

SENATE—Wednesday, July 9, 1997

The Senate met at 9:15 a.m., and was called to order by the President pro tempore [Mr. THURMOND].

PRAYER

The Chaplain, Dr. Lloyd John Ogilvie, offered the following prayer:

Generous Father, help us to be more gracious receivers. We talk a lot about giving but often find it difficult to give to others what they need because we have been stingy receivers of Your grace and goodness. We cannot give what we do not have. Remind us that to love You is to allow You to love us profoundly. Then we will be able to love others unselfishly. The same is true for the gifts we need from You for our leadership. We need Your supernatural gift of discernment. Help us be willing to receive Your divine intelligence rather than obdurately insisting on making it on our own limited resources. Invade our thinking with insight and inspiration we could not produce on our own. You wait to bless us. We receive not because we do not ask. All through this day, make us aware of our great need for You and the great things You want to do through us. In the name of our Lord and Saviour. Amen.

RECOGNITION OF THE ACTING MAJORITY LEADER

The PRESIDENT pro tempore. The able acting majority leader, the distinguished Senator from Texas, is recognized.

SCHEDULE

Mrs. HUTCHISON. Mr. President, on behalf of the leader, I wish to make the following announcement. Today the Senate will be in a period of morning business until the hour of 11 a.m. At 11 a.m. the Senate will resume consideration of S. 936, the Senate defense authorization bill. Currently, there are a number of amendments pending which will require rollcall votes and also a number of filed amendments which are expected to be debated throughout the day. As previously announced, Senators can expect a series of rollcall votes on amendments to the bill later in the day as we make progress on this important legislation.

As always, Members will be notified accordingly when votes on amendments are ordered. As a reminder to all Senators, last night a cloture motion was filed on S. 936. Therefore, all first-degree amendments must be filed by 1 o'clock today. As previously stated, it is the intention of the majority leader

to complete action on this bill by the end of the week. Senators should be prepared for busy sessions this week.

I thank all Members for their attention.

RESERVATION OF LEADER TIME

The PRESIDING OFFICER (Mr. INHOFE). Under a previous order, the leadership time is reserved.

MORNING BUSINESS

The PRESIDING OFFICER. Under a previous order, there will now be a period for the transaction of morning business, not to extend beyond 11 a.m. with Senators being permitted to speak up to 5 minutes.

INVESTIGATION BY GOVERNMENTAL AFFAIRS COMMITTEE

Mrs. HUTCHISON. Mr. President, I rise today to discuss the solemn importance of the investigative hearings that have just begun by the Senate Governmental Affairs Committee under the leadership of the distinguished chairman, Senator THOMPSON, and the distinguished ranking member, Senator GLENN.

While it is unfortunate that some in Congress have attempted to portray this investigation as an effort by one side to make political hay, I want to briefly discuss why these hearings are crucial for all Americans of whatever party or ideology.

Through the hard work and bipartisan effort of the Governmental Affairs Committee, there has been evidence uncovered and indications of much more evidence to come that our American political system was put up for sale and that an alarming number of foreign interests were ready and willing to buy. While there have been indications of a wide array of illegal activities in connection with the 1996 Presidential election, much of which the public is aware, Senator THOMPSON yesterday indicated that there may be much the American people do not yet know.

The chairman stated yesterday that his committee has evidence that points to a concerted effort by the Chinese Government to improperly or illegally influence American foreign policy toward that country and toward Taiwan. Mr. President, if this is, indeed, the case, then in my view the American people must know the truth. They have a right to know whether the U.S. Government and U.S. officials who were charged with the duty of serving the

interests of the American people instead served their own special interests and the interests of others.

The U.S. Senate is attempting to find the truth through this investigation and I am hopeful and confident that it will do so.

Central to the investigation at this point is a name now well-known to the American people, John Huang. Mr. Huang has been a highly paid executive of a major foreign bank. He was appointed to be a high-level trade official at the Commerce Department with access to an array of classified documents. And finally, he was for a time a key fundraiser for the Democratic National Committee. While alone each of these positions is laudable, in part what this investigation seeks to determine is whether or not Mr. Huang served in all of these capacities at the same time, which would be a crime.

Although it is becoming increasingly apparent that Mr. Huang did not act alone in his efforts to serve as an international influence broker, it is nevertheless interesting to discover that of the \$3.4 million in donations to the Democratic Party that Mr. Huang raised, the Democratic Party has returned almost half of that money, \$1.6 million, to the donors because the contributions were probably made illegally.

Now Mr. Huang has asked the Senate for immunity from future prosecution if he testifies before the Governmental Affairs Committee. Whether Mr. Huang is ultimately granted immunity or not, his conduct and that of dozens of others who have been subpoenaed must be uncovered. This will inevitably involve a give-and-take process between the majority and the minority on the committee. That is to be expected, given the sensitive nature of this inquiry. But simply because the investigation touches on sensitive issues does not mean that it should not move forward. In fact, the history of our country has been one of constant vigilance against the kind of secret manipulation of power that is at the center of this investigation. Only by fully exposing wrongdoing can we be satisfied that all that can be done is being done to tell those who would seek to thwart our system that America's foreign and domestic policy is not for sale.

Mr. President, in addition to the critical need to expose the illegal activities of those in positions of authority in our Government, let me also say that we in Congress should act to address the related issue of campaign finance reform. Let me be clear: the Governmental Affairs Committee and

servicemembers to our national security. Granting this Federal charter demonstrates our gratitude for their outstanding efforts.

Mr. President, I appreciate the support of my colleagues for this amendment. It is with great honor and gratitude that I was asked to introduce this legislation by my friends at the Air Force Sergeants Association.

I ask unanimous consent that the text of the Air Force Sergeants Association Federal charter amendment, amendment number 728, be printed again in the CONGRESSIONAL RECORD.

There being no objection, the text of the amendment was ordered to be printed in the RECORD, as follows:

AMENDMENT NO. 728

(Purpose: To provide a Federal charter for the Air Force Sergeants Association)

Insert after title XI, the following new title:

TITLE XII—FEDERAL CHARTER FOR THE AIR FORCE SERGEANTS ASSOCIATION
SEC. 1201. RECOGNITION AND GRANT OF FEDERAL CHARTER.

The Air Force Sergeants Association, a nonprofit corporation organized under the laws of the District of Columbia, is recognized as such and granted a Federal charter.

SEC. 1202. POWERS.
The Air Force Sergeants Association (in this title referred to as the "association") shall have only those powers granted to it through its bylaws and articles of incorporation filed in the District of Columbia and subject to the laws of the District of Columbia.

SEC. 1203. PURPOSES.
The purposes of the association are those provided in its bylaws and articles of incorporation and shall include the following:

(1) To help maintain a highly dedicated and professional corps of enlisted personnel within the United States Air Force, including the United States Air Force Reserve, and the Air National Guard.

(2) To support fair and equitable legislation and Department of the Air Force policies and to influence by lawful means departmental plans, programs, policies, and legislative proposals that affect enlisted personnel of the Regular Air Force, the Air Force Reserve, and the Air National Guard, its retirees, and other veterans of enlisted service in the Air Force.

(3) To actively publicize the roles of enlisted personnel in the United States Air Force.

(4) To participate in civil and military activities, youth programs, and fundraising campaigns that benefit the United States Air Force.

(5) To provide for the mutual welfare of members of the association and their families.

(6) To assist in recruiting for the United States Air Force.

(7) To assemble together for social activities.

(8) To maintain an adequate Air Force for our beloved country.

(9) To foster among the members of the association a devotion to fellow airmen.

(10) To serve the United States and the United States Air Force loyally, and to do all else necessary to uphold and defend the Constitution of the United States.

SEC. 1204. SERVICE OF PROCESS.

With respect to service of process, the association shall comply with the laws of the

District of Columbia and those States in which it carries on its activities in furtherance of its corporate purposes.

SEC. 1205. MEMBERSHIP.

Except as provided in section 1208(g), eligibility for membership in the association and the rights and privileges of members shall be as provided in the bylaws and articles of incorporation of the association.

SEC. 1206. BOARD OF DIRECTORS.

Except as provided in section 1208(g), the composition of the board of directors of the association and the responsibilities of the board shall be as provided in the bylaws and articles of incorporation of the association and in conformity with the laws of the District of Columbia.

SEC. 1207. OFFICERS.

Except as provided in section 1208(g), the positions of officers of the association and the election of members to such positions shall be as provided in the bylaws and articles of incorporation of the association and in conformity with the laws of the District of Columbia.

SEC. 1208. RESTRICTIONS.

(a) **INCOME AND COMPENSATION.**—No part of the income or assets of the association may inure to the benefit of any member, officer, or director of the association or be distributed to any such individual during the life of this charter. Nothing in this subsection may be construed to prevent the payment of reasonable compensation to the officers and employees of the association or reimbursement for actual and necessary expenses in amounts approved by the board of directors.

(b) **LOANS.**—The association may not make any loan to any member, officer, director, or employee of the association.

(c) **ISSUANCE OF STOCK AND PAYMENT OF DIVIDENDS.**—The association may not issue any shares of stock or declare or pay any dividends.

(d) **DISCLAIMER OF CONGRESSIONAL OR FEDERAL APPROVAL.**—The association may not claim the approval of the Congress or the authorization of the Federal Government for any of its activities by virtue of this title.

(e) **CORPORATE STATUS.**—The association shall maintain its status as a corporation organized and incorporated under the laws of the District of Columbia.

(f) **CORPORATE FUNCTION.**—The association shall function as an educational, patriotic, civic, historical, and research organization under the laws of the District of Columbia.

(g) **NONDISCRIMINATION.**—In establishing the conditions of membership in the association and in determining the requirements for serving on the board of directors or as an officer of the association, the association may not discriminate on the basis of race, color, religion, sex, handicap, age, or national origin.

SEC. 1209. LIABILITY.

The association shall be liable for the acts of its officers, directors, employees, and agents whenever such individuals act within the scope of their authority.

SEC. 1210. MAINTENANCE AND INSPECTION OF BOOKS AND RECORDS.

(a) **BOOKS AND RECORDS OF ACCOUNT.**—The association shall keep correct and complete books and records of account and minutes of any proceeding of the association involving any of its members, the board of directors, or any committee having authority under the board of directors.

(b) **NAMES AND ADDRESSES OF MEMBERS.**—The association shall keep at its principal office a record of the names and addresses of all members having the right to vote in any proceeding of the association.

(c) **RIGHT TO INSPECT BOOKS AND RECORDS.**—All books and records of the association may be inspected by any member having the right to vote in any proceeding of the association, or by any agent or attorney of such member, for any proper purpose at any reasonable time.

(d) **APPLICATION OF STATE LAW.**—This section may not be construed to contravene any applicable State law.

SEC. 1211. AUDIT OF FINANCIAL TRANSACTIONS.

The first section of the Act entitled "An Act to provide for audit of accounts of private corporations established under Federal law", approved August 30, 1964 (36 U.S.C. 1101), is amended—

(1) by redesignating the paragraph (77) added by section 1811 of Public Law 104-201 (110 Stat. 2762) as paragraph (78); and

(2) by adding at the end the following:

"(79) Air Force Sergeants Association."

SEC. 1212. ANNUAL REPORT.

The association shall annually submit to Congress a report concerning the activities of the association during the preceding fiscal year. The annual report shall be submitted on the same date as the report of the audit required by reason of the amendment made in section 1211. The annual report shall not be printed as a public document.

SEC. 1213. RESERVATION OF RIGHT TO ALTER, AMEND, OR REPEAL CHARTER.

The right to alter, amend, or repeal this title is expressly reserved to Congress.

SEC. 1214. TAX-EXEMPT STATUS REQUIRED AS CONDITION OF CHARTER.

If the association fails to maintain its status as an organization exempt from taxation as provided in the Internal Revenue Code of 1986 the charter granted in this title shall terminate.

SEC. 1215. TERMINATION.

The charter granted in this title shall expire if the association fails to comply with any of the provisions of this title.

SEC. 1216. DEFINITION OF STATE.

For purposes of this title, the term "State" includes the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, and the territories and possessions of the United States.

AMENDMENT NO. 420

Mr. GLENN. Mr. President, I rise to speak in support of an amendment offered by my colleagues, Messrs. COCHRAN and DURBIN, to correct a significant deficiency in our export licensing system.

I will speak today of the current practice of allowing the export from the United States of high-powered, dual-use computers—machines that until very recently were called supercomputers—without any prior U.S. Government assessment of their end uses or end users. The amendment takes a significant step to correct this problem—not by banning the export of such machines, but merely by requiring exporters to obtain an individual validated export license before exporting them from the United States or re-exporting them from elsewhere.

The amendment specifically requires a license for the export of computers with a composite theoretical performance level equal to or greater than 2,000 million theoretical operations per second [MTOPS], when such machines are

destined to a group of countries that now receive such computers—up to a level of 7,000 MTOPS—without U.S. Government end use or end user checks.

The specific group of controlled countries—the so-called “Tier 3” countries—is described as follows in the Bureau of Export Administration’s Report to Congress for Calendar Year 1996: “* * * countries posing proliferation, diversion or other security risks.” So we are dealing here with certain countries that our government, on the basis of all the information at its disposal, has determined pose risks to our security.

SOME ANCIENT HISTORY

This is not the first time I have spoken about the proliferation risks associated with high-powered computers. On October 31, 1989, I spoke of the dangers from supercomputers and super bombs (CONGRESSIONAL RECORD, 10/31/89, p. S-14382 ff.).

On that occasion, I reminded my colleagues of the role computers play in designing nuclear weapons, and this particular application will only grow in importance now that the world appears heading for a ban on all nuclear explosions. Though it is true indeed that countries do not need high-powered computers to build the bomb—witness America’s 1945-vintage Fat Man and Little Boy bombs—it is well recognized today that such computers are absolutely essential to developing advanced nuclear weapon designs, including H-bombs, especially when nuclear test explosions are prohibited. These computers are also useful in designing nuclear weapon delivery systems, the full gamut advanced conventional weapons systems, and have other national security applications—cryptography, for example.

Over a decade ago, in January 1986, America’s three nuclear weapon labs—the Lawrence Livermore, Los Alamos, and Sandia National Laboratories—issued an unclassified report aptly titled, “The Need for Supercomputers in Nuclear Weapons Design.” The following extracts clearly identify the utility of supercomputers—as defined back in 1986—in the design and improvement of our Nation’s nuclear weapons:

Large-scale computers are essential to carrying out the weapons program mission. Computers provide essential understanding and enable us to simulate extremely complicated physical processes . . . Computers enable us to evaluate performance and safety over the decades of a weapon system’s lifetime . . . computers enable us to verify weapon designs within testing limits.

With large-scale computers, we have been able to improve our designs by optimizing design parameters, while reducing the number of costly experiments in the design process . . . Tests involving high explosives have been reduced from 180 tests for a 1955-vintage weapon to fewer than 5 for today’s weapons because of computation.

Computers enable us to extrapolate to new capabilities . . . It is this computational ca-

ability, driven by the needs of the weapons design, that has made possible new concepts and enhanced safety in weapons.

The inability to calculate solutions to complex problems [during the years of the Manhattan Project] hampered development and forced weapons designers to build in large margins against error (e.g., large amounts of high explosive, which increased weight to such an extent that some designers were uncertain the devices could actually be carried by existing aircraft) . . . It has been estimated that a team of scientists using the calculators of the 1940s would take five years to solve what it takes a Cray computer one second to perform.

Without supercomputers, the nation’s nuclear weapons program would be deprived of much of its vitality . . . supercomputing is essential . . . in providing us with a tool to simulate the complex processes going on during a nuclear explosion . . . computers enable us to infer real-environment weapon performance from underground nuclear tests.

The computer becomes absolutely essential in the evolution of a design that will survive the “fratricide” threat . . . the computer is essential in designing a system whose vulnerability to an ABM attack is reduced to an acceptable level.

[Computers] enable the designer to “test” ideas before actually committing to hardware fabrication . . . computing capabilities are absolutely critical to progress in new designs.

OK, so those were the uses of high-powered computers a decade ago. Obviously, computer technology has grown rapidly—even exponentially—since that time. This growth has led to much higher computing speeds, more manufacturers, more applications, improved software, and more countries seeking such machines. The growth has been so rapid that many both in and out of Government have come to believe—or appear to have convinced themselves—that this technology is completely uncontrollable.

The rapid advancement of this technology has been accompanied by an equally rapid decontrol of some of the very devices we used to make some of the most powerful weapons the world has ever known. The Commerce Department’s Bureau of Export Administration, for example, reports in its most recent Annual Report to Congress that—“Due to the 1994 and 1995 liberalization for computers, this commodity group has been replaced by shotguns as being the most significant commodity group for which export license applications were received in fiscal year 1996.” So it now appears that we are giving closer regulatory attention to shotguns than to a key technology that our top weapons labs have characterized as essential to performing a variety of nuclear-weapons applications.

But the supporters of this decontrol effort are not daunted by this news. They have consistently argued that if some other country is exporting high-powered computers without rigorous controls—or without any controls at all—then by golly, so should we, or else we would face the horrible accusation of “shooting ourselves in the foot” by

denying U.S. manufactures market opportunities that are available to their foreign competitors. If there is evidence of foreign availability, in short, if there is at least one other country out there—whether it be North Korea, or Iran, or China, or any other nation—if just one of these countries decides to cash in on America’s restraint, then we should have the same profit-making opportunities.

Well, there are a lot of problems with this point of view, some legal, and some political and moral. Let’s have a closer look at these problems.

THE LEGAL AND POLITICAL FOUNDATIONS OF LICENSING

Under our Constitution, treaties are the supreme law of the land. One of our treaties, the Nuclear Non-Proliferation Treaty of 1968 [NPT], explicitly requires America not in any way to assist any non-nuclear weapon state to acquire the bomb. That treaty does not contain any proviso indicating that assistance may be provided if some other country is providing such assistance. It has no loophole allowing such assistance provided though a third party. It contains no codicils exempting the computer industry or any other industrial sector from the duty not in any way to assist the proliferation of nuclear explosive devices. The taboo on assistance is clear and categorical.

As well it should be. Indeed, America is quite fortunate that the term “not in any way” does not mean “except in some ways.” After all, there are 5 nuclear-weapon states today in the NPT and over 175 non-nuclear-weapon states in the world that have ratified or acceded to that treaty. If today we decide that it is fully consistent with this treaty obligation for the United States to decontrol completely technology that our top weapons designers at our nuclear weapon labs have publicly identified as essential to performing a variety of nuclear weapons-related activities, then how can we even pretend to be complying with this treaty? Is this the kind of approach we wish for other members of the treaty to adopt, to interpret that treaty as only requiring the regulation of state-of-the-art technology or goods that are only exclusively available at home? Is this what is ahead for American leadership in the global nonproliferation regime?

If this is the reasoning that is to guide America’s technology transfer control policies into the 21st century, then I truly worry not just for the future of the NPT but for the future security of our country. To those who argue that we should only control state-of-the-art or sole-national-source technology, I ask: Why limit this logic only to the controls over computers? Why not, after all, also decontrol all of the other technologies that go into making bombs, except those items that are the most modern or exclusively sold in the U.S.?

The answer of course, is self apparent. Such a step would amount the crudest possible form of technological indexing, where U.S. controls would simply be ratcheted down with every new technological advancement. Such an approach would wreak havoc on any responsible nonproliferation policy.

The hydrogen bombs that America fielded in the 1950's and 1960's are no less dangerous in the hands of our adversaries just because they were made with technology that is now a half-century old. To advocate the decontrol of a technology strictly on the bases of so-called foreign availability, or the age, or level of sophistication of the item, without regard to either the actual end use or identity of the end user, is to turn a blind eye to proliferation. It is a sure-fire method to bring, as fast as possible, anachronistic weapons of mass destruction back into fashion. Fortunately, the NPT does not only aim at preventing the proliferation of state-of-the-art bombs—and we and our friends and allies around the world are much better off as a result.

Nor does our domestic legislation take such an approach. I am proud, for example, to have been the principal author of the Nuclear Non-Proliferation Act of 1978 [NNPA], which requires the President to control "all export items * * * which could be, if used for purposes other than those for which the export is intended, of significance for nuclear explosive purposes" (section 309(c)). Now I suppose it might have been possible to have written this law only to control:

The smallest possible number of choke-point export items . . . which are known beyond even the faintest shadow of a doubt to be exclusively intended for a weapons-related use in a publicly-listed bomb plant in a rogue regime that is known to be pursuing weapons of mass destruction.

But fortunately that is not how the law was written and our Nation is quite a bit safer with the original text. No indeed, the law was quite explicit in requiring the control over "all" export items—and all means all—which "could be"—not just are—"of significance for" nuclear explosive purposes—not just absolutely critical to performing such functions.

We also have several sanctions laws that punish foreign countries and firms that assist other countries to acquire nuclear weapons. The so-called "Glenn/Symington amendments" in sections 101 and 102 of the Arms Export Control Act, for example, require sanctions against any party involved in the transfer of unsafeguarded uranium enrichment technology or nuclear reprocessing technology. These are the types of technology that produced the nuclear materials used in the Nagasaki and Hiroshima bombings. I guess you can call that old technology. I guess you could say there is "foreign availability" of that technology since many

other nations can perform these fuel cycle operations. I guess that today's methods of enriching uranium or separating plutonium are more sophisticated than they were 20 years ago. But does any of this mean that we should rewrite all of our nuclear sanctions laws to correspond to this dubious new doctrine of controlling only state-of-the-art goods? Absolutely not, the question answers itself.

When China transferred ring magnets to Pakistan's unsafeguarded uranium enrichment plant, I did not wonder, "now gee, were these items state-of-the-art quality or just 1970's-vintage?" I was not angry that the items did not come from San Francisco, Chicago, New York, or even Cleveland. I did not care how sophisticated, or how old, or how cheap, or how "available" such items were. I did care, however, that China was assisting Pakistan to produce nuclear materials for its secret bomb project.

Nonproliferation is about not assisting countries to get the bomb—not just a duty to control the most modern gadgets available. When the special U.N. inspectors found tons of Western dual-use goods in Saddam Hussein's weapons bunkers, did any of my colleagues recall an avalanche of mail from their constituents expressing outrage that more U.S. goods were not found in Saddam's arsenal? Were there pickets in front of the Capitol haranguing the Congress further to relax export controls so that we can lower our Nation to that grimy "level playing field" quite evidently enjoyed by some of our European friends? None that I could find.

None indeed. Here is what happened instead. The public was outraged, and outraged all the more amid revelations shortly after the gulf war in 1991 that United States dual-use goods did, indeed, turn up in Iraq. This outrage, with a little help from the news media, helped to stimulate some constructive reforms in America's nonproliferation policy. In 1992, America succeeded in getting 27 nations of the Nuclear Suppliers Group to commit themselves not to export dual-use goods to unsafeguarded nuclear facilities and to require full-scope international safeguards for all exports of nuclear reactors and other nuclear energy-related technology. Before these sensitive dual-use goods can be exported, under this multilateral understanding, member governments must review specific license applications and review the specific nonproliferation credentials of the importing parties.

In this instance, America did not stoop to adopt the *laissez faire* nuclear trading practices of other countries; instead, we raised the level of the international playing field to our level by showing that our Nation is a leader not a follower when it comes to nonproliferation.

Another positive reform in U.S. nonproliferation controls was implemented just a few months after Iraq invaded Kuwait. President Bush unveiled the "Enhanced Proliferation Control Initiative" [EPCI], which authorized the U.S. Government to prohibit the export of any item—repeat, any item—that could contribute to the proliferation of missile technology or chemical and biological weapons. A similar control had existed for years covering dual-use nuclear technology where the exporter "knows or has reason to know" that the item would be used in a weapons-related application.

The EPCI or so-called knows rule was intended, however, to complement—not to replace—the Nation's export licensing system. Let me cite a recent case to illustrate this point.

On February 19, 1997, for example, the Washington Post reported that a California computer firm, Silicon Graphics, Inc., had illegally sold four supercomputers to a Russian nuclear weapons facility. The article quoted the chief executive officer of this firm as offering the following explanation for the export: "The Department of Commerce doesn't provide a list of facilities around the world that we shouldn't ship to. So we tend to rely on the end-user statement on how they will be used." In short, the company interpreted the knows rule as applying only to the importer's stated end-use for the specific export. The company, and it is probably not alone in this respect, evidently did not even consider the possibility that its importer would consider offering a bogus end use.

Now there are several reasons why the U.S. Government cannot go around publishing the names and locations of all the world's secret bomb facilities and their suppliers. Here are three of them—First, the names change rapidly in the black business of nuclear proliferation and a printed list would no doubt be obsolete as soon as its ink was dry; second, the public identification of such facilities and suppliers could well jeopardize U.S. intelligence collection capabilities; and third, such a listing could be quite useful to a proliferant country or group, effectively amounting to free market research for the proliferators.

So there are some significant limitations in the extent to which the Government can delegate export control responsibilities to the private sector. Companies simply do not have the capabilities of U.S. intelligence agencies. That is the reason why licensing is such a good idea: It is the best known technique for making efficient and effective use of the resources of our Government—for which the U.S. taxpayer has paid so dearly over the years—to assess proliferation risks in specific exports.

Thus even if some of the goods we control are being sold by foreign competitors, and even if some goods are

not state-of-the-art, it still makes considerable sense for the U.S. Government to require licenses for items that could assist countries to make bombs. Why? For two key reasons.

First, licensing is the Government's window on the world market for U.S. products; export decontrol or devolution of export controls to the private sector slams that window shut. In other words, licensing creates a paper trail, generates data, and gives our Government's nonproliferation analysts something concrete to work with. This information is valuable in assessing—and subsequently reducing—proliferation risks. Thus, even if license applications are rarely denied as is currently the case, it still makes sense to require licenses for goods that, as our treaties and domestic laws specify, could assist other countries to make weapons of mass destruction.

Second, our leadership role in international nonproliferation regimes requires not just words but deeds. If we want other nations to strengthen their controls, we should be prepared to do so ourselves. Again, our job must be to use our leadership to raise international standards up to our own level playing field, rather than lower our own to some homogenized least-common-denominator standard set by the world's most irresponsible suppliers.

SOME ADDITIONAL LOOSE ENDS

Before concluding today, I would like to touch upon a few other charges that have been leveled against the very idea of requiring export licenses for any but state-of-the-art computers. I will address two of such charges.

First, our national economy will allegedly be hurt by the establishment of licensing requirements for computers rated at over 2,000 MTOPS going to the designated nations.

We should keep in mind here that the overwhelming majority of America's exports leave the country without requiring export licenses at all. In 1995, for example, America exported \$969 billion in goods and services, while the Government denied export licenses for goods valued at only \$30 million. To give my colleagues an idea of the scale we are talking about here, the ratio between the value of those goods that were denied licenses and the total value of U.S. trade in that year is analogous to the difference between the length of a pencil eraser and the height of the Washington Monument. That is about the same ratio as the size of garden pea on the quarter-inch line of a 100-yard football field, or the amount of calories in a single carrot relative to a year's worth of balanced meals.

Here is another way to put this problem in its proper context: \$99.20 out of every \$100 in U.S. exports did not require an export license. And of the few that did require such a license, only one license in a hundred was denied. That was in 1995. Since then, computer

controls have been substantially liberalized (along with chemical exports going to parties to the Chemical Weapons Convention), while overall U.S. exports were just over \$1 trillion in 1996. Relative to total U.S. trade, therefore, fewer and fewer goods are requiring licenses.

Now some might argue that while these figures may be true, certain industries face a greater likelihood of having to face license requirements than other industries. Yes that is undoubtedly true: If you produce something that is likely to assist another country to get the bomb, you can expect Uncle Sam to get a bit nosy and, if the system is working right, to be an outright nuisance. No company, however, can claim any right under U.S. law to help another country to make nuclear weapons or any other weapons of mass destruction. We have a free economy—but our individual freedom to produce and market goods is not unlimited, especially when it comes to goods that can jeopardize our national security.

As John Stuart Mill once wrote in his book, "On Liberty," over a 100 years ago: "Trade is a social act. Whoever undertakes to sell any description of goods to the public, does what affects the interest of other persons, and of society in general; and thus his conduct, in principle, comes within the jurisdiction of society." The writer of those words was one of England's foremost liberal economists. Even Adam Smith himself admitted that the Government had a legitimate responsibility to regulate certain forms of trade.

And I for one cannot imagine a more legitimate basis for regulating trade than to ensure that America is not assisting other countries to make the bomb. Fortunately, I am not alone in this conviction. As President Clinton stated on October 18, 1994: "There is nothing more important to our security and to the world's stability than preventing the spread of nuclear weapons and ballistic missiles." The key legislative task—a responsibility now before us today—is to ensure that this principle is reflected in the rules and procedures America uses to control its own exports. License-free exports of technologies that our weapons labs have repeatedly identified as useful in making bombs and reentry vehicles hardly seems to me an appropriate way to implement this Presidential statement of our top national priority.

Our national economy will not be hurt, and America's international economic competitiveness will not be crippled, by the establishment of a licensing requirement on computers rated at 2,000 MTOPS and above going to certain destinations—though our national economy could well be endangered, and considerable business opportunities lost, if a nuclear war should someday

break out involving foreign weapons that designed with computers that were Made in USA.

Most computers, moreover, will still leave the country without export licenses. We are talking about today machines that have special capabilities. On June 12 of this year, a senior strategic trade advisor at the Department of Defense, Peter Leitner, testified before a hearing of the Joint Economic Committee on "Economic Espionage, Technology Transfers and National Security." Dr. Leitner included with his testimony a graphic showing some of the functions in our own military of computers operating at levels actually less than 2,000 MTOPS. He pointed out that NORAD had recently upgraded its computers by buying Hewlett-Packard computers rated between 99 and 300 MTOPS. He testified that machines have been used below 2,000 MTOPS to perform the following functions: space vehicle design (launch and control); high-speed design simulations; prewind tunnel modeling; reentry vehicle design (ICBMs); and high-speed cryptography.

Perhaps we should require licenses for computers at even lower levels than 2,000 MTOPS, as Dr. Leitner's testimony implies. It seems hard to justify the authorization of exports—without even requiring a license or an end use or end-user check—of technology that is capable of being used in designing nuclear weapons or reentry vehicles as being in any way consistent with our national security interests. Until some international agreement can be reached on an alternative level, however, the 2,000 MTOPS level is a good place to begin to strengthen controls over these sensitive dual-use items.

Multilateral control over this technology is of course the best course to pursue, but multilateralism has to begin somewhere. The United States—with its reputation as the world's leading champion of nonproliferation and with its world-class computer industry—has an extraordinary opportunity for leadership in encouraging other members of the Nuclear Suppliers Group to adopt similar controls. A diplomatic effort of this nature would also help to alleviate fears of our industry that the duty of complying with these controls would fall only on U.S. exporters. Our negotiations with other members of the NSG should begin with one basic question: Why should computers be exempt from the no-assistance norm that lies at the heart of the global nonproliferation regime?

My colleague from Minnesota, Mr. GRAMS, has recently suggested that perhaps the General Accounting Office might be called upon to examine the national security risks of unregulated exports of computers in this range and, depending on the scope and content of the request, this might be a good idea indeed. But until we see a specific request and a finished study, I think the

amendment proposed by Messrs. COCHRAN and DURBIN is a prudent course to follow for the immediate future.

It is useful to recall that GAO does indeed have some relevant background in dealing with the proliferation implications of such computers. At my request back in 1994, the GAO prepared a lengthy report on U.S. export licensing procedures for handling nuclear dual-use items. In testimony before the Committee on Governmental Affairs on May 17, 1994, a senior GAO official, Joseph Kelly, noted that recent export control reforms in recent years "... will almost certainly result in a substantial decline in the number of computer license applications and could complicate U.S. efforts to prevent U.S. computer exports from supporting nuclear proliferation." GAO concluded that "many of the computers that will now be free of nuclear proliferation licensing requirements are capable of performing nuclear weapons-related work." (GAO/NSIAD-94-119, 4/26/94 and GAO/T-NSIAD-94-163, 5/17/94.) Mr. President, these do not seem to me to be the types of items that should be, in GAO's terms, "free of nuclear proliferation licensing requirements."

The second charge leveled against the establishment of a licensing requirement is that it would place U.S. exporters at a competitive disadvantage, due to the protracted delays in obtaining the necessary license approvals. This argument also lacks credibility. The Bureau of Export Administration [BXA] in the Department of Commerce is so proud of its recent efforts to streamline the export license application process that it trumpets this achievement in its most recent annual report to Congress. Here is what that report had to say about the licensing process:

... BXA implemented significant improvements in the export license system via Presidential Executive Order 12981 [which] ... limit the application review time by other U.S. agencies, provide an orderly procedure to resolve interagency disputes, and establish further accountability through the interagency review process.

[E.O. 12981] ... reduces the time permitted to process license applications. No later than 90 calendar days from the time a complete license application is submitted, it will either be finally disposed of or escalated to the President for a decision. Previously, all license applications had to be resolved within 120 days after submission to the Secretary. ... By providing strict time limits for license review and a "default to decision" process, it also ensures rapid decisionmaking and escalation of license applications.

In FY 1996, the Bureau introduced a PC-based forms processing and image management system which, along with the new multipurpose application form, enhances BXA's ability to make quick and accurate licensing and commodity classification decisions.

BXA ensures that export license applications are analyzed and acted upon accurately, quickly, and consistently, and that exporters have access to the decisionmaking process, with current status reports avail-

able at all times. Rapid processing is available for the majority of applications BXA receives.

BXA also notes that it is in the process of upgrading and expanding its electronic licensing process to provide prompt customer service.

It is also noteworthy that BXA discusses in the same report its assistance to Russia and other new republics of the former Soviet Union to upgrade their national systems of export control. Obviously, if America is decontrolling goods useful in making nuclear weapons and other weapons of mass destruction, and the missile systems to deliver them, then we can hardly hope to inspire these other countries to show any greater discipline.

It would be far better for us to be sticking to a strict interpretation of the "not in any way to assist" obligation that the United States and every other nuclear-weapon state in the NPT has vowed to implement. We should lead the way in strengthening international controls, not in relaxing them under the false flag "economic competitiveness." We should remember that these other countries have their own conceptions of "economic competitiveness" that, if allowed to become a global norm, could lead to a total collapse of the international non-proliferation regime. We have as much at stake in encouraging these countries to place nonproliferation as a high-national priority as we have in ensuring a similar priority here at home.

CONCLUSION

So I ask my colleagues to join me in voting for this constructive reform of our export licensing process. We have the people in our government who are competent to review these licenses. We have the technology and procedures in our Government to ensure the prompt and efficient handling of license applications. We have both domestic and international legal obligations that require the control of technology that could assist other countries to get the bomb. And we have legitimate national security interests to protect. America can be a formidable economic competitor in the world without becoming the world's most formidable proliferator of nuclear or dual-uses goods. I urge my friends and colleagues to vote for this amendment.

HIGH-PERFORMANCE COMPUTERS

Mr. WARNER. Mr. President, I had the opportunity earlier today to meet with a number of computer manufacturers located in my State. They expressed grave concerns about the amendment which you have proposed. I would like to take this opportunity to engage in a colloquy with the Senator from Mississippi in an effort to get more information on this important issue into the RECORD.

My constituents allege that, by next year, your amendment will have the effect of restricting the sale of personal

computers—similar to those in our Senate offices—to Tier 3 countries. Do you agree with this statement?

Mr. COCHRAN. Mr. President, based upon statements made by Under Secretary of Commerce for Export Administration William Reinsch, it is highly unlikely that personal computers capable of more than 2,000 MTOPS will be available by next year. At a recent hearing Secretary Reinsch said, "high-end Pentium-based personal computers sold today at retail outlets perform at about 200 to 250 MTOPS," and at another hearing, this one before my subcommittee on June 11, he also said that "computer power doubles every 18 months, and this has been the axiom in the industry for I think about 15 years." The math is straightforward; if top-end PC's are capable of 250 MTOPS today, 18 months from now they'll be capable of 1,000 MTOPS; and 54 months from now—in 4½ years—they'll be capable of 2,000 MTOPS. Fifty-four months from now is not, contrary to the claims of some computer manufacturers, the fourth quarter of next year.

Mr. WARNER. Mr. President, it is my understanding that, since 1995 when the new export control standards were established, there have been over 1,400 computers sold in this range to Tier 3 countries. Of those 1,400 sales, a small number have allegedly wound up with military end users in Russia and China. What evidence do we have concerning these alleged computer sales to military end users?

Mr. COCHRAN. Mr. President, according to the Department of Commerce, from the period January 25, 1997, through March 1997, 1,436 supercomputers were exported from the United States. Of that number, 91—or 6.34 percent—went to Tier 3 countries, some of which went with an individual validated license. We know, based upon statements by Russian and Chinese Government officials, that some of these supercomputers are in the Chinese Academy of Sciences, a military facility in Chungsha, China, and in Arzamas-16 and Chelyabinsk-70. Arzamas-16 and Chelyabinsk-70 are both well-known nuclear weapons development facilities in Russia; the suggestion by exporters that these high performance computers would be in either of these locations and not be doing nuclear-related work appears to be somewhat self-serving and contrary to common sense. According to Russia's Minister of Atomic Energy, these supercomputers are "10 times faster than any previously available in Russia." The Chinese Academy of Sciences, which has worked on everything from the D-5 ICBM to enriching uranium for nuclear weapons, hasn't been shy about its new supercomputing capabilities, saying that its American supercomputer provides the Academy with "computational power previously unknown" available to "all the major

scientific and technological institutes across China." American high performance computers are now available to help these countries improve their nuclear weapons and improve that which they are proliferating.

Mr. WARNER. Mr. President, if your amendment passes, it is my understanding that this would be the first time that export control parameters would be established in statute. I am concerned that with advances in technology, the fixed parameters will quickly become outdated. How will we be able to deal with these technological advances when fixed parameters are included in legislation? Did you consider other alternatives to fixed statutory language, such as an annual review of the threshold by a neutral third party or government entity?

Mr. COCHRAN. Mr. President, the current policy is established in regulation, and regulation has the force and effect of law. For Congress to participate in the policymaking process it must pass legislation. Furthermore, the pace of technological advancement is such that, at some point in the future, it is entirely possible that the 2,000 MTOPS level—which is the administration's current floor—will have to be raised. That is why, on July 7 on the Senate floor, I said that if, 4 or 5 years from now, industry's optimism proves to be correct, I will be pleased to return to the floor and offer legislation adjusting the 2,000 MTOPS level.

Mr. WARNER. Mr. President, I have been told that computers with similar capabilities and computing power are readily available from other nations. Given that, the concern is that your amendment would put U.S. computer companies at a competitive disadvantage since these computers are readily available on the world market. What has your subcommittee's research shown regarding the foreign availability of computers in this range (2,000-7,000 MTOPS)? What is the market share of U.S. manufacturers of computers in this range, and has that market share changed since the administration liberalized its policy in 1995?

Mr. COCHRAN. Mr. President, this amendment will not in any way reduce the number of American high-performance computers going to Tier 3 countries. It does not change the administration's standards for making the exports; all that is changed is the question of who makes end-use and end-user determinations for Tier 3 countries. In fact, at least eight high-performance computers have been exported to Tier 3 countries with an individual validated license since this policy started. Only entities that shouldn't be receiving these supercomputers in the first place won't, because of closer scrutiny by the executive branch, receive them under this amendment. So, the suggestion by some manufacturers that this amend-

ment would somehow reduce their market share is an argument that has no basis in fact.

Mr. WARNER. Mr. President, it has been alleged that the licensing requirement contained in your amendment will put U.S. computer companies at a commercial disadvantage since it often takes up to 6 months for the Commerce Department to approve an export license. By contrast, the Japanese often approve export licenses in 24 hours. In conjunction with your efforts on this amendment, have you explored options for improving the export license approval process at Commerce?

Mr. COCHRAN. Mr. President, Japan has a more restrictive export control policy than does the United States. I support making the Department of Commerce export licensing process more efficient, though a more efficient process cannot come at the expense of national security concerns, which must be adequately addressed in the process. I would note, as well, that more than 95 percent of export licenses considered by Commerce are currently approved in 30 days or less.

AMENDMENT NO. 669

Mr. ROCKEFELLER. Mr. President, I am proud to cosponsor an amendment to the Department of Defense authorization bill that would restore funding for bioassay testing of atomic veterans. I urge all of my colleagues to join in support of this important measure.

In my role as the ranking member of the Senate Committee on Veterans' Affairs, I have heard firsthand of the difficulties experienced by veterans exposed to ionizing radiation during their military service when they have tried to get their radiation-related diseases service connected by the Department of Veterans Affairs. The main reason for this difficulty is the sometimes impossible task of accurately reconstructing radiation dosage.

The law currently distinguishes between two groups of veterans: those who warrant presumptive service connection for their radiation-related conditions because of their participation in an atmospheric nuclear test, the occupation of Hiroshima or Nagasaki, or their internment as a prisoner of war in Japan during World War II, which resulted in possible exposure to ionizing radiation—and those who may have been exposed to ionizing radiation in service under other circumstances, such as service on a nuclear submarine. Those veterans who do not receive presumptive service connection and suffer from radiogenic diseases must prove their exposure to radiation by having the VA and DOD attempt to reconstruct their radiation dose through military records. VA looks to the DOD to perform these dose reconstructions.

This amendment is so important because the White House Advisory Committee on Human Radiation Activities has acknowledged that there are inad-

equated records to determine the precise amount of radiation to which a veteran was exposed, and what the long-term risks associated with that exposure are. As of September 1996, VA had only granted service connection to 1,977 out of 18,896 veterans who had filed claims based on participation in all radiation-risk activities. VA estimates that it has granted fewer than 50 claims of veterans who did not receive presumptive service connection.

This amendment would authorize \$300,000 for the completion of the third and final phase of Brookhaven National Laboratory's testing of radiation-exposed veterans. Brookhaven's fission tracking analysis could provide a more accurate measure of an individual's internal radiation dosages. I have contacted VA in support of the Brookhaven project in the past. VA's response indicated that it is the Department of Defense, not the VA, who has the responsibility to provide dose estimates for veterans exposed to ionizing radiation. That is why we must restore funding to the Brookhaven project in the DOD authorization bill.

As ranking member of the Committee on Veterans' Affairs, I have seen the struggles of America's atomic veterans and their survivors. I have heard testimony of the veterans who bravely served in our military, and who are now sick and dying and cannot get the compensation they have earned by their service to our country. These veterans were placed in harm's way, sworn to secrecy, and abandoned by their government for many years. It is critical that we search for a better way to assess their exposure to radiation. It is vital that we restore funding to a program that can renew hope to atomic veterans and their families.

Mr. BROWNBACK addressed the Chair.

The PRESIDING OFFICER. The Senator from Kansas.

Mr. BROWNBACK. Mr. President, I ask unanimous consent for a period of morning business not to exceed 10 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. WARNER. Mr. President, if I might ask my distinguished colleague, we have a few cleared amendments on the bill. Would it be possible to clear up these few amendments and then return to his request?

Mr. BROWNBACK. I have no objection to doing that.

Mr. WARNER. I thank the Senator.

Mr. President, we are ready to proceed, if the distinguished ranking member is prepared.

AMENDMENT NO. 607, AS MODIFIED

Mr. WARNER. Mr. President, I ask unanimous consent that Senator KYL's amendment be modified as indicated in the modification, which I now send to the desk, numbered 607.

Mr. LEVIN. Mr. President, let me ask a parliamentary inquiry.