been less than encouraging. In response to further economic growth abroad and recent exchange rate changes, U.S. experts of all manufactured goods,

including high technology goods, should grow faster in the coming years than U.S. imports.

U.S. performance in export of technology intensive goods remains strong because the United States remains by far the most important performer of industrial research and development (R. & D.), exceeding the combined R. &. D. of Japan, West Germany, Canada, the United Kingdom, and France—whose combined GNP is slightly more that of the United States. (See tables 2 and 3.) U.S. research and development expenditures as a percent of GNP exceed those of all major Western nations except West Germany, whose proportionate expenditures are equivalent to ours. While U.S. proportionate expenditures have declined somewhat since their peak in the early 1960's, due to the winding down of the U.S. space program, since 1973 they have been fairly constant. (Chart 1.)

Chart 1 also shows that expenditures on R. & D. as a percent of GNP have risen since the 1960's in West Germany and Japan, with most of the increase occurring during the late 1960's and early 1970's. In recent years, proportionate expenditures on R. & D. in these two nations have been almost constant, while in France, Canada, and the United Kingdom, proportionate expenditures since the middle 1960's have fallen.

Germany, traditionally a major center of scientific and technological expertise, has actually not fully regained its pre-World War II position as a performer of R. &. D. Japan, which has been adept at imitating and improving other nations' technologies, has only recently emerged as a true techological innovator in its own right.

For the future, the United States undoubtedly will continue to perform more of the world's research and development than any other nation or group of nations. To assure maximum U.S. competitiveness, our Government should support a continued high level of R. &. D. as we have been doing: such expenditures rose by 22 percent during the past 2 years, and the President has proposed expenditures for fiscal year 1980 which will, in real terms, remain approximately the same as last year in spite of the overall tightness of his budget proposals. Our country will not, however, totally dominate the development of new technologies to the degree that it did during the two decades or so following the Second World War.

The increasing role of other nations in developing new technology means that they will bear more of the costs of development than was the case during the 1950's and 1960's, while the benefits of new technology will continue to be shared by all nations, including our own. We believe that this is a good thing.

In sum, I think there should continue to be a strong presumption against restricting exports of technology. Proponents of restrictions carry a heavy burden of demonstrating that it would be in the national interest to do so.

FOREIGN GOVERNMENT INTERVENTION

I would now like to address another issue—our concern about the use of measures by other governments which can have the effect of encouraging the transfer of technology. Such measures may take many forms, but they usually combine several basic features: direct incentives to investors to attract the transfer in the first place;

performance requirements, which require firms inter alia to transfer technology as a condition of investing in the country at all; and offsets in major industrial or military deals. Such measures are utilized to assure that U.S. or other foreign firms do in fact contribute to the priority economic and social goals of the host government. They typically focus upon local job creation, local value-added, and exports as well as technology transfer.

In recent years, offset requirements have been most common in the area of defense procurement, where foreign governments have used their purchasing power to impose these requirements on U.S. firms seeking to sell to them. Moreover, their use of offsets is quickly spreading to the nondefense area. Thus, a foreign government will frequently require that, for a U.S. firm to do business, it must agree to transfer technology to the nation by means of licensing or co-production agreements. Although inconsistent with the spirit of the GATT and the concept of an open multilateral trade and payments system, these requirements are rapidly becoming a pervasive feature of the world economy.

These foreign government measures can result in the transfer of technology on terms that are unfavorable to our Nation. Thus a major objective of U.S. policy must be to achieve multilateral discipline on incentives and other interventions, both to maintain an open investment environment and to avoid our being forced into the adoption of emulative countermeasures. With offshore output by multinational firms now approaching a value of $1 trillion, it is anomalous that no major intergovernmental agreements apply to the international investment process like the long-standing rules and institutional arrangements which govern international trade.

Some of the new international arrangements worked out in the Multilateral Trade Negotiations will, in fact, help deal with this problem by limiting the use of such incentives as export and other subsidy practices. But the development of disciplines over government policies toward investment flows per se has become one of our important areas of policy initiative. My colleagues in other agencies and I have recently discussed these problems bilaterally with Canada and our major European allies, as well as multilaterally in the OECD. Our talks with Canada, as an example, have focused on a case of what we consider to be bad policy: a cash grant of $68 million, jointly offered by both the Canadian federal government and the provincial government of Ontario, to induce the Ford Motor Co. to locate a new engine plant near Windsor, Ontario. We have also expressed concern to our other neighboring nation, Mexico, over that nation's automobile decrees, which require all automobile assemblers there to cover their full foreign exchange costs through exports and provide them with attractive tax credits for doing so. These kinds of policies, which are also practiced by many other nations, serve to distort the economically efficient allocation of resources and can result in the loss of U.S. export opportunities and U.S. jobs.

At the Bonn Summit last July, we joined the other participants in emphasizing our willingness to increase cooperation in the field of foreign private investment flows among industrialized countries and between industrialized and developing countries. We also stated in the Summit communique that we will intensify work for

further agreements in the OECD and elsewhere. President Carter has asked the State Department, in consultation with the Departments of Defense, Treasury, Commerce, the Office of the Special Trade Representative, the Council of Economic Advisors, and the Office of Management and Budget, to consider multilateral consultations on the adverse impact of defense offset sales agreements and to seek their reduction through the formulation of internationally agreed guidelines on the terms for future agreements. In view of the increasing importance of nondefense offsets, especially investment offsets, we at the Treasury Department believe that guidelines should also be sought for these.

The basic problem we face in trying to achieve discipline is that most governments have not yet recognized the need for international cooperation on investment, even though they long ago recognized the need for rules on trade and international monetary policy. In part, this is because direct investment and technology transfer are relatively new as major vehicles for international economic exchange, and their impact has not been as visible as the impact of trade flows and exchange rate changes. There are also ambivalent and conflicting views on the jurisdiction of the different sovereign states involved in the broad-gaged activities of multinational companies.

It is apparent, therefore, that the process of developing cooperation in this area, which has already begun, will be evolutionary in nature. It will involve gradual development rather than the creation of a complete international investment regime at a single stroke. But the need for cooperation is clear, and we intend to press vigorously to draw international attention to this area.

TREASURY RESPONSIBILITIES

Finally, Mr. Chairman, you asked several questions about the specific role of the Treasury Department vis-a-vis export controls.

Treasury administers controls with respect to exports from foreign countries by foreign firms owned or controlled by U.S. persons or firms. Such firms are prohibited from selling any commodities or technology to North Korea, Viet Nam, Cambodia, or Cuba without a Treasury license. Treasury regulations also prohibit the unlicensed sale of strategic goods to Eastern Europe, the U.S.S.R., and the People's Republic of China by such firms. These latter regulations apply only to strategic goods and not to technology. They are obviously and extension of the primary export controls on U.S.-based firms administered by the Department of Commerce for national security or foreign policy reasons.

Treasury also participates in interagency bodies which review export administration and make recommendations on it. The Secretary of the Treasury is a member of the Export Administration Review Board. Treasury is also represented on the Advisory Committee on Export Policy and on its Operating Committee, which considers difficult cases and makes recommendations.

Treasury has collaborated in various interagency studies seeking to improve licensing procedures and expedite decisions. Delays and uncertainty in the issuance of export licenses discourage American exporters and handicap them in competition with foreign export-

ers. This not only hurts our balance of payments, but means lost business for American firms and fewer jobs for American workers. We strongly believe that agencies concerned with export administration should give full weight to the effects on our foreign trade of export control measures.

And, as I have indicated, Treasury plays an active role in working out and negotiating a variety of U.S. efforts to limit governmental intervention in the international trade, investment, and technology transfer areas. We believe strongly that such an approach should govern both international economic relations and the policies of the United States itself.

[Tables and a chart accompanying Mr. Bergsten's statement follow:]

Table

U.S. Trade in Manufactured Goods, Categorized as "Technology-Intensive" and "Non-Technology-Intensive"*

1967-1977

$ Billions

Year	Technology-Intensive			Non-Technology-Intensive			Total		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1967	8.0	3.1	4.9	12.8	12.7	0.2	20.8	15.8	5.1
1968	9.6	3.9	5.7	14.2	16.7	-2.5	23.8	20.6	3.2
1969	10.7	4.7	6.0	16.1	18.3	-2.2	26.8	23.0	3.8
1970	12.3	5.7	6.6	17.0	20.2	-3.1	29.3	25.9	3.4
1971	13.2	6.6	6.6	17.2	23.8	-6.6	30.4	30.4	0.0
1972	14.1	8.5	5.6	19.6	29.3	-9.7	33.7	37.8	-4.1
1973	19.0	10.6	8.4	25.7	34.4	-8.7	44.7	45.0	-0.3
1974	26.6	12.9	13.7	37.0	42.4	-5.4	63.5	55.2	8.3
1975	28.0	12.3	15.7	43.1	38.8	4.3	71.0	51.1	19.9
1976	31.2	17.0	14.2	46.1	47.8	-1.7	77.2	64.8	12.4
1977	33.4	19.6	13.8	47.1	57.7	-10.6	80.5	77.2	3.3

Note: Negative Balance Figures Indicate that Imports Exceeded Exports

* Source: Regina Vargo updated and expanded figures based on "The Impact of Technological Innovation on International Trade Patters," U.S. Department of Commerce, Bureau of International Economic Policy and Research, Monograph ER-24, December, 1977.

Table 2
Source and Use of R&D Funds in Six Nations in 1975*

Nation	R&D Funds Provided Amount ($ bil)	R&D Funds Provided %	R&D Performed Amount ($ bil)	R&D Performed %
United States				
Industry	15,787	44.8	24,164	68.6
Government	18,152	51.6	5,397	15.3
Other	1,261	3.6	5,926	16.8
Total	35,200	100.0	35,200	100.0
Japan				
Industry	5,521	63.0	5,634	64.3
Government and other	3,241	37.0	3,128	35.7
Total	8,762	100.0	8,762	100.0
W. Germany				
Industry	4,634	52.3	5,881	66.4
Government and other	4,223	47.7	2,976	33.6
Total	8,857	100.0	8,857	100.0
Canada				
Industry	557	32.7	681	40.0
Government and other	1,145	67.3	1,022	60.0
Total	1,702	100.0	1,702	100.0
United Kingdom				
Industry	1,847	39.2	2,965	63.0
Government and other	2,859	60.8	1,741	37.0
Total	4,706	100.0	4,706	100.0
France				
Industry	2,510	42.0	3,643	60.9
Government and other	3,472	58.0	2,339	39.1
Total	5,982	100.0	5,982	100.0

* latest year for which international figures are available

Source: OECD

Table 3

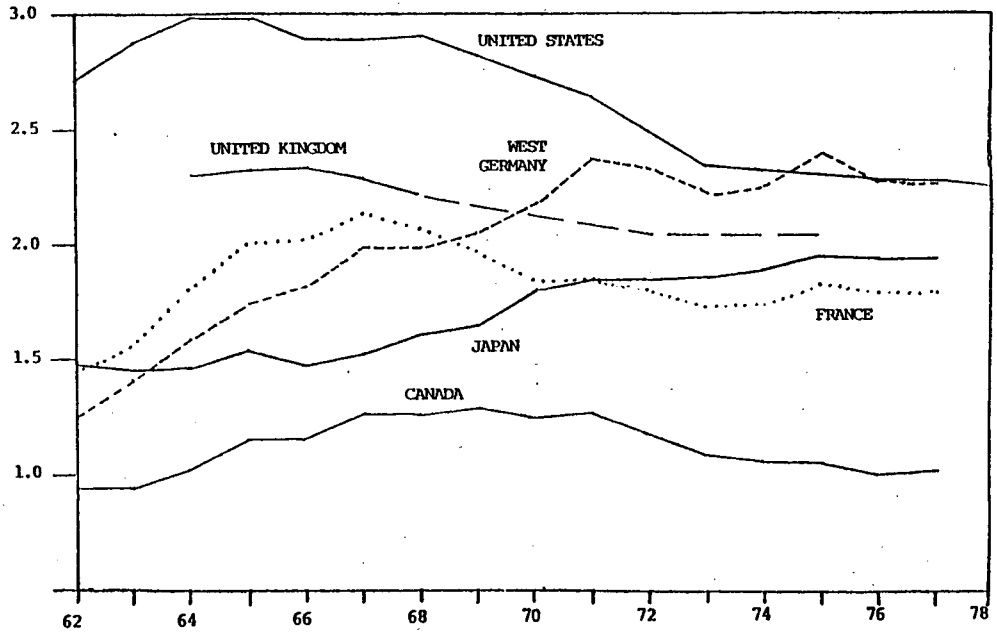
R&D As a Percent of GNP, 1975

	As a percent of GNP		Industrial R&D Non-Government Funded
	Total R&D	Industrial R&D	
United States	2.3	1.6	1.0
Japan	2.0	1.1	1.1
West Germany	2.4	1.4	1.1
Canada	1.1	0.4	0.3
United Kingdom	2.1	1.4	0.8
France	1.8	1.1	0.7

Source: National Science Foundation and OECD

Chart 1

Total R&D Expenditures as a Percent of GNP
in Six Nations, 1962-1978*



*Only U.S. available for 1978. Time series data for U.K. R&D are very incomplete. Available information suggests that R&D as a percent of GNP has declined from 2.3 percent in the mid-sixties to 2.0-2.1 percent in the seventies.

The CHAIRMAN. Thank you, Secretary Bergsten, for a typically thoughtful and persuasive analysis. We appreciate it very, very much.

It's interesting, though, that you stress the importance of exports. It seems to me the important element here is trade itself. There's a great value in imports, too. In fact, some people argue that you could say that exports are kind of on the liability side and the imports are on the asset side. Certainly from the standpoint of the consumer, imports are very helpful. In an inflationary situation imports tend to hold prices down. You could argue that exports, under some circumstances, could be construed as inflationary pressure. That is, the demand for exports could conceivably have an effect on raising other prices. At any rate, the overall effect of trade is beneficial and I notice that you comment very briefly on the importance of international investment, too—our investment abroad and their investment here. I think that's another element that's good and, of course, all of this I think is not just a matter of idealism but a matter of fact. To the extent we trade and invest abroad and people invest here it certainly tends to promote peace and cooperation and the prospect of a better, more peaceful and advancing world.

I think too often we put this in competitive terms. We are trying to beat others when actually we all benefit from a growing world trade, both this country and other countries. Certainly from the standpoint of division of labor and having products produced in those areas where they can be produced more efficiently it's to the benefit of everybody.

You have a good section. I'm delighted to see on R. & D. and you put to rest the notion that we are far behind other countries with respect to R. & D. You point out that our R. & D. is bigger than that of all of the Western countries combined in total and in percentage it's still near the top, although as you point out it has declined.

Is that R. & D. comparison fair, however, when you recognize that we put a much higher—I think we do and correct me if I'm wrong—a much higher proportion of our R. & D. into military and space than these other countries do and therefore from the standpoint of investment by this country and other countries in industrial, commercial R. & D. the advantage may not be as clear. Is that right?

Mr. BERGSTEN. Well, in my table 3, Mr. Chairman, I break out industrial R. & D. separately from total R. & D. as a percentage of GNP and that comparison too shows the United States in the lead with industrial R. & D. accounting for 1.6 percent of U.S. GNP as compared to 2.3 percent of GNP for total R. & D.

The CHAIRMAN. I noticed that. It kind of puzzled me. It doesn't fit with what I said, but in view of the fact that Japan and West Germany have relatively very little in space and military R. & D., how do you explain that?

Mr. BERGSTEN. I'll have to get the breakdown on what the difference in the two columns is for those other countries to answer your question properly. I don't know off the top of my head, but I'd like to supply that for the record if I could.

Could I make one other comment, Mr. Chairman, just on your original comments? I agree fully with everything you said about the importance of trade and investment as a whole, but I'd make one additional comment on the importance of exports. I think we have learned that if the United States does not maintain a competitive position in the export market we get two very adverse effects. One is the weakening of the dollar which in turn is very harmful to the consumer and our overall economic interests. When that weakening of the dollar became as strong as it did last fall we had to step in and take very strong measures to arrest the downturn because of the simple fact that in terms of our domestic situation it was undermining our whole anti-inflation effort.

The CHAIRMAN. Before you get away from that, I felt that Secretary Blumenthal and the Treasury Department were a tower of strength here in pointing to the importance here of flexible exchange rates and of recognizing that while there's a lag and there's no question that imports become more expensive and therefore there is an inflation element involved in the diminishing value of the dollar, but it is self-correcting if we have patience and we do develop a comparative advantage in price. As the dollar diminishes our exports are cheaper; as the dollar drops in value the imports are more expensive, and therefore it should have an automatic correcting factor. What went wrong with that?

Mr. BERGSTEN. I fully hold that view, Mr. Chairman. What we think happened—and it may not ever be clear even in retrospect—was that market psychology took the exchange rate much lower than it really needed to be to achieve the objective that you quite rightly state.

The CHAIRMAN. If that were the case, though, why didn't we get a quicker correction of our adverse trade balance? Why didn't our exports go up even more than they did?

Mr. BERGSTEN. Well, they did go up dramatically.

The CHAIRMAN. They went up some, but it seemed to me they should have gone up even more with the tremendous drop in the dollar and the great advantage we should have been able to win in foreign markets.

Mr. BERGSTEN. I think it gets back to your point about the timelag. We know it takes somewhere between 1 and 3 years to get the full effects on the exchange rate change in volumes and therefore the trade balance. The major depreciation of the dollar began in September 1977 and ran through much of 1978 until the halt was called on November 1. So we would not really have expected to get the major shift in our trade balance and volume until this year—1979—with a continuing impact in 1980. In fact, some of us felt that we were getting earlier dividends than might have been anticipated with a very sharp increase in our exports in the second half of 1978.

What I think did happen, though, was that because there was impatience in world markets and elsewhere, a negative psychology about the dollar began to develop toward the fall of last year which we feel carried the exchange rate way beyond what was needed to get to equilibrium. You quite rightly stress and we fully agree that the exchange rate has to avoid any position of over evaluation in order to maintain our competitive position.

The CHAIRMAN. How do you determine where the equilibrium point is?

Mr. BERGSTEN. That's a matter of judgment obviously, and I will address that in a second. What I wanted to say also, though, is that we don't want to undervalue the exchange rate because if we do, we really value the dollar too cheaply in world markets, which would add to our inflationary pressures here at home. That's the position we felt we were getting into, particularly in the fall and especially in the month of October.

Now, how one defines the right exchange rate is, of course, a conundrum that has puzzled economists, policymakers, laymen, and others for years.

The CHAIRMAN. One way to do it is to let the market do it.

Mr. BERGSTEN. Exactly. That's why the United States and other governments believe that no government or individual is smart enough to set an exchange rate, which should be determined by market forces. We have learned there's some price to pay for that. Like any market—stock, commodity, money market or whatever—you can get "overshooting." Markets don't just go from equilibrium point A to equilibrium point B in a straight line. They overshoot and bounce back. We experience that in all the markets. As a general matter, such behavior is not necessarily a bad thing. What we did feel had occurred last fall was that the negative psychology that drove the dollar down very sharply was so out of keeping with what we were confident was the underlying trend of economic progress here in the United States—an improving external account and an outlook for further steady improvement—that we simply felt there was no need for the exchange rate to depreciate further. Indeed, the degree and pace at which it had depreciated were undermining our own anti-inflation effort at home and, furthermore disrupting international financial markets, leading to adverse economic effects around the world and as well as here at home. Given the fact that we're so heavily engaged in the world economy, it simply was having adverse economic effects on us and had to be turned around. Frankly, I think that the stability in the dollar exchange rate in the last 3 months, which has persisted in the face of some very adverse news both at home and abroad, corroborates the judgment that the dollar had gone down much further than was justified by market effects.

The CHAIRMAN. Why did you leave out or couldn't you get statistics on R. & D. in the Soviet Union? It seems to me that might be the most pertinent of all in many ways.

Mr. BERGSTEN. We took these, frankly, from OECD and free world sources that try to compile comparable numbers from the individual countries. We do not have comparable or adequate data for the Soviet Union. We'll supply for the record what we have.

The CHAIRMAN. I wish you would for the record.

What are your views of the defense effort to identify military and critical technologies and focus national security controls on such technologies?

Mr. BERGSTEN. Mr. Chairman, I have to admit I'm not a great expert on that. I think, as I suggested in my statement, we should try to focus as narrowly as we can on truly military items that really do have military application and could hurt in the strictly

defined national security sense. I believe the effort should focus in that direction. I believe the Defense Department is trying to do that, but I can't give you an independent judgment on how effective that is.

The CHAIRMAN. Focus on that and focus also on trying to persuade our allies and partners in the free world to refrain also from transferring military technology to the Soviet Union if it's critical and we feel they don't have it. I agree with so much of what you say, but I do think there's a case here that can be made that there's been a very limited area.

What is the Treasury view of the effect of the antiboycott provisions of the tax law as well as the Export Administration Act on U.S. trade?

Mr. BERGSTEN. From the purely analytical standpoint, Mr. Chairman, I must say this is one of the most difficult issues we confront, trying to get a handle on the net effects of those policies. As you well know, I'm sure, from Secretary Kreps' testimony yesterday, we have made every effort to reconcile the intent and language of those statutes with our effort to continue to expand our responsibilities to the markets and countries that are involved in boycott activities. Frankly, I cannot give you an intellectually defensible tracing of precise effects of those measures. We get anecdotes which run basically along the lines that the big firms are able to work within the boycott rules and regulations without adversely affecting their business; small firms may find it difficult to do so. When we look at the aggregate numbers, we can certainly see continued substantial growth of U.S. exports to countries that are involved in boycott activities, and so in aggregate numbers it's clear that there's not been a major negative effect. Beyond that, I find it hard to go.

The CHAIRMAN. Senator Stevenson.

Senator STEVENSON. Thank you, Mr. Chairman.

As you know, Mr. Bergsten, we have been conducting for well over a year a study of the U.S. competitiveness in the world and that study has, of course, considered at some length the effects of the floating exchange rate system, the different growth rates, and so forth. We find that many economists are now chastened by history and are beginning to recognize that economic models based on 18th century abstractions about the behavior of markets and nations are of little relevance in the 20th century. In this world most nations don't even accept such a thing as a free market price to allocate goods and services. The devalued dollar which the Treasury still apparently relies on to right a trade balance is causing inflation. Inflation is offsetting the price and now the higher growth rates counted on by the theoreticians to enlarge export opportunities for the United States are threatened by political events, including Iran, shortages of oil will affect the growth rates of countries more dependent on foreign oil than the United States more severely than the United States. Even those economists who are unchastened by history and aren't making predictions in this world reach conclusions which are different from yours.

I hope you are right, but our studies give me no reason to think that you are. Chase Manhattan is now—the chief economist at

Chase Econometric—is now projecting a 1979 trade deficit of the same magnitude as 1978.

What assumptions do you make in your model about inflation?

Mr. BERGSTEN. We are using the official Government projections in our balance-of-trade forecast both on inflation and on growth and, of course, it is possible that either or both of those might turn out to be less than fully right, but those are the ones we are using.

Senator STEVENSON. Well, that may explain one of the differences. Price is one factor. There are many others. Export controls are one, export subsidies another. As far as we have been able to discover, this is the only nation in the world which regards purchases by foreign countries as a privilege to be withdrawn by the United States when the policies of foreign countries meet with our disfavor.

Do you know of any other countries which accept such a notion as we do about the privilege of buying from us?

Mr. BERGSTEN. Well, certainly other countries have put on export controls frequently in the past, but primarily for economic reasons, primarily what we call short supply or anti-inflation reasons.

Senator STEVENSON. Well, you know that's not what I'm talking about, nor the obvious other justification which is military. But do other countries deprive foreign countries of the privilege of buying from them if their human rights attitudes meet with disfavor?

Mr. BERGSTEN. I'm not aware of any countries that do that, Senator.

Senator STEVENSON. Do you have any suggestions for improvements in the Export Administration Act?

Mr. BERGSTEN. In the administration of the act?

Senator STEVENSON. No. For amendments, changes in the act itself which could lead to improvements in its administration?

Mr. BERGSTEN. I do not have any list in my pocket today, Senator, but we are very actively considering a number of possible amendments all aimed at what you are now suggesting trying to limit the application of the act to those cases that are clearly related to national security, expediting the administration of the act, trying to assure that the kind of balance between the export objective and the other objectives which the President focused on in his September 26th statement are in fact carried out through this Act. I am confident we will have amendments to propose to you in the near future.

Senator STEVENSON. Well, there seems to be more than one study underway. Is there one that is seeking to identify all the so-called disincentives to export?

Mr. BERGSTEN. Yes, sir.

Senator STEVENSON. I think we have already done that work and the House I believe also, if that's what it consists of, just a catalogue of disincentives. But isn't there another study that's aimed at making recommendations for changes in the—well, there seems to be more studies than I can keep track of. As you know, the Export Administration Act will soon expire. We have been trying since last fall to get an expression of policy on the technology transfer questions, the East-West issue, so the Export Administration Act could continue. Now I don't know which study it is that's supposed

to produce recommendations with respect to the act, but we'd like to get them if we're going to get them, and soon.

Mr. BERGSTEN. Right. As I say, Senator, I'm confident you will get those from us soon. We are working on it very actively and we will have proposals for you. I tried to give you in my statement today a definitive view from the administration on the technology transfer issue. I hope that's helpful. I think we have very much the same purpose that you have in mind.

Senator STEVENSON. Could you now tell us what role the National Security Council is now playing in the foreign relations of export control policy in this administration?

Mr. BERGSTEN. Well, the National Security Council, of course, is responsible for trying to coordinate the various aspects that go into making up an export control decision: The economic considerations involved both at home and abroad, the national security considerations more narrowly defined in terms of whether a particular item would add to the military capability of a potential adversary, and also the implications for the overall relationships between the United States and those other countries. I think it has traditionally been the role of the National Security Council to try to coordinate those various components into the complex decisions that are required and pull those together frequently for recommendation to the President who often does make that final decision.

Senator STEVENSON. Well, if I understand you, I think you are dead wrong. Maybe I don't understand you, but my question is not based on what you have now said but what others have told us and that is that the National Security Council is exercising a new operational responsibility for both the formulation of policy and its implementation that was never intended for the National Security Council. It was never exercised by the National Security Council until recently, and that in fact the exercise of this new operational responsibility is frequently at odds with the announced policy of the administration, comes by telephone from bureaucrats with no awareness of what the NSC's role is, whether it is in fact speaking for the President and, of course, with no accountability to the Congress. We end up, contrary to history which included an informal interagency system between Treasury and State and DOD and Commerce, with Commerce doing the implementing, with a confused disordered process in which the NSC is moving in mysterious ways and which make it very difficult for us to understand what the policy is and who's in charge.

Now, if that's the way the President wants to run it, there's very little we can do about it, but the complaints that I receive are from the departments of this government and also from exporters who are concerned because it's so disorderly and the policy is so unclear that they fear purchasers will only come to the United States as a last resort and, as you have already pointed out, there's very little that's superior or unique in the United States. So I would hope that—maybe you want to respond to this, but if not—that in the administration's consideration of recommendations for the Export Administration Act, formulation of policy, administration of it, that some serious attention will be given to whether the National Security Council should have any role at all except as a recipient

of opinion and information from the departments and for the benefit of the President.

I have run out of time. You have served with the NSC. When you were there did the NSC actually review license applications and make in effect decisions on it as it is now?

Mr. BERGSTEN. When I was there—and this was now 8 or 9 years ago—the NSC did play a coordinating role as I described it and from time to time did have a very influential voice in both the substance and timing of individual export control decisions. I find it hard to compare whether the frequency of that kind of activity is greater or lesser now, but it has historically been the case.

Senator STEVENSON. Now the history you're talking about is Mr. Kissinger.

Mr. BERGSTEN. That's right.

Senator STEVENSON. Well, that's when history broke down.

Mr. BERGSTEN. I didn't defend it. I reported how it worked.

Senator STEVENSON. The history I was citing was history. You're citing an aberration which continued. Was the NSC actually reviewing license applications even during the aberration, during Kissinger's time?

Mr. BERGSTEN. Not on a day-to-day basis, Senator. Individual cases of real significance, in either economic or political terms, were frequently reviewed there, yes.

Senator STEVENSON. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Tsongas. I won't question your definition of historical aberration of former Harvard professors for obvious reasons.

Mr. Chairman, what is the timetable for actually marking up the bill?

The CHAIRMAN. Well, we have a deadline of May 15, because of the budget resolution, so we have a relatively few weeks to move it along. By that time we have to have it marked up, reported and so forth.

Senator TSONGAS. Well, I have a high technology group of company presidents who—or a group of high technology presidents who meet on these issues and they had some concern as to what the leeway was in terms of time.

The CHAIRMAN. I understand sometime between the 1st and the 15th of April we will go to the markup.

Senator TSONGAS. Mr. Bergsten, on the trade tables on R. & D., which is something that I have spent some time on and have been concerned with, let me ask you some definitional questions.

What is a technology intensive product as opposed to—give me an example of a technology intensive product that we import.

Mr. BERGSTEN. That we import?

Senator TSONGAS. Yes.

Mr. BERGSTEN. Certain kinds of automobile components, transmissions, for example, that are heavily imported now to be put into final U.S. automobiles. Certain chemical compounds, some pharmaceuticals. The way we define technology intensive here was those products for which the technological input was higher than the average for all manufacturing, and we applied that on the basis of three digit SIC categories, if that helps you.

Senator TSONGAS. That helps. Is a Toyota considered to be non-technology intensive?

Mr. BERGSTEN. Let me ask my experts. They say it's right at the average. I'm not sure which side of the chart it's on.

Senator TSONGAS. Well, I think it would make a difference. If these figures reflect the obvious imbalance caused by automobiles, that's one thing; but if indeed the 1962 figure represents things other than automobiles, that's something to be concerned about.

Mr. BERGSTEN. Yes. I'm sorry, Senator, I don't have the precise breakdown. I want to look at this myself and I will submit it for the record if I can.

The answer is what I thought it might be. An automobile fully assembled was not included as technology intensive. Certain components of the type I mentioned are—the transmissions or radial tires or something which you then put on the final U.S. product assembled here.

Senator TSONGAS. If you could give me a list of what would fall in that category I would appreciate it.

Mr. BERGSTEN. Right.

Senator TSONGAS. What about the issue that the chairman raised which I didn't quite understand the answer, as to the percentage of our R. & D. which is defense based is really not applicable in terms of export potential?

Mr. BERGSTEN. Well, I simply pointed out that I did try in my table 3 to distinguish between the total R. & D. and the industrial R. & D. The U.S., as shown in table 3 of my testimony, devotes a higher percentage of GNP to industrial research than do other countries. Also indicated in the table is that the company funded R. & D. as a percent of national product is higher in the United States than in other nations, except Japan and Germany where the percentage is about the same as in this country.

Senator TSONGAS. Could you check on the AVCO Corp. to do research into the MX missile—which category does that fit in, defense or industrial?

Mr. BERGSTEN. That would be Government funded industrial R. & D. on my table 3, it would be in the 1.6 percent of GNP that is accounted for by industrial R. & D. but not in the 1.1 percent which is as it says, industrial R. & D. which is company funded. Again, in company funded R. & D., the United States ranks roughly equal with Japan and West Germany, as in fact it does on all three indicators.

Senator, I wouldn't want to overemphasize one-tenth of a point, or even two-tenths or three-tenths of a point, in making these comparisons. What they basically show is that there are three countries in the world which are roughly equivalent in terms of the R. & D. they spend either as part of their total economy or as part of their private economy, excluding military production. West Germany and Japan are roughly equal to the United States in those shares. This is reflected in their rapid growth in the world economy, their increase in competitiveness. It's our feeling in the administration that the United States has to maintain its position, and if possible do better, in terms of the share of our resources that are allocated to R. & D. We obviously have budgetary constraints. We don't want to go overboard in that area, but at the same time

this is one of the very few areas where in this year's budget as submitted by the President there is a very substantial increase in funding, at least the real level is equal and we will hopefully be able to do a bit more.

Senator TSONGAS. I'm quite aware of that. On the last chart, if you were able to start without the U.S. R. & D. that was defense related—is that possible?

Mr. BERGSTEN. Yes. I think we could try to cut it that way and submit additional tables and a chart for you to try to show how that does break down.

Senator TSONGAS. Because what you have in essence, you go back to the 1962-64 time frame in the United States has an R. & D. percent double both West Germany and Japan and both countries have determined since then to increase their percentage and the United States has decreased it and given the obvious implications I think it concerns us.

Let me ask one other question. One of the problems that's been pointed out to me by companies in my State is that when it comes to the problems of export controls in the—bureaucracy—I don't mean the bureaucracy in the George Wallace term—but a decision in the bureaucracy must be made—is it not—you're the person who's in that position—is it not the case that the high risk is to let it go and the low risk is to in questionable cases to put on a restriction because if we make a mistake in letting it go it becomes a major issue? If you make a mistake in restricting it, you just have a disgruntled company here and there. Is that not the human behavior conditions operative?

Mr. BERGSTEN. I really don't think so, Senator. There is an axiom in the study of bureaucratic politics which says where you stand depends upon where you sit. That might be true for people in some positions, but in other positions in the Government that are intimately involved in this process I think the human push is in the other direction—not to have aggrieved firms complaining about both delays and negative action on their license applications. The President put down a very clear order in September that the export criteria are to be given much greater weight and balance in view of the other program objectives, so what you say may be true in some particular points of the bureaucracy but I don't think that's the general reaction at all.

Senator TSONGAS. Let me ask one final question. Is there any attempt on the part of the administration to, as Japan and West Germany does, obviously to encourage exports as a way of doing business which is not the psychology of most American manufacturers in some kind of comprehensive way or is it still an ad hoc approach? I mean, if you look at the percentage of exports of energy to West Germany and Japan, you see it's staggering and yet they both have favorable balance of payment situations. The average manufacturer can do rather well without engaging in foreign markets. Are we trying to break that attitude down?

Mr. BERGSTEN. Well, we're trying. I think you put your finger on one of the most significant problems we have in this whole international situation, which is really a deep-seated element, American firms, workers and government never have been export oriented, certainly not like those in other countries.

At the same time, we have done something right because the share of exports in our gross national product has doubled in just the last 10 or 15 years. A small number of our very largest firms have done impressively well in world trade. Many of them rely for more than 50 percent of their earnings on their export business and have done very well.

What we need to do, as you're suggesting, is to generalize that experience more broadly, bring medium-sized and smaller firms much more aggressively into the export business. I think we have made a start in changing the mentality. Certainly in directing the Small Business Administration, for example, to use a substantial share of its resources to develop export opportunities for American business we are taking an important step. In developing big export missions like we have in Japan we are taking an important step. In beefing up the export facilitation efforts in the Commerce Department and State Department we are taking steps. I would say it's not yet a comprehensive policy. I would not argue that we have done enough yet to really make a change in what has been a structural situation for a long time. But I think we have begun. We intend to do more. It is going to be a long slow road and we're going to need support here in the Congress on funding and on the psychology of it, if we are to succeed.

Senator TSONGAS. Well, I think we would like to give you a hand. Thank you.

The CHAIRMAN. Mr. Secretary, you talk about building up our exports to Japan. It reminds me of a story that may be a cock and bull, about the transfer of the exchequer in England who came here and was asked by a reporter why there were no balance of payments problems in the 19th century and his response was "because we didn't have balance of payments statistics in the 19th century." You're the keeper of the statistics and as the keeper of the statistics you're in a position to influence our attitudes pretty sharply.

Let me give you an example of how the Japanese situation seems to have been influenced primarily by artful use of statistics in window dressing rather than any substantive change. I pointed this out in the Congressional Record and I'm going to read from what I had in the Record. Japan is showing a preference for window dressing in the balance-of-payment statistics at a time when basic corrective measures are needed. The Export-Import Bank of Japan has a scheme to provide funds for foreign and perhaps even United States commercial airlines and have the full value of the aircraft recorded as a U.S. export to Japan. Now, of course, the airplanes would never even fly over Japan. They would go directly to the third country or U.S. airline, but the Japanese get more than an artificial adjustment in their balance of payments. They earn interest and charges on the leases and build up trade relations with airlines which will eventually be used for more Japanese, not American, exports. In addition, when the leases are paid and ownership transferred to third country airlines Japan will record the transaction as exports. The window dressing will be reversed to benefit the Japanese trade balance in 1989 and beyond. Then I point out that such gimmicks will not remedy the fundamental problem in the United States and should be firmly rejected and

must be excluded in calculations of United States-Japan trade balance.

Isn't that really a method of—I wouldn't say deception exactly, but doesn't it give us a false picture of what the improvement in trade between this country and Japan really is when obviously we're not exporting the aircraft to Japan?

Mr. BERGSTEN. I would have two comments on that, Mr. Chairman. The first is we have discussed these ideas extensively with the Government of Japan and in every one of those discussions we start by saying exactly what you did; that these measures are in no way a substitute for the fundamental adjustment that has to take place. Secretary Blumenthal was just in Tokyo the day before yesterday again reiterating to the Japanese our extremely strong view and insistence that they continue to make efforts on the fundamentals in the growth rates, the competitive positions, opening their markets to imports in a meaningful sense—the whole range of measures that we have continued to raise with them. There is some progress—not enough, but some progress.

But my first point would be that we have stressed at every occasion that these measures are no substitute at all for the fundamentals and in fact when we—and I think even the Japanese—discuss their trade numbers, they do single out a separate item called emergency imports and this comes under that heading. When they talk about their trade balance in fiscal 1978 or fiscal 1979, they give a number but then they themselves are rapid to say this includes "*x*" billion dollars of emergency imports. The special transactions you're talking about are included in that rubric of emergency imports so everybody knows that the underlying surplus in their position is that much higher by the amount of the emergency imports. I don't think they or anybody else has really tried to hide that, but rather they treat it as a short run item to try to reduce the immediate effects of their surplus. That's my second comment.

I think it probably does reduce the immediate effects of their surplus to the extent an American firm does export and does get paid for the plane by the Japanese. It is a transaction across the foreign exchanges which adds to the strength of the dollar because of the immediate dollar inflow to pay for the plane. It is true that if the product is leased back to a U.S. airline that it triggers a stream of dollar payments to the Japanese intermediary over time, which as you rightly point out some number of years down the road—10 years or whatever—may on balance turn out to be profit to the Japanese firm.

There are a couple of other financial benefits of the leasing proposal for the United States. First, it adds to the stock of capital available to the United States, since the Japanese would be financing the U.S. airline's acquisition of aircraft. The airlines are tapping the Japanese capital market instead of our own capital market.

Second, it frees up the resources of the U.S. Export-Import Bank, since foreign airlines that traditionally had borrowed from the Eximbank to finance the purchases of aircraft may now turn to Japanese leasing companies. This means that the U.S. Eximbank

may finance other capital goods exports now that it no longer needs to finance these aircraft.

The CHAIRMAN. But it shouldn't be in the trade balance statistics. It ought to be in the payments balance perhaps.

Mr. BERGSTEN. Actually, where it counts in our statistics depends on the details of the precise transaction. Some count as exported goods; some do not. If there's a payment for the goods by a Japanese purchaser to an American exporter, it is I think legitimate to count it as an export of goods. Then the lease back payments from the American commercial airline to the Japanese intermediary is a service payment by the United States but both of them go into the current account which is what we focus on in any event as the main indicator.

The CHAIRMAN. But it seems to me it's putting the emphasis on the banker rather than the actual recipient of the aircraft.

Mr. BERGSTEN. Well, as I say, it does depend on the precise nature of the transaction. The Census Bureau statisticians who actually make the rulings on this I think are diligent to try to make it square with the basic definitions they use, but I think it's fair to say it does in the short run at least have a favorable impact on the current account foreign exchange situation and so it's legitimate to treat it that way, but always stating it's an emergency transaction, a short run kind of special operation and not to be confused, I fully agree with you, with the fundamental situation.

The CHAIRMAN. Well, it is confusing, but let me proceed to another issue.

I was discussing when my time was up last time the antiboycott provisions of the tax law and so forth. Let me ask, does Treasury intend to issue new regulations under the antiboycott provisions in the tax law?

Mr. BERGSTEN. We have made every effort to conform as best we can to Treasury regulations and the Commerce regulations in the face of the two acts which have some differences between them. We have under consideration some new guidelines that might be needed to clarify particular points. We haven't made a decision yet whether they are necessary. There have been some requests for clarification. We have that under consideration.

The CHAIRMAN. Does Treasury intend to propose any statutory change in the antiboycott provisions of the tax law or Export Administration Act?

Mr. BERGSTEN. We have no plans now for any proposed changes in the anti-boycott provisions. Along with the other agencies I mentioned earlier, we are undertaking a very extensive review of the Export Administration Act and I think we will be proposing some amendments on that.

The CHAIRMAN. They had better be forthcoming pretty quickly because May 15 is the deadline. We expect to mark up the bill in less than a month, so we will have to act.

Mr. BERGSTEN. Right.

The CHAIRMAN. We also have to send up an authorization bill for international functions which I understand is subject to the May 15 deadline.

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Does Treasury intend to transfer to the Commerce Department the responsibility for transaction controls with respect to North Korea, Cambodia, and Cuba?

Mr. BERGSTEN. I'm not aware of any plans to transfer that authority.

The CHAIRMAN. Why not? Why should we have two departments administering export controls? That was one of the recommendations, as I understand it, of the witnesses we had yesterday, that we ought to try to concentrate this in a single department with financial responsibility and one of the reasons for the problems we have had in exporting is the delay which is almost as bad as denial, sometimes worse.

Mr. BERGSTEN. Well, Mr. Chairman, I don't personally think that this particular aspect of the export administration has been an independent source of delay. It's really the tail on the dog. I can see the case for consolidating. We are looking into that. Consolidation may be one of the recommendations that we will make.

The CHAIRMAN. Well, maybe I can document that in my next round, but I think we did have quite a bit of testimony that it's much more difficult when you have to clear it with other departments back and forth.

Three years ago the Export Administration Act expired because the Ford administration refused to accept the anti-boycott bill. President Ford used the Trading With the Enemy Act to apply export controls nevertheless. In 1977 Congress amended the Trading With the Enemy Act and passed instead the International Emergency Economic Powers Act making significant changes in the President's emergency authority.

What would the administration do about export controls if, God forbid, Congress fails to extend the Export Administration Act?

Mr. BERGSTEN. God forbid. My answer would be it's a hypothetical situation. We certainly not only hope it won't happen, but we see no reason why it should happen this year.

The CHAIRMAN. Well, yes, but you should have a backup position in that event. We should have had more backup positions in Iran. Maybe we have learned our lesson.

Mr. BERGSTEN. We will take your advice and develop a backup position.

The CHAIRMAN. I don't think that's going to happen either, but I think you should be prepared just in the event. You never know what's going to happen in the Senate or the House for that matter.

What effect, if any, do Treasury gold sales have? Gold prices are up and so are gold imports. Just today they went down, but over the last several months they have been rising, certainly since the November 1 decisive action by the Government led by the Treasury Department—Secretary Blumenthal was a principal architect of that program—the gold prices have gone up in spite of the gold sales and I read an article the other day that was very cogently reasoned and argued that as a matter of fact gold sales have been pushing gold prices up.

Mr. BERGSTEN. The main effect of our gold sales has been to reduce the U.S. trade deficit. Until we began selling gold, the United States had become a substantial net importer of gold over the past few years. At current levels of 1½ million ounces per

month our gold sales this year will enhance the trade balance by somewhere between $3 and $4 billion, shifting us from a sizable net importer to something of a net exporter of this commodity. This strengthens the dollar and has some of the effects we discussed earlier.

The CHAIRMAN. That policy obviously has a finite period. We run out of gold when we export $2 or $3 billion.

Mr. BERGSTEN. We sell 1½ million ounces per month and our total stock is about 285 million ounces. So although it is finite, there's a lot there.

The CHAIRMAN. You're talking about month, not year.

Mr. BERGSTEN. If we continue at the current rate, we would be selling about 18 million ounces this year and, as I say, our total stock is 285 million ounces, a substantial supply and I would not envisage we would continue to sell at that rate for 10 years; but even if we did, there would be plenty left in the kitty.

The CHAIRMAN. I just have a minute left so let me just refer to the GAO reference with respect to interagency delays that I mentioned earlier.

GAO's October 31, 1978 report said the Government administration of export licensing is spread among too many agencies. The resulting lack of accountability and the delay and uncertainty in the decisionmaking process can cause exporters to lose sales even if a license is subsequently approved. GAO recommended that the licensing be concentrated in the Commerce Department. That's why I asked whether or not you would agree.

Mr. BERGSTEN. Sure, I see the case that it would be neater and cleaner to put them together, but I would simply submit from my own experience that the Treasury function is such a small one——

The CHAIRMAN. That's why it should be easy to move it out.

Mr. BERGSTEN. We've got it under consideration.

The CHAIRMAN. OK. Senator Stevenson.

Senator STEVENSON. Thank you, Mr. Chairman.

Our report on competitiveness will be finished in a few days and will include a recommendation for an export strategy and we would be glad to have your reaction to these recommendations. I just have an observation with which to conclude, Mr. Chairman. It goes back to the figures on R. & D.

With the era of cheap labor, cheap raw materials, cheap fuels, cheap money all in the past, there's very little left really for the United States with which to be competitive in the highly competitive world except for a preeminent capacity for technological innovation and, of course, food production which is itself a technology intensive industry. These figures are in some respects misleading. They don't reflect qualitative differences country to country. They do include, as you indicated, Mr. Chairman, expenditures which probably are proportionately larger in the United States for space and the military than any other country; also expenditures which are, of course, larger proportionately in our country for nonprofit R. & D.—environmental safeguard, for example, and product improvement as opposed to innovation and all. Those other countries do something that we don't do. They make an objective of Government the commercialization of technology.

Now, you, Mr. Chairman, mentioned space disparagingly a moment ago.

The CHAIRMAN. I didn't mean to mention it disparagingly. I just said if you leave that out, because we obviously have a space program that Japan doesn't have——

Senator STEVENSON. Well, let me qualify what you just said. We have two space programs. One is black and one is white. The economic benefits of the black, or military intelligence side, are difficult to quantify. They are important to the nonmilitary benefits, for example, because certain of our intelligence systems aren't space based; they are land based. We may not be able to verify all the aspects of the SALT agreement now because of what's just happened in Iran. But I remind you that the most competitive industry of the United States in the world is its aerospace industry and its aerospace industry is so export oriented and competitive because of Government support. It's contrary to those popular notions about the omnipotence of free enterprise and the futility of government spending, but it has been government's role as a supporter of R. & D. and as a procurer of R. & D. which more than anything else created the aerospace industry which is our most competitive industry.

Now other countries make the commercialization of technology an objective. We do it by accident, by coincidence. Our objective was space per se, and the military, and by accident we created an aerospace industry. We supported an aerospace industry, not to mention all the other spinoffs—the computer industry and everything from computers to Teflon frying pans which end up as commercial products. In Japan an objective is to organize an electronic data processing industry by one subsidy or another and they create a great electronic data processing industry—at the same time, incidentally, we are trying to break up IBM. This year IBM comes downstream with fourth generation computers, the highest of high technologies. There's more R. & D. being conducted abroad than at home now. Technology transfers are a two-way street and those investments abroad tend to be much more selective.

I think all those countries—certainly most—have devices by which they bring industry and government and universities together in cooperative efforts to commercialize technology.

Continuing just 1 second more with space, Mr. Chairman, our commercial benefits from space have been very substantial but we have not begun to realize the commercial benefits of space. The Shuttle that flies this year, or probably next year, opens up for the first time an opportunity to involve the Government and an industry directly in the commercialization of space technology. You say there aren't others. There are others in space now and they are moving ahead rapidly because they, more so than we, see commercial opportunities in space. Consider the most recent Landsat stations: two of the three went to foreign suppliers. The Russians are moving ahead. The French are moving ahead. The Japanese are moving ahead in space because they see the commercial opportunities there.

We are going to have a Space Shuttle, but we are not going to know what to do with it. In an energy crisis, one of the most promising means for exploring for fuels throughout the world is

through remote sensors from space. We use it on the black side. We haven't begun to use it on the white side and there's nothing in the budget with which to make a commitment for remote sensing—food production, crop monitoring throughout the world—we have that technology within our grasp, not to mention the communications system for manufacturing procedures, for the longer term and multiple possibilities such as a solar powered satellite. I can't think of an opportunity that offers greater commercial opportunity, not to mention all the authority in the world politically than through the exploitation of space, and it costs no more than what we spent to develop the Space Shuttle to use it.

But the United States, unlike other countries, is pulling back. That's what's wrong. We are pulling back. We are pulling back across the board and they are all moving ahead rapidly to overtake us. It's not our capacity. It's our relative capacity for technological innovation and a will to use what we already have. That's a large part of it.

I think from this study, Mr. Bergsten, you will see that we come down, as you do I think, very hard on technology and the need to maintain our commitment to basic science as well as to research and development and to make new commitments including the commercialization of technology in the Government. That's just one example of nonprice factors where competitiveness isn't going to be recovered by floating exchange rates.

Thank you.

The CHAIRMAN. Well, thank you, Senator Stevenson. I'm glad—I don't want to engage in a debate between you and me on space. For one thing, I think you and I would very largely agree. What I was saying is that much of the research and development that this country has been engaged in has been what you call I guess the black side of space. That is the side that has no industrial application, at least in the immediate future. It may have eventually a thousand years from now or a hundred years from now, but I would agree wholeheartedly that we should certainly emphasize far more than we have the Earth applications. You make some excellent examples here—the crop monitoring. There are many other areas. The Shuttle can be used in all kinds of ways. It was interesting when the Defense Department came before my Subcommittee on Appropriations Committee—we have jurisdiction over the space budget. When the Defense Department came before us I asked them whether or not they could bear part of the cost of the Space Shuttle in their budget inasmuch as they are the principal customers. They said, "No, we couldn't justify it." If it had to be in their budget, they wouldn't fund it. They would let it go. So I think part of the space program, even with respect to the space shuttle, may have a marvelous payoff and the payoff may come sooner than anybody expects. Often technology moves faster than we expect. There's also a great deal of this—I don't know what percentage of this, but I suspect rather large—which does not relate to research and development and it would be helpful in helping to make us more competitive industrially.

Let me ask you a couple of questions that I haven't had a chance to get to here, Mr. Bergsten. Would you recommend a change on the part of the Congress with respect to Jackson-Vanik? That is,

would you recommend that we have a policy which would permit us to trade with the Soviet Union on a most-favored-nation basis perhaps regardless of their policies with respect to emigration and Jews? Do you think we should modify that position?

Mr. BERGSTEN. As you know, the administration does not have any policy on that issue at this time. We are certainly trying to expand our economic relations, including trade, with the Soviets and other Communist countries as rapidly as we can.

The CHAIRMAN. Has the administration made any analysis to determine whether the Jackson-Vanik amendment is effective? I think Senator Stevenson made a very powerful point the other day pointing out it seems that it hasn't gotten results. The results should be to help increase the emigration of Jews from the Soviet Union, those wanting to leave, and it's been counterproductive. It seems to have been counterproductive today. But it's helpful to us if the administration could give us their analysis of it.

Mr. BERGSTEN. Well, we will certainly do so in great detail when we go into markup on the act and have precise hearings on the legislation. Obviously, there are a great variety of factors involved, not only in the emigration policy of the Soviets but all of the objectives that are sought through those amendments, and we will have a complete readout for you at that time.

The CHAIRMAN. Now we also have no legislation for the IMF quota increase. Do you intend to request such legislation this year?

Mr. BERGSTEN. I think, Mr. Chairman, we will submit the authorizing legislation later this year. You will recall last year there was an extensive discussion over the——

The CHAIRMAN. When you say later this year, when do you expect that to be?

Mr. BERGSTEN. Well, I don't have a firm date. I was going to explain why. There was a great debate last year over the proper budgetary treatment of IMF transactions. That was over the Witteveen facility legislation. The IMF quota increase is different from the Witteveen facility but raises some of the same issues. So what we wanted to do was try to get a clear but agreed upon understanding among all the participants here on the Hill as well as the administration so when the authorizing legislation was submitted we wouldn't have a great time delay on the grounds of the technical question of budgetary treatment which we had last year.

We had a long meeting about 2 weeks ago with members of your staff and the staffs from the other relevant committees on both sides of the Congress, and we are trying to work that out. That's really the issue. As soon as we can get a resolution and a common view of how to handle the issue from that technical standpoint, I think we would come in with the legislation.

I don't think, Mr. Chairman, you face the same May 15 deadline on that one as you do on this other piece of legislation.

The CHAIRMAN. Staff advises me that's correct.

Mr. BERGSTEN. So I think in that sense it's not quite as urgent, but we intend to submit it within a couple months anyway.

The CHAIRMAN. One final question. I'm very sympathetic with the position that the Treasury takes and Senator Stevenson and others take that we should do all we can to encourage our exports. I think that's right and sound and obviously trade is a two-way

street and if we don't export we can't import. While it's not a matter of life and death the way it is in a country like Japan or England or others that depend so heavily on trade as they do—we have this marvelous domestic market—nevertheless, it's very important for the health of our economy.

But right now, don't you feel as if you're swimming against the tide really, in an inflationary environment where inflation is our No. 1 problem, and at a time when our capacity utilization is close to what many economists—not all by any means—but many economists say is close to the inflationary margin, when our unemployment is relatively low—adult males, for instance, it's close to 4 percent; overall it's higher than that, but for skilled workers it's close to full employment.

Under these circumstances, for us to have a dynamic, explosive—not explosive—but a dynamic increase in exports, therefore increasing demand, isn't it possible that that might have an inflationary effect?

Mr. BERGSTEN. Well, taken by itself it could have. But as you well know, we do anticipate a slowing down this year of the other components of final demand.

The CHAIRMAN. Let me just interrupt you once again to say that the difficulty is that we're urged to follow and we intend to follow more stringent fiscal and monetary policies to slow the economy down. If you slow the economy down on the one hand and if we have a dynamic export program on the other, doesn't that contradict what we are able to do with fiscal and monetary policy and making considerable sacrificies.

Mr. BERGSTEN. It's a matter of degree. Sure, if we offset fully the slowdown from other sources of demand, private consumption, the Government budget, State and local governments, if we fully offset that by a shift toward greater surplus or lower deficit, right, the outcome would be a net of zero. You have the same demand pressure on the economy. But even with our relatively optimistic forecast on the external balance, some of which I mentioned before, we would not go nearly that far in terms of our external adjustment.

We do have to shift the allocation of our resources away from domestic consumption to some increase in how much we export, net, to the rest of the world. That's necessary for the dollar defense and the other purposes I mentioned earlier. But trade is only a relatively small share of our economy. Increases in exports constitute only a small offset against the cutbacks that are called for in the rest of our anti-inflation program and were fully taken into account in developing that program. So if the anti-inflation program works as we would hope and project, increased exports would be fully consistent with reduced inflation.

The CHAIRMAN. I want to challenge that a little bit. We have a $2 trillion economy. We have a $29 billion deficit, which is an enormous deficit, historically, but is small in relationship to the size of our economy. A relatively modest shift in exports, an increase in exports will go a long way toward offsetting any austerity.

People talk about making a decisive difference with a $10 billion further reduction in Federal spending.

Mr. BERGSTEN. Right.

The CHAIRMAN. We could easily have a $10 billion increase in exports that would counteract that.

Mr. BERGSTEN. Well, that is right, but, Senator, I am not sure that's a bad thing. I mean——

The CHAIRMAN. It's a great thing in many respects, many respects.

Mr. BERGSTEN. That's what I mean to say.

The CHAIRMAN. Especially for an exporting State like Wisconsin.

Mr. BERGSTEN. But also from the standpoint which you are a champion of, of holding down government spending, reducing the Federal budget deficit, it is true.

The CHAIRMAN. Yes, but there are many purposes in that. One of the purposes in holding down Government spending of course is to ease the inflation pressure, and if that's going to be overcome or overwhelmed by an increase in exports——

Mr. BERGSTEN. Well, what that might say is we need an even smaller budget deficit because we have to get the external side up for the reasons we discussed earlier. If it means a little tighter fiscal policy, you will have us on your side.

The CHAIRMAN. I sure hope so.

Well, thank you very much. Mr. Secretary, we appreciate very much your testimony. As always, you're a very bright man and contribute greatly to our understanding and our record.

The committee will stand in recess until 2 o'clock when we hear from Secretary Cooper of the State Department.

[Whereupon, at 11:35 a.m., the hearing was recessed to reconvene at 2 p.m. this same day.]

[The following responses to questions submitted was subsequently received for the record.]

DEPARTMENT OF THE TREASURY,
Washington, D.C., April 19, 1979.

Hon. William Proxmire,
Chairman, Committee on Banking, Housing, and Urban Affairs,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: During the questioning following my testimony before the Senate Committee on Banking, Housing, and Urban Affairs on March 6, 1979, I indicated that I would be glad to submit additional information for the record in response to Committee members' questions. I hereby submit my replies to your questions and those from Senators Garn and Heinz.

I am not able to provide the information requested by Senator Stevenson pertaining to allocation of R&D expenditures in the Soviet Union, because the required data are not available from any source in this country.

It was a great pleasure, as always, to testify before your Committee. I hope that you will find my testimony useful to the Committee's efforts to improve the Export Administration Act.

Sincerely,

C. FRED BERGSTEN,
Assistant Secretary.

REPLIES TO QUESTIONS SUBMITTED TO C. FRED BERGSTEN, ASSISTANT SECRETARY, DEPARTMENT OF THE TREASURY

Question. As you know as well as anyone in the Administration, it has been enormously difficult to convince the Japanese Government to drop its hidden trade subsidies or its barriers to foreign imports. In our negotiations with them on a whole range of trade issues, the point which is invariably raised by the Japanese representative is that the Government coalition is a fragile one and any radical changes in their trade policy could very well cause that coalition to crumble.

My question to you would be, with a $9 billion trade imbalance with the Japanese, is there any point at which it might be appropriate to play "hardball" and call

their bluff? Should we ever go the point where we demand an equitable trading arrangement with them, and refuse to accept excuses or promises which never seem to be fulfilled?

Answer. The United States is already demanding an equitable trading arrangement with the Japanese. Clearly, decisive action is needed to reduce the large Japanese trade surplus. One means to accomplish that is by reduction of Japanese barriers to imports. The Japanese have maintained high import barriers in the past, and have been reluctant to reduce them. We have, however, obtained substantial Japanese concessions in the Multilateral Trade Negotiations now near conclusion. The results of these negotiations will include the following:

Japan will reduce its tariffs to the same level as ours, both on an average basis and by product areas. Japan will cut its tariffs by over 60 percent from GATT-bound rates on some 3,000 industrial items;

The average Japanese tariff on industrial imports from the United States will be 2.3 percent, compared to an average U.S. tariff of over 4 percent on Japanese imports. Tariff cuts were negotiated in such key sectors as color film, computers, and integrated circuits.

In agriculture, the Japanese made concessions on some 150 items covering $1.5 billion in U.S. exports.

Perhaps even more important than tariffs is Japanese adherence to international codes regulating the use of non-tariff measures, including safeguards, standards, customs valuation, subsidies and countervailing duties.

While these steps do represent substantial progress, some problems remain. Most importantly, Japan has not yet made an adequate offer on entity coverage under the government procurement code. Ambassador Strauss on March 29 informed the Japanese that their offer on government procurement is clearly deficient, and that the United States will not conclude a government procurement agreement with Japan until Japan makes an adequate offer. Ambassador Strauss characterized the current Japanese proposal as "patently unfair," and suspended negotiations until the Japanese table an offer that provide real reciprocity for U.S. exporters.

Other problems also exist, including burdensome testing procedures for certain imports and discriminatory Japanese treatment of imported tobacco products. We are using the joint U.S.-Japanese Trade Facilitation Committee to seek satisfactory resolution of these problems. We are, and will continue to, press the Japanese to take all appropriate measures to reduce their trade surplus.

Finally, it is vitally important that U.S. exporters take advantage of the opportunities presented by an increasingly open Japanese market. Efforts to relax Japanese restrictions will help only if U.S. business exploits the potential of the Japanese market.

Question. Do you believe that there is any connection between the decline in the share of the market which the United States has experienced in various parts of the world in recent years and the increasing use of export controls for foreign policy goals?

Answer. Export controls as a general rule tend to affect a country's export performance adversely. Such controls are by no means the major cause of our recent unsatisfactory export performance, but they clearly can constitute a barrier to U.S. exports. A concrete example is the case of truck exports to Libya. Failure to grant an export permit would have meant the loss of millions of dollars in U.S. exports. Of course, controls may be necessary in some cases. But we should pay more attention to the need for the United States to increase its exports in deciding whether to impose controls. In his September, 1978 statement on Export Policy, the President directed that such an approach should be followed in export control decisions.

Question. What are the current Treasury Department forecasts for trade—measured in volume and dollar value—for 1979? How soon do you expect the U.S. to show a net trade surplus?

Answer. We are currently forecasting a U.S. trade deficit of approximately $27 billion for 1979, as compared to a $34 billion deficit in 1978. This improvement reflects:

A $25-$26 billion gain in nonagricultural exports (excluding gold), compared with a probable increase of about $16 billion in non-petroleum imports, representing an improvement of $9-$10 billion in those parts of our trade position which most accurately indicate the competitive position of the United States in the world economy;

An additional $3-$4 billion of gold auction effects;

A rise in agricultural exports of about $1 billion; and

An offsetting increase of at least $8 billion in our oil import bill, based on continued growth in oil consumption and the December oil price increases. (The 5

percent reduction in consumption called for by our recent agreement in the International Energy Agency is equal to a 10 percent reduction in U.S. imports, and potential import savings of $5 billion.) In volume terms, we expect nonagricultural exports (excluding gold) to grow about 11 percent this year over last, in contrast to an increae of less than 1 percent in non-petroleum import volume. Average unit values on both sides are projected to increase about 11-12 percent.

Considering our heavy and still growing dependence on imported oil plus current upward pressures on world oil prices, it is difficult at this time to foresee any early return to surplus on our total merchandise trade account. Our oil import bill, which was $45 billion in 1977 and declined temporarily to slightly over $42 billion last year, must be expected to total about $50 billion in 1979.

The trade balance, however, is only a partial measure of our international payments position. The U.S. deficit on current-account transactions with foreign countries (which includes all receipts and payments for services, together with private remittances and government pensions and grants, in addition to merchandise trade) is considerably smaller than the trade deficit, because of our substantial and growing surplus on net invisibles (services and transfers).

In 1978 this invisibles surplus was slightly over $18 billion, reducing our $34 billion trade deficit to a current account deficit of $16 billion.

This year, our invisibles surplus should show at least a small further increase—converting our forecast trade deficit of roughly $27 billion to a probably current account deficit of some $8 or $9 billion, roughly half of last year's level.

Question. Testifying before the full Committee in October, former Secretary of State Dean Rusk made a comment and then posed a question, that I in turn would put to you:

"When we refuse to trade . . . we should recall that we are depriving ourselves of the benefits of that trade, whether in the form of convertible currencies or goods and services which we ourselves need for our own national life . . . . We must . . . ask ourselves what ought to be the policies and practices which justify denying ourselves the benefits of trade . . ." (Oct. 11, 1978, p. 146.)

In other words, what policies and practices do you feel are sufficiently weighty to justify the costs of export controls?

Answer. As I elaborated in my testimony before the Committee, export controls are undesirable on purely economic grounds, except for certain narrow situations. But, while economic considerations are important, they are not the sole determinant whether to restrict exports. Foreign policy and security reasons can at times be of overriding importance. Setting objective criteria to determine when foreign policy considerations should overrule strictly economic criteria, however, is a difficult, if not impossible task. There is no easy set of rules. I do believe, however, that greater weight should be given to the impact of controls on our trade position, particularly at a time when we are in substantial deficit on our trade account.

Question. Are you aware of any Administration policies, either in your department or elsewhere, to influence exports in order to enforce compliance with President Carter's inflation program?

Answer. I am not aware of any Administration policies to influence exports in order to enforce compliance with the President's inflation program.

Question. What were the sources for the tables and chart presented with your testimony? What, on table 1, is the difference between a "technology-intensive" and a "nontechnology-intensive" product.

Answer. The data in Table 1 were calculated by Ms. Regina Vargo at the U.S. Department of Commerce. (Her telephone numbner is 377-2084.) A "technology-intensive" product is defined as one in a 3-digit SIC product category for which research and development expenditures as a percentage of value of shipments exceeds the mean for all manufactured goods. To calculate values of exports and imports for these product categories ("technology-intensive" and "nontechnology-intensive"), the products were reclassified by SITC category. Under this recategorization, the "technology-intensive" products were those in SITC groups 51, 531, 532.3, 533.1, 541, 551.2, 561, 581, 599.2, 711 (except 711.1, 711.2, 711.7 and 711.9), 714, 719.63, 722, 724.9 729.3, 729.5, 86, 891.1, and 891.2.

A detailed description of the methodology is contained in Regina Kelly (Vargo), "The Impact of Technological Innovation on Impact of Technological Innovation on International Trade Patterns," U.S. Dept of Commerce, Bureau of Economic Research Monograph ER-24, December, 1977.

The data in Tables 2 and 3 and Chart 1 were provided to us by Robert Santos in the Division of Science Resources Studies, National Science Foundation, Telephone 634-4648.

Question. What is the breakdown of government research and development expenditure (i.e. defense and non-defense) for each of the six nations shown in your tables?

Answer. The attached table gives a breakdown for each of Canada, France, Japan, the United Kingdom, the United States, and West Germany for 1975, the latest year for which comparable data are available.

DISTRIBUTION OF GOVERNMENT R. & D. EXPENDITURES FOR 6 NATIONS—1975 [1]

	Amount in millions of dollars [2]						Percent distribution					
	Canada	France	Japan	U.K.	U.S.	W. Germany	Canada	France	Japan	U.K.	U.S.	W. Germany
National Defense	62.9	1114.5	51.7	1018.3	9620.9	535.9	8	30	2	47	51	11
Space	31.9	210.0	121.5	45.5	2511.3	205.9	4	6	5	2	13	4
Energy	116.0	323.9	194.7	138.8	1163.9	512.2	14	9	8	6	6	11
Economic Development	351.3	965.1	530.1	466.7	1784.2	659.6	43	26	23	21	9	14
Health	70.5	151.6	70.2	45.7	227.4	158.1	9	4	3	2	12	3
Community Services	96.2	73.3	59.4	26.5	954.6	285.5	12	2	3	1	5	6
Advancement of Knowledge	83.7	907.8	1273.6	435.0	761.9	2452.6	10	24	55	20	4	51
Total	812.4	2746.2	2301.3	2176.6	19044.2	4809.8	100	100	100	100	100	100

[1] Latest year for which comparable data is available, for France and West Germany, this is calendar year 1975, for other nations fiscal year 1975.

[2] Converted from national currency to U.S. dollars by Treasury Department staff at Dec. 31, 1975, closing exchange rate.

Source: National Science Foundation, Science Indicators, 1976.

Question. In a hearing before the International Finance Subcommittee last May, Gary C. Hufbauer of the Treasury, gave his own opinion that,

> Restrictions on the outflow of technology would not be in the national interest. The administrative aspects of a technology licensing system are truly mind-boggling. A Technology Review Board would be a boon to Washington attorneys and bureaucrats, but very costly to firms with technology to sell.

Do you differ with this assessment?

Answer. I concur with the assessment of Dr. Hufbauer.

Question. What are U.S. research and development expenditures, exclusive of those made for national defense and for the space programs, as a percent of GNP?

Answer. The attached table shows U.S. Government expenditures for R&D less those for defense and space, total U.S. expenditures for R&D less those for defense and space, and each of these as a percent of GNP, for the years 1971–78.

U.S. R. & D. EXPENDITURES, LESS THOSE FOR SPACE AND DEFENSE, 1971–78

	1971	1972	1973	1974	1975	1976	1977	Estimated 1978
Billions of dollars:								
(A) U.S. Government expenditures on R. & D., less space and defense expenditures.	$3.90	$4.15	$4.71	$5.20	$6.02	$5.53	$6.87	$7.87
(B) Total national expenditures on R. & D., less space and defense expenditures.	15.61	16.80	19.02	21.18	23.07	24.72	28.12	31.35
Percentages:								
(C) Line (A) as percent of GNP	0.37	0.35	0.36	0.37	0.40	0.33	0.36	0.39
(D) Line (B) as percent of GNP	1.47	1.43	1.46	1.50	1.52	1.45	1.49	1.57

Source: Calculated from figures in National Science Foundation, "National Patterns of R. & D. Resources" 1953–1978/79, NSF 78–313, "Science Indicators 1976," NSB 77–1, and "Federal Funds for Research and Development and Other Activities" (NSF 78–300).

Question. Can you envision any practical and beneficial form of export control of technology?

Answer. Other than for reasons of national security, we do not feel that efforts to control the export of technology would be practical or in the national interest.

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

Secretary Cooper, we're glad to have you here.

We understand that Secretary Vance is busy with the trip to the Mideast with the President—which was unexpected.

But we're very happy to have you. You're certainly an expert in this field, and we're anxious to hear you and have an opportunity to talk.

Will you identify the distinguished gentleman on your right?

Mr. COOPER. Yes. This is Mr. William Root, who is the Director of our Office of East-West Trade.

The CHAIRMAN. Fine.

Go right ahead.

STATEMENT OF RICHARD N. COOPER, UNDER SECRETARY OF STATE FOR ECONOMIC AFFAIRS ACCOMPANIED BY WILLIAM ROOT, DIRECTOR, OFFICE OF EAST-WEST TRADE

Mr. COOPER. Thank you very much, Mr. Chairman.

Secretary Vance extends his apologies for not being here, and I'll do the best I can.

I have a statement that was prepared for his use, and I can either read it, or—if you prefer, Mr. Chairman—I can submit it and be very brief in my opening remarks so as to afford the maximum opportunity for questions.

I'm at your disposition.

The CHAIRMAN. In view of the fact that the statement just was made available to us a short time ago, I think you'd better go ahead and read it.

Mr. COOPER. All right.

I appreciate the opportunity to appear here to testify on U.S. export policy, and I appreciate the thoughtful questions in your letter of invitation.

I'll do my best to answer them, at least in general terms, in my opening remarks. And perhaps we can deal with them in more detail in the questions.

In response to two of the questions, I have attached to my statement a summary of restrictions on U.S. exports which have been adopted to further U.S. foreign policy objectives, with an indication as to which of these are also observed by foreign governments.

Before discussing export controls specifically, let me begin by emphasizing the great importance we attach to positive and effective national export policies. A basic element in these policies is the Export Administration Act, which must soon be renewed.

The act wisely emphasizes our national commitment to exports. This will always be an important policy objective, and I urge the committee, in reviewing the act, to bear in mind that in 1979 and

the years ahead the need to increase our exports will be especially acute.

Our economic situation has changed dramatically since the early post-World War II years. At that time we took our favorable export position for granted. Now, we are experiencing large trade deficits which adversely affect both our domestic economy and our foreign relations. We must find effective measures to improve our export performance.

The strength of our economy is highly dependent on international trade. Our country is large, and our productive facilities are diversified. But we are not economically independent. We need to emphasize this simple truth. Americans do not sufficiently appreciate that we live in an economically interdependent world.

An estimated one out of eight American manufacturing jobs now depend on exports. Fully one-third of our agricultural production is sold abroad.

Exports mean more than jobs and higher income at home; they also are necessary to pay for materials, like oil, which we have to buy from other countries.

Our ability to export must keep pace with our increasing dependence on imported raw materials and foreign manufacturers.

A strong position in international trade requires vigorous and highly competitive export industries. And we must develop more of them to close the balance-of-payments gap. With these industries will come new jobs, higher productivity, and technological innovation that our country will need in the 1980's.

I have emphasized economic factors, but our export performance affects vital U.S. foreign policy interests as well. America's strength is not measured only or even mainly by our military might. A vigorous economy, which produces goods that can compete effectively in markets at home and abroad, is essential to maintaining U.S. leadership in the world.

It is the foundation of our military strength, our diplomacy, and our inherent appeal as a nation.

On the other hand, a steadily growing trade deficit and a weakened currency—which are due, in part, to poor export performance—can eventually lead to an erosion of our international political standing and influence.

For example, the effect on our relations with European nations, Japan, and some oil exporting countries was evident last year when the dollar plummeted in foreign exchange markets. Thus, a stronger export performance, which among other things will bolster the dollar, is fundamentally important to an effective foreign policy.

Success in the international export market does not come through occasional bursts of energy. A sustained effort is necessary, requiring investment of time, manpower, and market research.

A large part of the burden for improving American export performance falls upon the private sector, but the Government can also help in a variety of ways. Among them is providing credit support and minimizing regulatory intervention.

Our most effective international competitors, notably the highly industrialized West European countries and Japan, have consistently and actively supported their export sectors and minimized government restrictions for many years.

The President's National Export Policy, announced last September, represents our commitment to make a similar sustained effort.

One of the most effective means by which our government can promote exports is to provide official export credit support to permit U.S. firms to compete effectively.

We are seeking to increase the Export-Import Bank's fiscal year 1980 program level above the level for fiscal year 1979, to allow it to support a greater volume of exports.

Exim is seeking more aggressively, within the limits of its resources, to provide support in individual transactions on terms competitive with those offered by the offical export credit agencies of our competitors.

Another measure we can take is to seek the removal or reduction of foreign barriers to our exports. We are now at the end of a major multilateral undertaking to achieve that objective.

As a result of the multilateral trade negotiations in Geneva, now nearing completion, our businessmen will have expanded opportunities for increasing their exports.

Equally important, they will be able to do so in the framework of fairer international trading rules. Trade disputes should be less frequent and more easily resolved.

A code on subsidies and countervailing duties would impose greater international discipline over trade-distorting subsidies and define more clearly a country's right to take countermeasures.

A code on government procurement could open up as much as $25 billion a year in foreign government markets now effectively closed to U.S. exports.

Congress will shortly be reviewing the results of these negotiations. When you review the agreements, I believe you will conclude that they serve our national interests. Their approval by the Congress will be a major step forward in fulfilling our national need to export.

The administration is thus moving forcefully to enhance the opportunities for American products in foreign markets.

In the area of disincentives, the national export policies will reduce domestic barriers to exports by creating a more sensible regulatory environment and by clarifying some of the ambiguities associated with the enforcement of certain of our laws.

More specifically:

All agencies will weigh more carefully any adverse effect that major administrative and regulatory actions would have on exports.

Second, the Department of State and other agencies will take export consequences fully into account when we consider the use of export controls for foreign policy purposes. We will give particular attention to the availability of the product from other suppliers.

It must be recognized, however, that at times our desire to promote exports will be overridden by other foreign policy concerns. There are circumstances under which our overall national interest will be served by export controls. Exports subject to validated

license requirements, however, are only a small percentage of our total exports.

The clearest instance in this area is national security, where we must continue to restrict, in cooperation with our Allies, the export of equipment and the transfer of critical technology which would contribute significantly to the military capabilities of potential adversaries.

We are now negotiating an updated list of goods and technology to be controlled in our respective countries, to eliminate those products which no longer have a significant security impact.

The principal countries to which these security controls apply are China and the Soviet Union. We have and will continue to apply security controls on exports to these two countries in a balanced manner.

It would not serve our political interests to give the appearance of being less stringent with one country than with the other.

In making judgments as to which items of equipment and technology are critical to our security, we will keep in mind that exports are essential to the strength of our economy and that a strong economy is a critical element of our security.

Our competitors in Western Europe and Japan, with their greater experience of dependence upon exports to sustain economic growth, understand this point well and have already taken the largest shares of industrial import markets in Communist countries.

American firms lag behind. If they can start to make greater gains, the new trading relationships should add to the stability of our political relations.

Export controls are also of importance in our efforts against nuclear proliferation, international terrorism, systematic violations of human rights, and regional military conflicts.

The administration has clearly articulated its commitment to these goals, and has given high priority to their implementation. The Congress has generally been supportive of these efforts.

As in the case of security controls, however, we are following the President's directive of September 26 last year to insure, in those instances where controls are invoked, that the foreign policy gain will outweigh the commercial loss.

The Department of State considers a number of factors in its recommendations for the application of controls: The importance of our foreign policy interest; the relationship between the export in question and the conduct we are trying to influence; and the likelihood that denial of an export license in a particular instance will be an effective means of achieving our purpose.

In making recommendations on the denial of export licenses, the State Department does assess the availability of the product from other sources and weighs whether or not this will negate the effects of denial.

However, it is important that the President and his principal foreign policy adviser be free to recommend denial of an export license in those cases where there are compelling foreign policy reasons, for example when we find it imperative to disassociate the United States from some activity which we find particularly abhorrent.

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We will not sell equipment to police and military entities in South Africa, though we know that such equipment may be supplied by others. There may also be instances where denial is essential to advance our nuclear nonproliferation objectives.

In a few instances, authority granted under the Export Administration Act has been used to limit the export of products which were in short supply and deemed vital to our domestic economic well-being.

The imposition of export restrictions to end a temporary shortage can disproportionately damage long-term export markets, however, and even political relations with purchasing countries.

We recognize the importantce of avoiding, wherever possible, such short-term export restraints and maintaining the U.S. reputation as a reliable supplier.

Even in the vital area of energy policy, we must take particular care that our legislative restrictions on exports of oil do not interfere with the long-term need for adequate and efficient supplies for countries with which we have especially close economic, political, and security ties.

With regard to the antiboycott provision of the Export Administration Act, we cannot agree to having our companies become the tool of other governments' trade boycotts against a third party. We are not proposing any changes in this portion of the act.

In conclusion, let me say that while export controls are an important foreign policy tool, I believe that many people have a somewhat exaggerated impression of the extent to which these controls really hamper the U.S. export performance.

Of those relatively few cases requiring validated licenses, less than 1 percent are actually denied; and we are striving to reduce procedural delays that may discourage potential exporters.

The administration fully recognizes the growing importance of exports to our Nation's economic well-being and overall world standing.

The State Department is joining with Commerce, Defense, and Energy in a further effort to eliminate those product restrictions which no longer serve our security and other foreign policy interests; to streamline the processing of license applications; and to help individual businesses more clearly understand our export control policies.

The State Department is committed to increasing its support for export promotion, with particular emphasis on small and medium-sized firms.

Secretary Vance has recently sent a message to our Ambassadors throughout the world, stressing the need to promote U.S. exports.

As you review the Export Administration Act and other related matters within your jurisdiction, I urge that the committee be mindful of the importance of expanding U.S. exports for our economy, while at the same time preserving our ability to pursue other fundamental foreign policy interests.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Secretary Cooper.

Without objection, the summary of current U.S. export controls, the addenda to your statement, will be printed in full in the record.

[The summary follows:]

SUMMARY OF CURRENT U.S. EXPORT CONTROLS FOR FOREIGN POLICY PURPOSES

The following controls have been adopted by the United States. The positions of the governments of our major foreign competitions toward these controls are also indicated.

a. Virtually total embargoes of exports (and imports) from the United States to North Korea, Vietnam, Kampuchea, and Cuba continue because, in the judgment of the Administraton, the political conditions for normalizing trade relations with those countries have not yet been achieved. Unresolved differences with these countries include: their military activities, U.S. government and private claims, and our terms for diplomatic recognition. The embargoes constitute a peaceful means available to the U.S. to support our foreign policy interests in these countries.

Our allies and major foreign competitors do not observe these embargoes.

b. Virtually total embargo of exports to Rhodesia and prohibition of arms sales to South Africa are in place in compliance with United Nations resolutions and are thus authorized by the UN Participation Act. Other members of the UN participate in these sanctions.

The President directed the prohibition of all exports to the police and military entities in South Africa to disassociate the U.S. from the repressive practices of those organizations. A few other items are controlled for export to other South African government organizations administering apartheid activities. The export of aircraft to South Africa is conditioned upon assurances of peaceful use. Our major foreign competitors do not apply these controls.

c. All U.S. trade with Uganda is prohibited because of human rights violations, pursuant to Public Law 95-435. It is too early to judge whether this legislated embargo will significantly advance U.S. foreign policy.

Major foreign competitors have not joined us in this embargo.

d. The export of munitions, crime control and detection equipment, and a few other items to a few consignees in a few countries whose governments are seriously violating human rights or are aiding and abetting international terrorism is restricted.

Our allies are in basic sympathy with our human rights policy and anti-terrorism goals. While most do not generally deny commercial exports for purely human rights reasons, they may take such matters into consideration when reviewing exports which are subject to control for other reasons, such as an incipient or ongoing conflict in the country of destination.

e. The President decided to require validated licenses for the export of petroleum equipment and to deny a license for a computer for TASS to the USSR for foreign policy reasons. Our allies and major foreign competitors do not apply these controls.

f. The export of munitions is controlled in furtherance of the policy of restraint on arms sales. A few items on the Commerce Department list are controlled in the interest of regional stability.

Most other governments control exports of arms. International negotiations are underway on conventional arms transfers.

g. The export of items judged to have the potential to contribute significantly to nuclear proliferation is controlled. We and other members of the London Suppliers Group condition the export of an agreed list of nuclear-related items on safeguards undertaken by the importer.

h. The Federal Insecticide, Fungicide and Rodenticide Act, the Toxic Substances Control Act, and the Consumer Products Safety Act require some restrictions on the export of hazardous substances.

Other governments do not impose legal restrictions on the export of hazardous substances. We are encouraging the exchange of information with our trading partners in the Organization for Economic Cooperation and Development (OECD).

The CHAIRMAN. I think it's very advantageous that you come up to testify before us. After all, you're not only an expert in this particular area, but you're a distinguished and widely-known economist; and part of the problem here is an economic problem, and I want to ask you first—as I asked the other witness this morning; and I've asked other witnesses in the past about this, so I'd like to ask you, in particular, because of your fine economic background: The exports do help us, but it's become almost like mother love or respect for the flag; this is something to stand up and salute, the fact that exports are good. I'm sure under most circumstances it's good, and perhaps it's good even under present

circumstances, where we have an economy where the number one problem is inflation and we're doing our best to hold down aggregate demand. To the extent that we are successful in improving and increasing exports, we tend to increase the demand in the economy; and we have to follow an even more stringent fiscal and monetary policy.

We might even argue that if exports are increased substantially over the next couple of years, while we're trying to cope with this inflationary situation, we would have to find a trade-off—corresponding reduction in Federal aid for education, Federal aid for health, for the cities, for housing, and so forth—because, after all, if we are going to have those sectors of the domestic economy go ahead, and exports expand rapidly, and overcome the trade deficit, so that exports increase in proportion to imports substantially, our inflation situation might be worsened.

I ask that question of you, because you are, as I say, a distinguished economist and also, as your statement indicates, a champion of a vigorous export policy.

Mr. COOPER. Let me try to answer the question in two parts.

The first part is that in assessing the state of balance of the overall economy for 1979 and 1980, we have already allowed in that assessment for a substantial increase in exports. That is to say this is not something on top of what we already have. It's built into the forecast or the assessment.

The CHAIRMAN. How large an increase do you assume?

Mr. COOPER. I'm not sure I can give you gross exports off-hand. What we project is a decline in the current account deficit by about 50 percent from $17 billion, roughly, last year to something on the order of $8 billion.

The CHAIRMAN. Do you stand by those figures in view of current developments so far this year?

Mr. COOPER. I see nothing in the January figures to change my mind about that. As you are probably aware, the very sharp apparent turn-around in the January figures reflects a major change in our method of seasonal adjustment.

Until that settles down, it seems to me we're not quite clear where we are and our forecast is still for a substantial increase in exports relative to imports this year.

So that the first part of the answer is that we are, if you like, taking for granted or assuming that there will take place in 1979 a substantial increase in exports relative to the balance of the economy.

The second part of my answer—as I am about to say this, I realize that my answer has three parts rather than two—the second part of my answer is that I do not subscribe to the view, and in this respect, I think I am jointed by the President's chief economic advisor, Charles Schultz, that at present, the major problem of the U.S. economy, the major source of inflationary impetus, is excessive aggregate demand.

The CHAIRMAN. As I pointed out this morning, we're at a point now where we're operating at about 85 percent capacity, and many economists feel that's very close to an inflationary level, at least in some areas.

We're also operating with 5.9 percent unemployment and adult white male unemployment is around 4 percent.

So we're at a point where many economists, not all, but I'd say a substantial proportion of them, feel that we're close to it and others think we may be close to it. If we don't cool the economy off, if that is not the case, then there is a very weak argument, certainly, for a stringent, austere, fiscal policy and monetary policy.

If so, we're just spinning our wheels and wasting our time talking about that.

Is that the case?

Mr. COOPER. Let me take up your first point first. You're right. A number of economists do say this. As I read our own history and current circumstances, while we are surely a lot closer to what one might call a full employment economy today than we were 2, or even 1 year ago, we are some substantial distance from it, whether one measures by capacity utilization or by unemployment of the labor force, compared with times in the past.

It's a question of a gradual approach. I think that we are clearly in an area today, again, in contrast to a year or 2 years ago, where we have to be more concerned about pushing too hard. There's no question about that. Caution is indicated.

On the other hand, in my own judgment, we are still some distance from having a really fully employed economy. The economy is suffering a lot of pressure of excess demand.

Now let me come to the second part.

I think we are here dealing in part with a real phenomenon and in part with a psychological phenomenon, rightly or wrongly, and you and I might agree, wrongly; but rightly or wrongly, a large portion of the American public believes that the Government, in general, and the level of Government spending, in particular, is not only a source, but the principal source of inflation.

And I think the President, in addressing the package of policies which he has decided on during the course of last fall and ultimately submitting his budget for January of this year, concluded that if he was going to enlist the kind of support that he and his advisors felt was absolutely necessary for the country at large to get inflation under control, he must show extreme restraint also in the public sector.

And I think that the President's fiscal policy at the present time has to be seen at least as much in that context than in what I would call the old-fashioned context of simply balancing aggregate demand.

The CHAIRMAN. But you would then agree, or would you, that in the event we do come to a point where we have an aggregate demand drop, under those circumstances, the expansion of exports would be reversed.

Mr. COOPER. If we were operating under full steam at full capacity and fully employed, then a dollar's worth of additional exports would be just as inflationary as a dollar's worth of additional consumtion.

There's no question about it. And one would then have to weigh additional exports as against other components of aggregate demand in terms of the other aspects of policy than just balancing the economy that I referred to in the statement.

The CHAIRMAN. One problem, of course, is that we shouldn't have a stop and go policy. If you try to restrict exports under some economic circumstances and expand them under others, it won't work. It has to be a steady encouragement policy.

Mr. COOPER. That's right. That was going to be the third part to my answer, which is that we are here dealing with something that goes beyond the short-run management of fiscal policy.

It's perfectly clear if one compares the American approach to exports with those of our major competitors, we have a long way to go still to build, or in some cases, to rebuild, the kind of penetration we need into markets abroad. And that's not just a question of 1 year, or even 2.

It's a question, as you just suggested, of a sustained effort over some period of time.

The CHAIRMAN. Now you said in the course of your remarks, as I understand it, that the restrictions that we have had on our exports have been relatively small in a modest proportion of our total exports.

And the testimony we had to date indicates that restrictions for human rights reasons have been even smaller, less than the military and less, perhaps, than some others.

And I'm happy to see that because I think all of us believe very strongly in human rights. It's one of the best things that the President has done. He's gotten much too little credit and much too much criticism, in my view, for making human rights, international human rights, a foreign policy issue.

But the question is: Does the restraint of exports to countries that have bad human rights policies do any good?

Does that achieve a success in persuading them not to follow policies of suppression? What's the record?

Mr. COOPER. Well, let me say first that as you appreciate, we have had a series of responses to gross violations of human rights in various ways. And the use of our exports—that is, use of the authority under the Export Administration Act for human rights reasons has been exceedingly limited.

In fact, as far as I'm aware—correct me if I'm wrong ——

The CHAIRMAN. We're told $10 million.

Mr. COOPER. It's really only to South Africa that exports have been restrained—I mean if you consider Uganda as having been covered by legislative action, purely on human rights grounds.

So the number of occasions in which we have used export controls in pursuit of human rights objectives has been exceedingly limited, as far as I'm aware, limited to those two cases.

And I think one has to say that in answer to your question, it is really just too early to tell what kind of effect, if any, this kind of use of policy instruments would have.

The CHAIRMAN. I hope we can follow that carefully so that we can be informed on it.

I think that certainly, if it has any success, that we certainly should do it, particularly, as you say, since the price we pay is a very, very modest one.

But nevertheless, it's a big one for the companies involved, often.

Mr. COOPER. I'm reminded also that in the name of human rights, we've restricted exports to Argentina, in the police and the military area.

I think, if I can say in further response, that while I think any final judgment has to be out on the question of what these restrictions have done, certainly in the case of Argentina and South Africa, and perhaps also now in the case of Uganda also. It's harder to know what's going on there.

They have dramatized to the Government that the United States, in these instances, is very serious about the substantive issue of human rights and about our assessment of their extent of violation of human rights, serious enough even to the point of restricting, to be sure, on a selected, limited basis, restricting exports to those countries.

But, as you know, human psychology is somewhat fickle sometimes. It's conceivable that the situation could be made worse.

Our impression is that in both these cases, the countries took notice in a way that they hadn't before.

The CHAIRMAN. My time is up. Senator Stevenson?

Senator STEVENSON. Thank you, Mr. Chairman.

Mr. Secretary, have exports been curtailed to Chile for human rights reasons?

Mr. COOPER. Are we talking now about the use of the Export Control Act, or about other actions that affect exports, such as Export-Import Bank credit?

Senator STEVENSON. I was not thinking of the Export-Import Bank. I was thinking of official means through the Export Administration Act, or the unofficial informal means of simply controlling exports.

Mr. COOPER. I'm told before my time, yes, they were.

Senator STEVENSON. To Chile, Uruguay?

Mr. COOPER. It's not on the list.

Senator STEVENSON. Libya?

Mr. COOPER. I'm sorry?

Senator STEVENSON. Libya.

Mr. COOPER. No denials on human rights grounds.

Senator STEVENSON. Well, I have some others on my list, but it may be a result of delays, as opposed to denials.

Do you have a list of pending applications?

Mr. COOPER. Just so we're talking on the same wavelength. I mean there have been denials to other countries on foreign policy grounds other than human rights.

Senator STEVENSON. Applications not acted on?

Mr. COOPER. As far as I'm aware, not on human rights grounds.

Senator STEVENSON. Wouldn't you concede that denials of validated licenses, export licenses in these cases, is an imperfect means of measuring the economic price of a policy which does deny, or which does attempt to control exports for human rights and other noneconomic reasons?

By that I mean, clearly, exporters are reluctant to export from the country that threatens, or at least imposes a substantial risk of long delays and an expensive, detailed regulatory process, and at the end, some risk of embarrassment, as well as an uncompleted transaction.

Mr. COOPER. I would agree with that, yes.

Senator STEVENSON. So the cost, whatever it may be, is higher than might be indicated by the figures which you gave us.

Is there anyway of estimating what the actual cost would be?

Mr. COOPER. I do not know. The point you raised is, I think, a very important one, which is how many applications do we not even see because firms that could export competitively find the prospect of going through Government bureaucracy, as they see it, too formidable to cope with.

And I do not know any way of measuring the deterrent effect. Surely, there will be some. And I would agree with you that the complete measure of the impact of the use of export controls for any purposes is not registered by the actual denials of cases.

Our impression is that the amount of exports that are actually turned off is not great, but that can only be an impression. And certainly, the complaints that we have from the business community are numerous, but those are, of course, complaints by people who do go through the process, and in the end, for the most part, go through the process successfully.

We try to deal with those complaints as well as we can. We are taking a number of steps, as I mentioned in the statement, to try to expedite the process and to minimize the deterrent effect of which you speak.

Senator STEVENSON. We will be this week, and more likely, early next week, issuing a report which is the product of more than a year of work by this committee on the competitiveness of the United States in a highly competitive economic environment. And it will include recommendations for U.S. export strategy.

We welcome your reaction to that report, including its recommendations. You will, I think, find that in it, some of us conclude that the reputation of the United States is now as an unreliable supplier in this highly competitive environment.

It's a serious disability and one which should be corrected, and to some extent, can be, even with continued imposition of export controls for noneconomic reasons.

Some certainty is required, including the enunciation of a clear policy and the means with which to administer consistently that policy.

Which brings me to the Export Administration Act. Do you have any suggestions for changes in that act, which, as you know, expires in the near future?

Mr. COOPER. We will have some suggestions for changes in the act. Unfortunately, I'm not prepared today to address them in detail.

What we will try to do when we finish the review within the Administration, is to present a number of specific suggestions for changes in the act.

The kind of things that we have under consideration at the present time are: First, stress the importance of exports to the national interest—we have to make that clear in the act; and second, to indicate that the President should consider the economic and the trade consequences in any decisions on export licensing—in particular, the denial of licenses.

This should be an explicit factor in the consideration.

Third, in the area of national security, underline the need these days to control the export of technologies, at least as much as product goods, for national security reasons. And fourth, to provide that foreign availability should be taken into account in administering export controls for foreign policy purposes.

These are the kinds of things now which we have under review and we're playing around with particular language that might be introduced.

I should emphasize that the President has not signed off on any of this yet, but there is widespread agreement within the administration that the act might reflect these various considerations.

Senator STEVENSON. How should foreign availability be assessed? You mentioned that the department does it. I sense that more than one department does it. How should it be done? How does the State Department do it?

Mr. COOPER. Are you asking the role that it plays in our considerations, or are you asking how do we gather facts?

Senator STEVENSON. How do you gather facts?

Mr. COOPER. How do we gather facts on this question? In some cases, the facts are, I guess one would have to say, self-evident. That is, the product is one that's widely available. It's part of conventional knowledge. But it can be obtained from many sources. So without any investigation that's just taken for granted.

When one gets into the more sophisticated materials and where we are concerned, this tends to be truer in the national security area than in other areas of the use of export licensing. Then we may do an investigation; in one in which I personally happen to have become involved last year, we actually wrote for catalogues and talked to representatives of foreign firms to find out how comparable their product was to a product by the American firm. I don't mean to suggest that we do a major research job on each and every case; we don't. But where there are questions or problems, we do make considerable effort through our Embassies and contact with foreign firms to get that kind of information.

Senator STEVENSON. In these cases to which you are referring, do you mean the State Department?

Mr. COOPER. In this particular case it happened to be the State Department; in other instances it might be another—usually the Defense Department has the responsibility for assessing the national security dimension of a particular export control. And one of the things they might be concerned with is foreign availability.

In the case of national security controls of course we do have a system through the CoCom, as it's called, for vetting the sales multilaterally with countries that are likely to be the major competing suppliers.

Senator STEVENSON. How many departments assess the national security implications of the Dresser industries case?

Mr. COOPER. The primary responsibility for assessing the national security implications falls on the Defense Department and in the first instance the Defense Department made the judgment. That particular case, as you know, became rather controversial and so the State Department got into its own assessment, inevitably more limited, but particularly to the question of an availability of sup-

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plies, and the Department of Energy expressed a view also in that particular case.

So that there were a number of different views expressed and ironed out ultimately in interagency discussion of them.

Senator STEVENSON. Finally, before I conclude this line of questioning, what is the role of the National Security Council in cases of foreign policy control?

Mr. COOPER. Well, the principal responsibility for foreign policy evaluation on the use of export controls falls on the State Department and the State Department takes that responsibility.

But the ultimate responsibility is the President's and if a particular case is an especially striking one or an especially controversial one, partly as a matter of courtesy or bureaucratic wisdom, the State Department will refer it to the White House as an issue for its consideration. And under those circumstances, I'm sure that the President asks the National Security Council, which is his advisory staff, essentially, on national security matters, its advice on whether or not the particular item in question should be licensed.

In addition, the President as an example of that, did require last summer that the exportation of petroleum production equipment to the Soviet Union be subject to export licensing, and that had not been subject to licensing before, and then it was decided within the government that the more visible, larger items—for which we had a list of criteria—should be vetted for foreign policy purposes.

That was done both by the State Department and the National Security Council. In each case no foreign policy grounds were found for denying any of those licenses. There have been no licenses denied in that procedure.

The CHAIRMAN. Senator Lugar.

Senator LUGAR. Mr. Chairman, Secretary Cooper, I have two or three comments to make. Then I have some questions for you.

In your answers to Senator Proxmire—and you were discussing our economic policy domestically as well as abroad—you commented that the President's fiscal policy has to be seen as one of restraint because psychologically the American people believe that governmental spending is the principal concern of inflation. You suggested that might be right or wrong, and I think implied that in your judgment it was wrong, even coopting the chairman.

I doubt whether he agrees with you on that, as a matter of fact, but be that as it may, it seems to me that the President has got to be perceived with regard to his fiscal policy as doing something here more than a psychological feint on behalf of what he believes psychological people believe and believe wrongly.

In other words, one of the problems that some of us see, as a matter of fact, with the budget that the President has sent over and with the general way the Congress is handling it is that with all the lip service being paid to governmental spending being excessive, as a matter of fact, it may become more excessive by the time we have completed a year. The President's convictions here suffer when comments are made such as you have made that psychologically he's genuflecting in that general direction, but as a matter of fact tend to believe something else is responsible.

Mr. COOPER. May I interrupt?

Senator LUGAR. Yes; could you clarify?

Mr. COOPER. I'm being abused, if I may say so. [Laughter.]

I was not saying this was just a feint in the direction of psychology; I was addressing a particular question of Senator Proxmire: Whether exports would contribute to further inflation in the United States on the assumption that we're already operating under a condition of excess demand.

The restraint in the President's fiscal policy is real. It's not just a feint. I was giving a reason why, even in a period during which in my judgment we are not operating under excess demand in this country—that's not the principal source of inflation—a relatively tight fiscal policy may be good national economic policy for the reasons I have given you. There was no suggestion in what I said that it was artificial or a feint or simply genuflection. But the reason is different from restraining total aggregate demand because excessive aggregate demand is the source of inflation.

Senator LUGAR. I appreciate that, and I appreciate your clarification. Senator Proxmire in asking that question of course started by saying, as I recall, that exports are almost like motherhood or saluting the flag or what have you, that everybody is for this sort of thing. Then I maybe sort of baited you, but I'm surprised, I suppose, by what appears to be not a relaxed attitude in the testimony—certainly the words forceful and strong and what have you bob up from time to time—but I would have thought that the lack of our ability to export right now to close significantly the balance of payments is bordering on the disastrous.

You're suggesting, for example, that your forecasts show that current accounts will show a decline from the figures of last year, and certainly honest men and women can differ on this. I see almost no objective evidence whatsoever in the current world situation that would suggest that there's going to be a decline. As a matter of fact, we're suffering a hemorrhage due to energy imports presently in which the gap has become astonishingly large day by day.

What I'm hopeful, as the administration thinks through the points that you made about what changes should come about in the act, is that there is in fact a very vigorous game plan for how in the world we are going to make a significant difference. What I note in your testimony, rightly or wrongly—and I would ask you to comment on this—is simply sort of a tiptoeing the thought that generally we must perceive that exports are a good thing.

You've said that would be the case in the comments that you have made on the new bill. But then, having said that, we also take a look at the problems of national security, and human rights, and various other reasons why we might deny this, or reject even a balanced movement through the whole situation, without recognition that we have a general disaster.

And by that I mean simply that more and more dollars are in the hands of other people outside our control, that the pressures on the dollar are likely to increase rather than to decrease during the coming year, that our general influence at home and abroad is likely to decline in this situation, and that the basic incentives are simply not there to export. Now, one thing we might do as an alternative game plan is to go into protectionism and keep everybody else out. That's been suggested by others, not by myself. I

would think that as a matter of fact importing is a mighty good thing and we ought to have liberal trade policies.

And I'll support the MTN situation when it comes along.

But there is just no affirmative game plan that I can see—and maybe this bill is not the vehicle—but if not, another one had better come along. Now, what sort of thoughts do you have?

Mr. COOPER. Well, Senator, I don't know quite how to respond to you because you know as well as I do the nature of our economy. We're not an economy in which the government can decree something to happen simply because it would be desirable for it to happen. We are, rightly in my view, a free enterprise economy in which we rely primarily on the incentives of the marketplace in order to induce people to do what's in their own economic interest.

Operating within that framework limits the capacity of government to push any particular kind of transaction, including exports. The emphasis that I've tried to give to the question of exports is, first, to underline their importance; second, to indicate that there are a few ways in which the Government can actively help exporters—and in that respect I note in particular the role of the Export-Import Bank—and then to focus, because that's the main direct responsibility of the State Department, on some of the Government-imposed inhibitions on exports and indicate that we will do everything that we can to minimize those inhibitions; but that because we have other foreign policy objectives we cannot go the whole way and eliminate those inhibitions altogether.

The point comes where one encounters conflicting national objectives, the conflict between our desire to export and our national security concerns, about the export of military products for example, and so forth. So my statement was designed to indicate on the one hand the strong importance that we attach to exports, the fact that we'll do as much as we can to facilitate them; and on the other hand, at the end of the day there will be occasions—not many—but there will be occasions in which there's a conflict between our desire to export and our other foreign policy objectives. And in each of those cases we must weigh carefully the conflicting considerations.

Senator LUGAR. Let me approach it much more strongly. If you have an official responsibility, I suppose you have to move more guardedly in these affairs. But I think we should—we had better establish a set of incentives that are mighty powerful to get the exports moving. It's simply inadequate to say that generally people don't do it, and therefore it's rather too bad.

The other side of the coin is that if we are not going to have exports in an adequate amount, we're going to have to stop importing. We're going to have to bring a degree of balance. That would be a very heavy degree of government at that point. In addition to national security or the occasional human rights case, we'd simply say that we're having a hemorrhage of our dollars. They're out in people's hands, or we start backtracking the other way. We say people have the $600 billion out there somewhere, but they can't buy farmland, for instance. They can't buy businesses. They can't buy anything with them. In essence we try to restrict how in the world all these dollars will prey upon us because they are out there.

It seems to me the sense of national urgency that is required simply has not been a part of this presentation. And I would hope, by the time the administration comes back, that it certainly is, because it seems to me otherwise we are going to have a different sort of hearing, and that would be: how in the world do we stop the dollar from a further disastrous decline? How many more billions in reserves are we going to put out into foreign banks to shore it up? And in essence, how, psychologically, are we going to try to trick the world out of what has become obvious when you see all the Eurodollars and other kinds that are out there?

That's a serious problem. And I think that's what the export act needs to be all about.

Mr. COOPER. If I could say one point about incentives because I think it's worth making: the decline of the dollar is certainly not something on many grounds to be welcomed, and as I mentioned in my statement, there are some foreign policy costs to that. There are other costs to that as well, the contribution to inflation, and so forth. Nonetheless, one of the benefits of the decline is that it has created, in our assessment, very strong financial incentives to export that did not exist, say, 2 years ago.

Therefore, if the exporting climate can be made appropriate in other respects, the financial rewards for exporting from the United States are certainly there. One can see that, among other places, in the desire of foreigners to invest in the United States now. They now see that this is a very attractive place to invest and sell from.

And I think what we want to do is establish the rest of the regime, if I can call it that, that encourages firms to take advantage of those financial incentives that now exist.

Senator LUGAR. Mr. Chairman, I don't want to prolong this, but I think the point that you've just made is an important one and a very interesting one. Indeed, there are incentives for foreigners to buy firms or make investments in the United States.

Mr. COOPER. And buy American goods.

Senator LUGAR. Occasionally. But you know, I suppose even now, buy our goods, buy our buildings, almost everything else in sight, as a matter of fact.

Clearly, with those claims out there, they will be exercised in some form. That does soak up some of the dollars that are out there.

What I would hope—this is a footnote to this because policies were adopted by the Congress and fostered by the administration last year in agricultural exports. And the thing was resisted earlier on by the State Department. There was some cooperation later on.

What we still face in the agricultural export realm, though, as the oversight of the Ag Committee would indicate, is a very halting implementation at the embassy level, the agricultural attachés' almost miniscule progress in the most obvious realms in which we had something to sell and in which we're trying to move on.

There are still real problems of protocol, of how the agricultural attachés will fit in with the rest of the staff.

And we've just simply got to get through that type of thing.

Now the State Department, without any further legislation, by implementing seriously the Agricultural Export Act, can move a lot of agricultural goods. That would help a good number of us

from many, many States, quite apart from helping the balance of payments.

So I implore you to carry that word back. I know you may have done your part, and so have many. But it's just not getting done. It needs to be done with urgency. The law is on the books and the guidelines need to be written into it.

I thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Lugar, for a most useful and refreshing and vigorous questioning.

Mr. Secretary, to follow up just a little bit for a minute or two on what Senator Lugar was talking about, as I understand it, the deficit in our trade balance is expected to be reduced by about $10 billion, from $29 to $19, or something like that.

Mr. COOPER. Something like that.

The CHAIRMAN. So it's about the same order of magnitude as the reduction in our domestic budget is being reduced by about that much, I think.

It's expected to be. It may not be.

What in terms of incentives—I'm not asking you to give me a complete answer down the list, but what kinds of incentives can we offer?

I'm very skeptical about tax incentives because they always tend to be regressive. They tend to be inefficient.

You can make a strong case that disc has been extraordinarily inefficient and ineffective in achieving its end.

And yet, to the extent that it does result in benefits, the benefits go without any basis on ability to pay.

So it's not a progressive kind of a tax, and almost all of the tax incentives are the same kind of nature.

Can you suggest any area of encouraging exporting that would be effective?

It's easy to ridicule, but the "E" award program, I think is a good program. It's a program I've taken a little part in in my State and several other States do use this kind of incentive.

Is there any other kind of incentive you can think of that would do the job that's not regressive?

Mr. COOPER. I am not here today to recommend tax incentives for export.

The CHAIRMAN. I was just bringing that up because that's the first thing that came to my mind. Perhaps there are other incentives.

Mr. COOPER. As I have just said, I think there are at today's configuration of prices and exchange rates, ample financial incentives for firms to export.

What we do find is that given the nature of modern trade, one of the things that inhibits American firms relative to major competitors is the availability of export credit on the right maturities. For reasons that are not entirely clear to me, the private market has not moved in to take up the maturities on export credits of the type that now typically run for many kinds of exports. That is in the vicinity of 8, 9, 10, 12 years, even 15 years, in some cases. The problem is compounded at the moment by the fact that export credit agencies try to hold their interest rates with some continuity over time and market interest rates have gone up. So that in

addition to the question of maturity, export credits now carry generally lower rates than market rates.

That's not true in all countries, but it's true in a number of countries. And a combination of the two together means that although our private financial market is unrivaled, unexcelled in its capacity to give credits and so forth, it's not really enough to assure the export orders. The current limits on Export-Import Bank lending do operate as an impediment to American exports.

Senator Lugar, I would agree entirely that, though the record varies from country to country, our embassies in general could be more helpful.

The CHAIRMAN. It's particularly true with the small businesses, I think. Small businesses are often extraordinarily efficient and innovative. And I found a number of small businesses in my State, and I'm sure it's true in other States, too, that have been very successful in exports.

On the other hand, they just happened into it. They did it through some kind of foreign travel or something like that on the part of their owner. They find out about it.

It would seem to me that this is something which could be promoted much more vigorously because our economy is very efficient. We have a lot of extraordinarily able firms that could take advantage of exporting to their benefit, and certainly, to the great benefit of the country if they were encouraged to do so in a more comprehensive, vigorous way.

I'd like to read to you two proposals on trade and foreign policy from an article by an expert on the subject, and get your reaction.

First, and I'd like your reaction to each, in turn, the first observation is this: "It is essential that there be more effective centralized control over East-West economic relations within the executive branch of Government.

This is necessary so that the various decisions that have to be made concerning trade, technological transfer, scientific contacts, credits, and grain exports, will be brought together in a single point and effectively related to the foreign policy purposes which the United States is pursuing at any given time.

"This can only be done adequately through the framework of the National Security Council."

Do you agree?

Mr. COOPER. Are you going to give me a hint as to who the author is?

[Laughter.]

The CHAIRMAN. Well, he's a Harvard man. And as a Yalie, that might be one signal.

Sam Huntington.

Mr. COOPER. Yes, I thought I recognized the drift. Do I agree? Yes and no. I think if the question is do things need to be done in this regard that are not now being done? I would not agree as far as non-agricultural trade with the Soviet Union is concerned, including technology transfer. There we have a mechanism which reviews and licenses. It's an inter-agency mechanism, but nonetheless, it's a single place that vets all of the proposals for export licensing.

Many of those licenses are handled on a routine, that is, on a bureaucratic basis. But if there seem to be problems with them at all, they get bucked up to the political level.

Now it is true that that group does not handle things like scientific exchanges and that agricultural trade is still handled in a somewhat different way. But it is also true that any major move on any of those fronts is brought to the political level by the State Department. We have a very large office dealing with Soviet affairs. And that office tries, and on the whole, I think it's successful—at least it tries to be successful—in pulling together the strands of all of our transactions with the Soviet Union.

And if there seems to be some kind of misalignment, or there's going to be a foreign policy embarrassment because of what another group is doing, or something like that, that body pulls all the strands together, and then can buck it upstairs, as it were, or buck it over to the White House for some kind of political vetting.

So I would have thought that it is not necessary to centralize all of these things in the NSC.

Furthermore, I would argue that it's undesirable to centralize all of these activities in the NSC. And indeed, I would have thought I could persuade Huntington to that view if he knew the human resources that would be required to do it. It would make the NSC all out of proportion to what I think is its appropriate role; namely, foreign policy advisor, national security advisor, to the President.

The CHAIRMAN. The State Department is in charge of foreign policy. So it would seem to me that that would be your function.

Mr. COOPER. Here, we're really talking about coordination in the first instance; and, only if it becomes a foreign policy question, about foreign policy.

And I think my impression is that the Office of Soviet Affairs in the State Department does pull together the various strands which you raised, and is aware of what's happening on different fronts.

And as I say, if a political issue is raised by some configuration of those things, it can then raise it first within the State Department and, if necessary, to the White House.

The CHAIRMAN. The second statement is the following: It is necessary to review and revise existing lists of embargoed goods and technologies so as to require on foreign policy grounds validated licenses for those items of machinery and technology for which the Soviets have a critical need and for which they are largely dependent upon U.S. supply.

"All such items should be controlled, regardless of the extent to which they are likely to be used for military purposes.

"In other words, we should put ourselves in the position in which the technological door can be more easily closed or swung nearer to being closed, if that seems desirable or necessary."

Mr. COOPER. I would strongly disagree with the second part of the statement. In regard to the first part of the statement, the current list is under periodic review to see whether it's necessary to keep all of the things on it that are on it. There is such a review going on now. That's the CoCom list.

If I understand the quote correctly, however, Huntington is suggesting that we should try to identify every product, regardless of its possible military use, every product in which the Soviet Union

might depend on the United States as a source of supply, as a unique or distinctive source of supply, and put that under some kind of political control.

It seems to me, in the first place, that kind of action would have at least marginally the kind of deterrent effect to our exports of which Senator Stevenson spoke earlier. Other things being equal, that would be undesirable. If a business firm selling washers, ordinary washers, felt that it could be clamped down on, it would be unnecessarily deterred from entering that market. And it would seem to me that we don't want to put that kind of inhibition or uncertainty on American business if there aren't strong reasons for doing so.

Second, and this may sound partially contradictory to what I've just said, if in the event it is decided for compelling foreign policy reasons that products X, Y, and Z should be denied to the Soviet Union, the President has that authority today. He doesn't need the new machinery or new apparatus in order to accomplish that result. He can, on foreign policy grounds, require that products be licensed, and then deny the license.

But I would prefer to keep that possibility as far in the background as possible so as not to deter the establishment of ordinary business relations with the Soviet Union.

Our principal concern should be a national security one. I think we have to look very carefully about how that's defined, and so on. Where we think there is a national security angle, we do, in my judgment, have to be cautious about sales to the Soviet Union. But that falls far short of what the quote you read suggests.

The CHAIRMAN. Senator Stevenson?

Senator STEVENSON. Thank you, Mr. Chairman.

Mr. Secretary, you indicated in your statement that the Soviet Union and the PRC should be approached in a balanced manner. According to news reports, the recent negotiations with the PRC conducted by the Treasury Secretary have been successful.

The principal obstacle to a trade agreement has apparently been negotiated satisfactorily. And with respect to the emigration policies of that country, it was reported that the Vice Premier, when he was here, asked the President how many millions do you want, which would seem to indicate that the emigration requirements of the Trade Act might easily be complied with by the PRC, but not the U.S.S.R.

So having expressed your support for a balanced manner, and also indicated that we shouldn't be less stringent with one than the other, can I infer that the administration will support amendments to the Trade Act which would permit a balanced or even-handed approach with respect to Ex-Im Bank credit eligibility and MFN for both these countries?

Mr. COOPER. Let me back away from your question at least half a step and say that in terms of the policy thrust, the answer is "Yes", we would want to find some way to assure MFN treatment, both to China and to the Soviet Union. And also, to deal on comparable terms between them as far as Export-Import Bank credits are concerned.

As to the exact modalities, that is to say, the nature of amendment to legislation or just how best to do that, that's a question

that still is under consideration and I wouldn't want to endorse at this time any particular method.

I would note that, in fact, emigration from the Soviet Union has increased quite dramatically in the last year, and we feel that one way or another, in the spirit of the current legislation and in terms of its objectives, that now, or sometime soon, is the time to move for MFN treatment for both the Soviet Union and China.

But the exact modalities and the exact timing are still under discussion.

Senator STEVENSON. As you know, the trade agreement requires—the Trade Act requires formal assurances and they appear to be available in the case of the PRC, but not the USSR.

We received some indications yesterday that the Administration, or some parts of it, were considering the waiver move. That might be sustained in the case of the PRC, but it's quite probable that if tried in the case of the USSR, it would be successfully challenged in the courts because of the absence of assurances.

The model that works in the case of Hungary might not work in the case of the U.S.S.R.

And in addition, the waiver route requires annual waivers which insinuate uncertainties into the economic relationships to the disadvantage of both sides.

Notwithstanding all that, and including especially the implications of an unevenhanded approach—I won't call it the China card. It's China's American card. Would that approach be acceptable to the State Department, and isn't it being actively considered?

Mr. COOPER. On the question of modalities, I understand exactly what you're saying, and there's no doubt that those risks exist: of a court challenge on the one hand, and on the other hand with the annual waiver. This would also apply to China. It's an annual thing, and therefore it introduces an element of uncertainty into it which, other things being equal, is not desirable.

All I can say is that we are aware of those disadvantages. At this stage we are still looking at a variety of options for accomplishing the desired objectives. Those particular options have not been ruled out. But I wouldn't want to suggest that either of those options is the leading option. A decision hasn't been made on how best to approach this issue.

Senator STEVENSON. Will it be made soon?

Mr. COOPER. I would hope so.

Senator STEVENSON. What do your current account projections assume about the rate of inflation in the United States?

Mr. COOPER. The whole package in the economic report, projections and so forth, assume a rate of inflation year over year, if I recall it correctly, of 7.5 percent.

Senator STEVENSON. Do you think that's a realistic projection still?

Mr. COOPER. I think it's still within the realm of possibility. [Laughter.]

Senator STEVENSON. And what do your current account projections assume about the relative growth rates in the industrialized countries, the industrialized nations?

Mr. COOPER. Again, the forecast for the United States, fourth quarter to fourth quarter, if I recall it correctly, is 2.2 percent. Our

assumption is that the rest of OECD will grow 4 percent or above, between 4 and 4.5 percent. Japan will grow substantially higher than that. The German economy looks remarkably strong compared with the recent past. Some of the other European economies have some troubles, but taking it all in all, the rest of the industrialized world will grow roughly around twice as rapidly as the United States.

Senator STEVENSON. And the recent events in Iran give you no reason to reassess those projections with respect to growth rates?

Mr. COOPER. The recent events in Iran are very troubling, and the growth rates I have mentioned do take into account the OPEC price decision of last December. But they do not take into account or allow for the possibility of a prolonged period of no oil exports from Iran. If that were to be the case, then there no doubt would have to be a downward revision in those growth rates.

As you may have read, the International Energy Agency just last week did decide on a common demand restraint target for oil, the equivalent of roughly about 5 percent of IEA consumption. And our current reckoning is that if such demand restraint succeeds and, given the increase in oil production by OPEC countries other than Iran, we, taking the two things together, have fully compensated for the roughly 5 million barrels shortfall from Iran.

Now, whether the demand restraint program in the IEA countries can be undertaken without any effect on growth rates remains to be seen. All I can say there is that all of the participating countries are very conscious of that problem and will try to find ways that inhibit growth as little as possible, in terms of their demand restraint.

So I think all one can say at this stage is that there is a huge cloud of uncertainty surrounding the Iranian situation. It may be that our original projections will hold up. The situation is still fluid. But on the other hand, we could find ourselves, later in the year, in some trouble, because of a shortage of oil.

Senator STEVENSON. There's a growing cloud of uncertainty around the world. Didn't that agreement produce a disproportionately large commitment on the part of the United States to absorb—what would you call it?—demand restraint, energy conservation?

Mr. COOPER. No, I wouldn't have thought so. I mean, it's the same percentage applied to each of the IEA member countries' consumption of oil.

I should back up and say this was not a literal fixed commitment. It's the same percentage which will be used as guidance by each of the member countries on their consumption of oil.

Now, it is true that the emphasis was on consumption of oil rather than imports of oil, and a country like Japan, for example, imports 100 percent, essentially 100 percent of its oil; whereas a country like the United States imports roughly only half its oil. A country like Norway, on the other hand, exports about four times as much oil as it consumes. So countries do find themselves in different circumstances as far as production is concerned.

But what they all agreed to do—Norway, the United States, Japan—was to take the same base, consumption, which it seems to

me is the relevant base in the circumstances, and agree to use the same percentage reduction or a guideline.

So I would have thought it's a very fair and a desirable agreement.

Senator STEVENSON. Thank you.

The CHAIRMAN. Mr. Secretary, I wish we could do something about that phrase "most favored nation." I think—I understand it's been around a couple hundred years.

Mr. COOPER. It's a historical relic.

The CHAIRMAN. It's time to put it to bed and bury it somewhere, because it does raise people's hackles when they hear "most favored nation" treatment for Russia and China. Under the circumstances, they say, you're out of your mind. Here we're arming, you know, and all this kind of thing, to oppose the Soviet Union in the event of a terrible military catastrophy, they're our principal adversary and so forth, and we're giving them favored nation treatment.

Maybe we could change it to "competitive trade nation" or "peaceful trade nation," "cooperative trade nation," something. "Most favored" sounds a little much.

These phrases can be very important, I think, in getting public acceptance.

Mr. COOPER. I understand exactly what you mean. You notice that sometimes we simply use "MFN."

The CHAIRMAN. It's much better.

Mr. COOPER. It's much clearer. It doesn't carry the kind of emotive load that the written-out phrase "most favored nation" does. It means putting them on a par as regards to tariffs, with regard to most other countries.

The CHAIRMAN. Yesterday I asked Secretary Kreps whether the administration made efforts to get other countries to adopt export controls and restrictions similar to those this country has adopted for foreign policy and moral reasons; that is, that we try to get them to do the same kind of thing. After all, if they don't do it, obviously, it's not an effective policy.

She was not aware of any such efforts. And I'd like for you to tell me, with respect to each of the following, what efforts, if any, the State Department has made to get other countries to adopt similar policies and what the results have been:

First, control on exports to Uganda.

Mr. COOPER. As far as I'm aware, we have not made any efforts to get other countries to control exports to Uganda. The British yesterday, I believe, have acted on their own to restrain certain sales to Uganda. But this is a unilateral act.

The CHAIRMAN. Why didn't we make an effort to get other countries to do the same, if we really mean business with respect to Uganda?

Mr. COOPER. I wonder if, rather than talking about Uganda, I can talk about this general problem of getting other countries to participate, because the answer to your question does vary very much, as you might guess, with the particular area of concern. But let me make a general statement about it.

Most countries do not share the U.S. view that control of exports is a useful instrument of policy. And on the occasions—and I've

personally been involved in some of them—in which we have suggested that X or Y or Z might be done together, we get, in effect, guffaws, diplomatic guffaws, but they are guffaws. I mean, it's just not within their realm of experience, if I could put it that way, to use restraints on exports in the various ways in which we use restraints on exports.

The CHAIRMAN. I could see where they would guffaw loudly if they don't cooperate. On the other hand, if there were cooperation and we were successful in preventing Uganda or other countries suppressing human rights from getting exports, it would be effective.

Mr. COOPER. I'm talking here almost about the philosophical mind set. The assumption that exists in most other countries is that exports are not an instrument of policy, to be used for A, B, C or D.

The CHAIRMAN. And in other countries exports are far more important. They live by them.

Mr. COOPER. They live by their exports in a way in which we don't. And part of their attitude toward the United States is—although this is changing, for reasons which we have spoken about earlier—is that, look, the United States can perhaps afford that luxury; we can't. We are vitally dependent for all of our imported materials on foreign sources of supply, highly dependent for our production and employment on sales abroad, and therefore we cannot do it.

Now, I hasten to add that there are important exceptions to that. Obviously, in wartime they will move to control.

We have managed, in the area of national security, to persuade the other leading potential suppliers, weapons suppliers, that it is in our collective interests to keep high-technology materials and military materials from serious potential adversaries, and we have quite an effective, cooperative system.

You mentioned human rights. We have found that in other areas of implementation, we have gotten cooperation in the area of human rights. That is, we have found support in representations, we have found support in some votes on international loans, for policies on human rights. And there's no question that, for example, a number of Western European governments fully support our position on human rights.

It's just that they stop short—stop well short, I would say—of considering control of exports as an implementation for this.

Nonetheless, in the context of U.N. action, they have restrained exports of military goods to South Africa. So their response varies from issue to issue.

We have a major international exercise in the area of anti-bribery activity. This is an area where we in the United States have our own legislation.

The CHAIRMAN. Other countries do follow economic restriction policies on their exports: the OPEC embargo, the Arab boycott.

Mr. COOPER. Pardon?

The CHAIRMAN. The OPEC embargo is certainly an example of an economic restriction on exports.

Mr. COOPER. I'm sorry, I thought you were talking about the countries that are major competitors of the United States, which

means mainly Western Europe and Japan. Those are the countries I was addressing.

The CHAIRMAN. I was.

Mr. COOPER. But the clarification is useful.

The CHAIRMAN. But I was saying that there are other countries that have used export policies as a means of achieving noneconomic goals. The Arab boycott is another.

Let me just run down this list for the record. I think I know what your answer is, but I want to be sure. I don't want to take it for granted.

You say, as far as controls on exports to Uganda is concerned, we have not asked other countries to work with us on it?

Controls on exports which could be used by the South African military or police. Did we attempt to get cooperation from other countries in that area?

Mr. COOPER. Yes, although their practices differ. I mean, they do participate in the embargo of sales of military equipment to South Africa. They do not participate in a general prohibition on sales to the military and police, if, for example, they are civilian goods.

The CHAIRMAN. So they did cooperate to that extent, as far as the military and police are concerned.

Now, what countries?

Mr. COOPER. In principle, in that case, all of the members of the UN—there's actually a UN resolution on that point.

The CHAIRMAN. Control of export of crime control and detection equipment to all non-NATO destinations.

Mr. COOPER. There the practices vary from country to country and good to good. I mean, as you get closer to the strictly military area, the stricter the enforcement is.

The CHAIRMAN. For the record, can you spell that out in detail country by country?

Mr. COOPER. Can we provide country by country detail?

Mr. ROOT. Mr. Chairman, by crime control and detection equipment, you mean that particular list of items which was added to the control list last year——

The CHAIRMAN. That's correct.

Mr. ROOT. Then by and large, other countries do not exercise similar controls, because that does not include the military items that Secretary Cooper was referring to.

The CHAIRMAN. All right. The fourth item is control on exports of oil and gas exploration and production equipment and technology to the Soviet Union.

Mr. COOPER. There is no restraint that I am aware of by other countries, and we have not approached other countries to oppose such restraint.

Incidentally, on that, as you know, we have not exercised any restraint ourselves. We put them under license, but we have granted all of the licenses that have been requested.

The CHAIRMAN. How about antiboycott statutes? Have we approached other countries to agree with us in trying to prevent the Arab boycott of Israel?

Mr. COOPER. We have talked with other countries about the whole pressure of the Arab boycott. We have explained our policies

with respect to the boycott and we have suggested that it would be helpful if other countries would also address this question.

We've also addressed the secondary boycott.

The CHAIRMAN. Have we had any success?

Mr. COOPER. As far as I know, we have not had any success in that area.

The CHAIRMAN. How about antibribery legislation?

Mr. COOPER. In the antibribery area, we have what has become an elaborate multilateral exercise to agree on a UN code concerned with corrupt practices. And that has met periodically now over the last 18 to 24 months. Its most recent meeting was in January of this year, and we hope at the resumption of the next session, which will be in late spring or early summer, that we can get an agreement on a negotiating conference for an international code on corrupt practices. So that we have met, at least, with a sympathetic response on that one.

The CHAIRMAN. Senator Stevenson?

Senator STEVENSON. One more question, Mr. Chairman.

Why did the Department of State place exports of oil equipment to the Soviet Union through validated license procedures, but not for the PRC, Libya, Iraq, or any of the others?

Mr. COOPER. I guess the answer to that question is to deny the premise. The President decided last summer, at a moment of particular tension with the Soviet Union, that, as a signal to the Soviet Union of our displeasure at various things that they were doing, we would impose licensing requirements on exports of petroleum production equipment. It was done explicitly for foreign policy reasons. It was done on the decision of the President. And as I said a moment ago, no licenses have actually been denied under that.

Senator STEVENSON. But the same reasons didn't obtain in any other cases?

Mr. COOPER. That is correct. I daresay if we had been trading with Cuba at that time, we would have done the same thing vis-a-vis Cuba. But since we have a more or less total embargo on Cuba, the issue didn't arise.

Senator STEVENSON. Is the administration assessing the attitude of the Ayatollah Khomeini toward human rights?

Mr. COOPER. The general answer to that is "yes." I have not heard it linked to date with the possibility of controls on exports to Iran.

Senator STEVENSON. The law of the Koran is a harsh one. Due process goes out the window. Women are deprived of basic human rights.

Well——

Mr. COOPER. Islam, like other of the major religions, has found ways to adjust its original dicta over time to modern circumstances, and we're all very hopeful that the same will be true with Iran.

Senator STEVENSON. We're very hopeful that we won't have to cut off exports to Iran.

Well, I only make that point to suggest that morality is in the eyes of the beholder, and the applications of these controls are

highly selective and, in my judgment, of questionable morality and effect.

One more question on oil. As you know, the Export Administration Act contains provisions which inhibit our country's ability to export oil, and because of past mistakes, oil is now in surplus on the west coast. It makes a great deal of economic sense to export it to Japan, perhaps with swaps of reduced imports.

Does the administration have any recommendations to offer us with respect to those provisions of the act?

Mr. COOPER. Not at the moment. This is an issue that is under careful review. We share the same concerns or observations that you've just made, but no decision has been made by the administration on what to do about this point. I don't know whether it's cricket to venture a personal opinion as distinguished from an administration view on this, but my own personal view, I emphasize it is a personal view, is that we should relax the restrictions on the export of oil; under current circumstances the production of oil in Alaska is being restrained by a very low level of profitability relative to the investment costs.

Technically and at world prices economically it would make sense to increase the production of Alaskan oil. I myself am very much concerned about the world oil balance and that concern has been reinforced. It existed before, but it's been reinforced by the events in Iran. I think that anything that we can do to bring the world demand and supply for oil in better balance and to reduce our dependence on Middle Eastern oil would be a desirable thing. There is one worldwide oil market, and I would have thought that the fact that, in sharp contrast to 20 years ago, the United States now depends for half of its oil on imports indicates that we are fully linked in with the rest of the world, and therefore there's something highly artificial, particularly for a country that spans as many miles as the United States spans, from Maine to Hawaii and the outer Aleutians, to say that we cannot export any of our oil even though we are a huge importer. Since it would add to total oil supply, I would hope that we could in fact relax that restraint. But I emphasize again that's a personal view. There are differences of view within the administration on this. And it's under review.

Senator STEVENSON. Thank you. I hope your view prevails. Thank you, Mr. Chairman.

The CHAIRMAN. Secretary Cooper, the committee heard testimony yesterday on the question of evenhandedness in controlling exports to China and the Soviet Union. I'm concerned that we may begin to authorize the export of strategic commodities to China which we would not permit to go to Russia. Such exports could be diverted to the Soviet Union and certainly would be if Chinese policy reversed course, say, in a dispute over Taiwan, patching up relations with the Soviet Union.

Worst of all, we may fall into the trap of letting our allies sell strategic goods to China but not our own exporters. We would get the worst of both situations. China would be importing strategic goods and technology that could be used against us, and we wouldn't even make a dollar on the sales. Do I have your assurance that this administration will oppose the sale of goods or technology

to China or Russia by any of our allies, where we would not allow similar exports by our own citizens?

Mr. COOPER. No, you cannot have my assurance on that point. [Laughter.]

Let me try to indicate what the state of the play is on that. As far as the United States is concerned, we will try to maintain a balance in our relations with China and the Soviet Union, and what that means in practice at the moment is that we will not sell military equipment to either country, either China or the Soviet Union.

As far as nonmilitary items of possible strategic value are concerned, we have a process of vetting any particular license application on a case-by-case basis and through CoCom——

The CHAIRMAN. Well, answer the principal problem we have here: What good does it do for us to refuse to sell anything, including military equipment to these countries if we have no policy of trying to persuade our allies not to follow suit? Isn't it a useless policy? Doesn't it simply do, as I say, not in any way reduce the military power of these two countries, but at the same time deprive our own exporters of markets and of profits?

Mr. COOPER. Your question—I was approaching your question, I thought, as you phrased it, which started at one point, but you've leaped to the second part of your question, which is: Do we unnecessarily deprive American businessmen of opportunities if we don't try to restrain our allies entirely? And the answer to that, I suppose, hinges on the word "unnecessarily."

I mean, surely, to take a case that has been much in the newspapers or was much in the newspapers a few months ago, the prospect of the sale of Harrier aircraft to China by Britain—that may not materialize, incidentally—but at least the British are going ahead. We have said flatly that we will not sell aircraft——

The CHAIRMAN. Let me show you this. Japanese seek to sell China microwave units, Washington Post, November 26, 1978. United States says France can sell the Chinese an Atomic powerplant. Then there's a computer sale to China in the spring of 1978. In each of these cases it would seem that we're following the policy that I described of refusing to permit our own exporters to sell in these markets, but not doing anything to dissuade other countries from doing exactly that.

Mr. COOPER. I may have misunderstood the thrust of your question. The examples you give happen not to involve military weapons. And under those circumstances, it is not true that we are depriving our own exporters of sales opportunities that we permit to foreign producers; under current circumstances, any firm that wants to sell, let's say, a computer to China, whether it be a U. S. firm or a Japanese firm or a German firm, can come forward, ask for an export license. It will be vetted in CoCom, and it will be vetted under the standard procedures, and the sale is either permitted or denied, depending on the judgment——

The CHAIRMAN. Let me read you what the problem is here: It says Westinghouse is the firm that could make the sale. It says Westinghouse itself cannot sell China a nuclear powerplant, because the Chinese would not agree to sale conditions required by the Nuclear Nonproliferation Act passed by Congress last year.

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That law requires that the United States be allowed to inspect all nuclear facilities operated by a country asking for an export license to make sure plutonium is not diverted from spent fuel.

So there's a case where Westinghouse can't make the sale, but the French can.

Mr. COOPER. But wait a minute. Westinghouse can't make the sale on certain assumptions about Chinese behavior, which assumptions, as far as I'm aware, have not been tested. And when the French began to talk with the Chinese about the sale of nuclear powerplants, we in turn talked to the French about getting, one way or another, assurances from the Chinese in the area of nonproliferation, which is a general concern of ours.

The CHAIRMAN. Have we gotten those assurances from the Chinese?

Mr. COOPER. We're not directly involved in the transaction, of course, and I'm not sure what the state of the play is.

Mr. ROOT. The French have obtained assurances from the Chinese. I cannot say whether they are the type of assurances that would be required under U. S. legislation.

The CHAIRMAN. Well, then, here's another New York Times, November 8, 1978: U.S. Neutral on West Europe's Arm Sales to Peking; and NATO Group Mulls Refusing Arms Sales of Strategic Technology to Communists.

Again, it seems we're following a policy of setting up situations in which our allies can sell but we won't sell for maybe very good reasons. And maybe we'll fail. But it would seem to me if we are convinced that it's a mistake to sell military or other high technology goods to these countries, that we should do our best to persuade our allies to do it too.

Mr. COOPER. That's what I started out to address. The latest example you give now is one that involves weaponry. In the area of weaponry, it is true that we have said on the one hand, both the President and the Secretary of State have said we will not sell weapons to Communist China, but on the other hand, it is a matter for each other individual supplier to decide whether it will sell defensive weapons systems to China. As far as the nuclear reactor is concerned of course, if we have particular statutory requirements, they are obligatory for the American administration. They're not obligatory for other governments. We do have our policy requirements, which we hope are consistent with the statutory requirements, and we do try to promulgate our policies where we can.

The CHAIRMAN. Let me just read to you two quick paragraphs:

> Current discussions within CoCom also involve the sale of nonmilitary sophisticated equipment to China and the Soviet Union, such as large computers, nuclear powerplants, and offshore drilling and coal mining equipment.
>
> Hitachi, Limited of Japan is said to have received CoCom approval to ship a $3 million large scale computer to China, while Nippon Electric announced the conclusion of a $16 million order for computer systems and television related facilities to the Soviet Union for the Moscow Olympics in 1980.
>
> Nippon Steel Co. is also waiting for approval for the sale of a computer to China for use in a steel plant.

All this seems to indicate that Japan is taking advantage of the situation, and as I say, maybe there's nothing we can do about it. But you've indicated to me that we don't try.

Mr. COOPER. No, no, not on these kinds of examples. Mr. Root would like to comment on the particular cases.

Mr. ROOT. There have been several computer sales to the People's Republic of China by the United States and by Japan. There are several others pending. In every single case the same standards have been applied. There has been no discrimination against U. S. exporters in the sale of computers.

Mr. COOPER. In computers, you understand, it is not a yes or a no matter whether we sell to either the Soviet Union or China. The end use of the computer plays a decisive role in consideration about whether to go ahead with the sale and what assurances we get as regards the end use of the computer. Although it may seem on the surface inconsistent, we have found ourselves in some instances approving a computer for sale to one buyer in the Soviet Union and denying the sale of the same kind of computer to another buyer in the Soviet Union.

Similarly, in principle, that could arise with China. The particular use of the computer and what assurances we can get on the end use of it play an important role in the licensing process.

The CHAIRMAN. Then, to wrap this up, you're saying that the assumptions in my question are wrong, that you do follow a policy of, in the first place, selling high technology equipment to the Soviet Union and to China, one, in many cases; and No. 2, in the event we do not, we do try to persuade other free countries to follow the policies we follow; is that correct?

Mr. COOPER. That is correct, with the exception of defense weapons systems vis-a-vis China.

The CHAIRMAN. Now, do you plan to offer any amendment, plan to ask for any action on the part of Congress with respect to the Jackson-Vanik law with respect to Soviet emigration being tied to trade?

Mr. COOPER. I can't answer that at this time. That's an issue which is under careful review within the administration. With the opening up of diplomatic and trade relations with China and our desire to improve our trade relations with the Soviet Union, that is obviously an important issue which we have to face and we want to face this year. But the particular modalities about how to bring it about have not been decided on, so I cannot answer your question with a yes or no in terms of a particular amendment to Jackson-Vanik.

The CHAIRMAN. When do you think you might be able to reach a conclusion on that?

Mr. COOPER. We are fretting about it actively is all I can say. I would hope within a few months we would have a firm decision on that.

The CHAIRMAN. How about the antibribery legislation. The antibribery legislation, do you have any amendments or any suggestions in mind or are you actively considering any changes in that?

Mr. ROOT. Mr. Chairman, we have no proposal at the present time, nor do we anticipate one. However, as Secretary Kreps mentioned yesterday, we do have in mind attempting to develop regulations which would better define what constitutes a bribe, and this may eventually lead to a legislative proposal.

The CHAIRMAN. That's from the Attorney General?

Mr. ROOT. The Attorney General would be involved in this issue, yes.

The CHAIRMAN. How about the Arab boycott legislation? We have communication from the Jewish groups and also from the Business Roundtable saying that they would simply ask for its extension with no change. Is that the position the State Department takes?

Mr. COOPER. Yes. As I said in my statement, we propose no change in that part of the Export Administration Act.

The CHAIRMAN. Now, last October Senator Case testified before this committee because he was concerned about commercial exports which could have political and military implications in certain regions of the world, especially the Middle East. He suggested that the Export Administration Act was not adequate in this area and that we should consider revisions to give Congress review power, like the Nelson amendment provides for arms exports. He referred particularly to the sale of L-100's to Syria; a Jeep factory in Egypt is right next to an antitank missile factory where it was obvious that they could use the two factories to put the missiles on the Jeeps. Do you have any views on the prospect of permitting Congress to have a review of such sales?

Mr. COOPER. I think that there is in the existing framework enough flexibility to deal with those situations as they arise. As I mentioned in my statement, one of the foreign policy criteria that we look at in assessing license applications is regional stability and if in our judgment the regional stabiilty is threatened by a particular sale, it can be denied.

I would not propose any change in the legislation in that regard, and in particular it seems to me that a congressional review of particular license applications would greatly increase the kind of uncertainty that businessmen face and that we spoke about earlier today.

The CHAIRMAN. One final question: What would your view be of an amendment to the Export Administration Act to stop exports to any country whose government engages in the consistent pattern of gross violations of human rights, such as the Government of Uganda?

Mr. COOPER. I guess the question would be: Who and how would it be determined whether a country's government engaged in gross violation of human rights, or is that open for discussion?

I think the short answer to that question would have to be "No". I would not support that kind of legislation.

The CHAIRMAN. Why not?

Mr. COOPER. I think it goes back to what I said earlier. I think that although we have used controls on exports in a very limited way in order to demonstrate our concern with human rights violations in a country, it seems to me that that's not the most effective way of doing so. We have other instruments of policy whereby we can make known our human rights concerns. The imposition of an embargo on exports does impose or might impose costs on the American economy and the American public that were not commensurate with the actual benefits that flow in a particular case.

And I think that a more flexible regime which allows an articulation of policy issues, of which export license denials are one, but

one that's only rarely used, would be the preferable system to a kind of guillotine type that you proposed.

The CHAIRMAN. Secretary Cooper, I want to thank you very much. Your testimony has been most useful. You've been most responsive and helpful, and you've made an excellent record.

The committee will stand adjourned, although the subcommittee will resume hearings on this subject on Monday, the Subcommittee on International Finance.

[Whereupon, at 3:55 p.m., the hearing was adjourned, subject to the call of the Chair.]

DEPARTMENT OF STATE

Washington, D.C. 20520

APR 24 1979

Dear Mr. Chairman:

Under Secretary Cooper has asked me to forward the Department's replies to the questions in your letter to him of March 14, which I understand you wish to include as a part of the record of hearings before the Senate Banking Committee on March 6, 1979.

Sincerely,

Douglas J. Bennet, Jr.
Assistant Secretary
for Congressional Relations

Enclosures:

Questions and Answers.

The Honorable
William Proxmire, Chairman,
Committee on Banking, Housing,
and Urban Affairs,
United States Senate.

SENATOR PROXMIRE'S QUESTIONS FOR

UNDER SECRETARY COOPER

1. The Commerce Department testified on Monday that some license applications for exports to Argentina, Chile, Uruguay and El Salvador, perhaps other countries as well, are reviewed on human rights grounds even when not involving crime control and detection equipment or technology. What exports are reviewed for what purposes? Has the President determined that exports subject to validated license control for national security purposes should be reviewed as well for foreign policy purposes, including human rights? Under what authority does the State Department review on human rights grounds export license applications not required for foreign policy purposes?

Answer:

The Administration's policy regarding the observance of human rights, which is an integral aspect of U.S. foreign policy, seeks to distance the United States Government from repressive practices and to raise the visibility and priority of human rights in violator countries and in the world. Toward this end the State Department reviews non-munitions export license applications for human rights purposes when they are:

a) already subject to review as crime control and detection equipment or for national security purposes;

b) for the police or military of a country the government of which commits serious human rights abuses.

Human rights reviews are conducted pursuant to the President's authority to impose controls for foreign policy purposes under Sections 3(2)(B) and 4(b)(1) of the Export Administration Act.

2. Please list all countries for which export license applications have been reviewed by your Department during the past two years on human rights grounds, and indicate the number of applications being reviewed by your Department each month to each country for such purposes. Please indicate in each case whether the reviews are mandated by statute or conducted pursuant to the President's authority under Section 3(2)(b) of the Export Administration Act.

Answer:

The Department of State reviews for human rights reasons validated Commerce license applications to police and military consignees in virtually all countries with which we conduct trade, except NATO countries, Australia, New Zealand, Japan, Austria, Finland, Ireland, Spain, Sweden and Switzerland. These applications are routinely approved unless two conditions are met: the country in question has a government which commits serious human rights abuses and the intended consignee is the police or military. A country breakdown is not readily available. Since December 1977 the State Department has reviewed for human rights reasons approximately 1200 applications to Commerce for export licenses, 75% of which were for crime control and detection equipment. Most of the cases are of relatively low value. Applications for export licenses are reviewed pursuant to the President's authority under Sections 3(2)(B) and 4(b)(1)

of the Export Administration Act. Applications for crime control and detection equipment are subject to validated license requirements under Section 4(m) of that Act, which was added in 1978 specifically for human rights purposes.

3. You mentioned in your statement that the Department of State reviews export license applications from the standpoint of the effect of the exports on "regional stability." Please indicate under what specific authority such reviews are conducted. During the past two years what types of exports to what countries were reviewed from the standpoint of "regional stability"? How many licenses with what value were denied? How many licenses with what value were held by the State Department for more than 30 days for the purpose of considering "regional stability"?

Answer:

Regional conflicts affect American foreign policy both directly and indirectly. The State Department reviews license applications for U.S. exports which might contribute to the military capabilities of countries engaged or expected to be engaged in such conflicts. Although there may be substantial overlap with national security or other concerns, these reviews are conducted under the President's authority to impose controls for foreign policy purposes (Sections 3(2)(B) and 4(b)(1). Some 12 licenses, worth roughly $180 million, have been denied, primarily for military related items for the Middle East or North Africa. Fifteen licenses have been considered for more than 30 days in the State Department.

4. What specific United States foreign policy objectives are intended to be served by the validated license controls imposed by President Carter on August 1, 1978, on exports of oil and gas exploration and production equipment and technology to the USSR? How do these controls "further significantly the foreign policy of the United States"?

Answer:

The August 1, 1978, regulations requiring validated licenses for export of petroleum equipment to the Soviet Union were put into effect for foreign policy reasons. No one specific Soviet action triggered this requirement. It was designed as a signal to the USSR that business could not continue completely as usual in the light of a series of incidents, including the arrest of a U.S. businessman, harassment of two U.S. journalists, and the violations of human rights related to the trials and sentencing of dissidents.

5. Will the United States Government continue to oppose firmly the sale by COCOM members of items on the COCOM list to the People's Republic of China in cases in which the U.S. Government would refuse to license the same sale by a U.S. company?

Answer:

We have stated that we will not sell arms to the PRC or to the USSR and that our Allies must decide such matters for themselves. We believe that COCOM procedures for coordinating export controls for non-weapons strategic items should remain intact, and that the same standards should apply to sales from the United States as to sales from other COCOM countries.

6. Should the United States initiate negotiations for the purpose of converting the informal COCOM arrangement into a treaty?

Answer:

There is a serious risk that even just proposing a treaty would lead to erosion of existing controls. Other member countries have resisted formalization over the years. Even if such an effort were successful, the benefits of formalization would be slight. Others would probably insist on an escape clause to permit, in extraordinary circumstances, approval of licenses at national discretion without COCOM concurrence. Indeed, although the United States has scrupulously abided by its COCOM commitments over the years, it might not be in our best interest to limit our sovereign rights by a treaty which would bind us to refrain from certain exports because of a negative position taken by an Ally.

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