will not delay in scheduling the additional hearings we need to hold to consider the fine men and women whom the President has nominated to fill these important positions.

Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. GORTON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

RECESS

Mr. GORTON. Mr. President, I ask unanimous consent that the Senate now stand in recess under the previous order.

There being no objection, the Senate, at 12:29 p.m., recessed until 2:15 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer (Mr. COATS).

Mr. LOTT. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. BOND. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND INDEPENDENT AGENCIES APPROPRIATIONS ACT, 1999

Mr. BOND. I ask unanimous consent that the Senate now resume consideration of the VA–HUD appropriations bill.

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

The clerk will report.

The legislative clerk read as follows:

A bill (S. 2168) making appropriations for the Department of Veterans Affairs and Housing and Urban Development, and for sundry independent agencies, commissions, corporations, and offices for the fiscal year ending September 30, 1999.

The Senate resumed consideration of the bill.

Mr. BOND. Mr. President, I think the distinguished Senator from Arkansas is ready to proceed with an amendment.

The PRESIDING OFFICER. The Senator from Arkansas.

AMENDMENT NO. 3062

(Purpose: To terminate the Space Station and provide additional funding for veterans and low-income housing)

Mr. BUMPERS. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

The Senator from Arkansas [Mr. BUMPERS], for himself, Mr. BRYAN, Mr. WELLSTONE, Mr. HUTCHINSON, Mr. LEAHY, Mr. KOHL, Mr. WYDEN, Mr. FEINGOLD and Mr. DURBIN, proposes an amendment numbered 3062.

Mr. BUMPERS. Mr. President, I ask unanimous consent reading of the amendment be dispensed with.

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

The amendment is as follows:

Strike line 21 on page 76 through line 4 on page 77 and insert the following:

''For termination of the International Space Station project, $850,000,000. In addition to the other provisions of this Act, $1,000,000,000 shall be available for the Veterans Health Administration Medical Care account and $450,000,000 shall be available for the Housing Certificate Fund account within the Department of Housing and Urban Development's budget.''

Mr. BUMPERS. Mr. President, this will be the eighth year that I have stood here and debated whether or not America should go forward with a space station. I didn't like the idea of the Space Station *Freedom*, but it was probably a bargain compared to what the International Space Station is turning out to be.

First, I would like to pose a question to my colleagues: Why is it that we continue to fund a program called the International Space Station, when every cellular biologist, every medical researcher, and every physicist in America who isn't involved in the program itself is vehemently opposed to it? These are some of the most brilliant people in America. Before we start off spending $100 billion, we ought to ask ourselves, Why are they opposed? Well, for very good reasons, and I will come back to those in just a minute.

It is a mystery that here in Congress we talk seriously about a program which in the last 3 years has become almost laughable. If it weren't so serious and the amount of money so enormous, it would be almost a comedy—a comedy of errors.

The cost began to spiral in 1996—maybe before that, but that was the first time we really knew it. The Russians have had space stations up for almost 30 years. The Mir is the seventh space station that the Russians have had up since 1971. And what do they have to show for it? Absolutely nothing.

In a little while, I will come back and quote some of the top Nobel Prize winners, some of the top physicists in America, cellular biologists—you name it. I will come back and quote several of them and what they have had to say about the space station as a research vehicle.

Now, you should bear in mind throughout this debate that when you talk about research on the space station, there is only one reason—one reason—you have to believe that the kind of research we are going to do, which NASA says will cure ingrown toenails, warts, cancer, sties—it will cure everything—you have to believe that research of whatever kind—mostly medical, and some of it molecular biology—but you have to believe that something happens in a microgravity situation that you can't emulate on earth, and not only is something going to happen in a microgravity situation, but it is going to be good. Again, I will come back to what the top scientists in this country have to say about it. But right now I will quote Professor Bloembergen, who is a top physicist at Harvard University. When he was President of the American Physical Society, which consists of 40,000 physicists, and, he summed it up when he said, ''microgravity is of micro importance.''

JOHN GLENN came to the Senate with me. We developed a warm friendship the first day we met and we have remained friends. I consider him one of my dearest friends, except when I bring this amendment up. But Senator GLENN is not going to deny that about all you get out of this is whatever you can get from microgravity research that can be emulated on earth; but there is no need to emulate it on earth. You are going to hear all this business about gallium arsenide crystals, which is ''bunk.'' Even if you could build crystals on the space station, nobody on earth could afford to use them.

Well, Mr. President, why are all these people opposed? Why are the top people on whom we rely for all of our medical research, cellular research—the top scientists in America—why are they outraged by spending $100 billion on one orbiting space station with a crew of, at first three people, and subsequently six or seven people? Why are they outraged? Well, one reason might be that they come up here pleading for money for honest-to-God research every year, and we give them a few shekels and off they go to do the best they can with it.

Think about the National Institutes of Health getting about $13 billion a year, and they do research on everything—honest research. They send out money to every university in the country that has a medical school to do research. Well, if we ever get this thing in space, just the annual operating cost will be enough to fund 6,000 researchers at NIH and universities across America for a year. We are going to have six people on the space station doing what the National Research Council estimates to be 24 hours of research each day, at a cost at which we could hire 6,000 researchers on earth.

Do you want to hear another one? Once we get it deployed, we are going to leave it in space for 10 years. You multiply the man-hours by 10 years that we are going to get in research, and if you don't just divide the annual operating costs, which, as I said a moment ago, would produce 6,000 researchers on earth, but divide it into the entire $100 billion cost, which is a legitimate thing to do because, after all, we are spending $100 billion to put the space station up and do research—whether you are going to build crystals or cure ingrown toenails, it is all research. But when you do that, the cost

of each man-hour of research on the space station is $11.5 million per hour.

Now, if that doesn't stagger people, what would? Here we starve the National Institutes of Health, we starve the Food and Drug Administration, we starve the Centers for Disease Control, and we are embarking on a program that will cost $100 billion, which translates into $11.5 million for every hour of research that will be done on that thing over a 10-year period. So can you see why I raise my voice? I can't believe it. It is so patently absurd and outrageous. And the ordinary layman in America thinks the space station is a pretty good idea. The Russians did it, why shouldn't we?

But let's go to the original promises. Mr. President, not only are all of the scientists in America opposed to it, I will give you another reason that Congress ought to be opposed to it. It is because we have just had one broken promise after another from NASA. My good friend from Ohio has heard me say this many times. Let me get this off my conscience right now. I believe in NASA and I believe in the space program. I thought the Mars Pathfinder Program was wonderful. We sent an unmanned rover to Mars, and it took magnificent pictures and sent them back to earth. It gave us a much, much better comprehension, for whatever it may be worth, of what is on Mars. So I want everybody to understand that this is not an anti-NASA speech or amendment; this is an antispace station amendment.

In September 1993, there was a solemn promise that was made to Congress and, therefore, to the American people. This is what a briefing paper on NASA's Web site says:

> In September 1993, a program implementation program called PIP had been developed in the baseline for the new International Space Station. The plan was coordinated with and agreed to by all existing partners. Based on this PIP, NASA reached agreement with the Clinton administration and with Congress that the International Space Station would be implemented with a flat budget of $2.1 billion a year.

Let me indelibly ingrain that on your brain. NASA said we will do this for $2.1 billion a year.

And we will build it. Bear in mind, there are three stages: Building it, deploying it, and operating it. The NASA briefing paper goes on to say:

> NASA promised that the program would remain on schedule and within the annual $2.1 billion and the runout $17.4 billion budget and that no additional funds will be sought. In exchange the program will be required to redesign and rescope the station.

A solemn promise of $2.1 billion. But, as they say, something happened on the way to the forum. We are now up to $98 billion-plus and heading north.

They also promised us that this thing would be finished by June of 2002. Again, something happened on the way to the forum. I will come back to that in just a moment.

But we should have noticed back in 1996. If we had been paying attention in 1996, we would have known that something was happening. Precisely what was happening was, NASA transferred $235 billion from other programs within NASA to the space station. They did that with the approval of the appropriate committees of Congress here. I assume it was the Commerce and Appropriations Committees. But what else did they do? They then changed their accounting system so they could transfer another $100 million over to the space station. That $300 million didn't count against the $17.4 billion that the cost of this thing was supposed to be. It didn't count against the $2.1 billion they promised they would use every year and not ask for more.

In 1997, guess what. The same song, second verse. In 1997, they transferred $200 million from the shuttle program to the space station because they had decided that Russia was not going to be able to come through with its part of the bargain their very first component—building the service module. They decided they might have to build it. So they transferred $200 million from the shuttle program to build what they call an interim control module. Then they again transferred $100 million from other accounts—mostly scientific accounts.

So we are not going to get as much science as we planned, because they have already taken $100 million of that out, and this $300 million did not count against the annual $2.1 billion appropriations.

Then in a hearing before the Senate Commerce Committee last year—I think it was in May—Boeing, the prime contractor, and NASA both appeared before the Senate Commerce Committee. Boeing said, in a rare admission, that it their part of the program was going to cost $600 million more than we anticipated. That didn't include the $600 million that had already been transferred by NASA from other accounts. NASA said that is true. But in that same hearing, they said the figure was not going to be $600 million in cost overrun, it would be $817 million. They also said in 1998 that they are going to need still another $430 million extra.

I mean we are getting bombarded by transfers from other accounts, transfers with and without the permission of Congress, admitted cost overruns of $817 million on top of that. And we are going to need another $430 million in 1998.

So, Mr. President, the thing is beginning to sort of roll out of control. And Dan Goldin, Administrator of NASA, takes the extra precaution, with, I think, a little prodding by Congress, to appoint a task force to look into this whole thing. He made Jay Chabrow, one of the premier space technology analysts in America, chairman of what is called the Chabrow Commission. They were formulated, I think, and appointed in September and went to work in November. And on April 15, 1998, they came back to the Congress and to NASA and said that the $21.3 billion that NASA admitted the station would cost in its FY 1999 budget was not enough. I should have mentioned that before. In their budget for 1999 NASA admitted that the space station was not going to cost $17.4 but, rather, $21.3 billion. They wish.

Jay Chabrow, in whom Dan Goldin obviously put a great deal of confidence, comes back and says, ''Would you believe $24.7 billion?'' That is a $7.3 billion overrun—43 percent—just to build it on the ground before we have put the first piece of hardware in space. Chabrow went ahead to say you are not going to finish it in the year 2002. It is going to take 10 to 38 months longer to deploy the space station than you have been admitted, more likely 2 years. So, instead of the year 2003, it is going to be finished in late 2005, or early 2006 at best.

Do you know what those kinds of delays mean in a program like this? Billions. If this had been anybody other than somebody like Jay Chabrow, with the credibility and reputation he has, everybody could have swatted it like a fly. But you cannot ignore this prestigious commission.

Do you know what else? The Chabrow Commission went ahead to say this $7.3 billion overrun assumes that the Russians, our big partner in the space station, will perform on time.

Mr. President, let's go to the next stage, deploying the space station. It is going to take, according to the latest figures from NASA, about 83 launches to deploy it. That means taking all of these parts into space over the period of the next 63 months, putting them together in space, and becoming what we call the International Space Station. When Jay Chabrow's commission said the cost overrun is going to be $7.3 billion, he went ahead to say ''if the Russians fulfill their part of this bargain.'' The Russians were scheduled to deploy the service module—a very important element in the space station—April 1998. Then it was going to be December 1998. Now we are up to April 1999.

Do you know what those delays do? They cost billions.

Do you know something else? Colleagues, let me ask you. Do you think the Russians can fulfill their part of this program? The Russians, who just barely have enough money to get a rescue team up to the Mir and rescue them, and whose electricity has been cut off at their primary cosmodrome at Baikonur. The electricity has been cut off because they won't pay their bills, and the reason they don't pay their bills is that they do not have the money. The reason they don't have the money is that the central government doesn't have the money to send to the Russian Space Agency.

The Russians are our partners. I feel sorry for them. This statement is not intended to condemn the Russians. But to think that we are gambling $100 billion on assuming that the Russians will provide 49 of the 83 launches it is going to take to put this thing in orbit.

We are depending on the Russians to do that? Do you remember when the Vice President went over to talk to Chernomyrdin and Chernomyrdin told the Vice President not to worry, that the money is going to be coming?

The money did not come. The money has not come.

Now, Mr. President, there is one admission I want to make right now. I would tell Daniel Goldin and the administration at NASA, forget Russia. I don't know what it is going to cost for the United States to assume its share of this burden, but whatever it is will be less than waiting for them to perform. They cannot perform. It is sad, and I am sorry, but the Russians are not going to be able to hold up their share of the bargain.

The European Space Agency—I think there are 14 countries in the European Space Agency—is in this, and you are going to hear all these loud laments: We can't quit now; it is an international project.

It is an international project with the United States putting up $100 billion and everybody else putting up $15 billion. The French are members of the European Space Agency. They have a very clever Space Minister, Claude Allegre. Do you know what he said? ''It is time to get out. This was a mistake.'' He went ahead to say, ''People often do stupid things. There is no rule that says we have to applaud them.''

They are in for 27 percent of the European Space Agency's share, which is around $9 billion to $10 billion, and they want out. They do not want to hear all these patriotic songs on the Senate floor about how this international cooperation is just wonderful. They want to save their 27 percent and get out while the getting is good. And as Claude Allegre, the Space Minister, said, ''I have never seen any research that would justify this kind of expenditure.''

Mr. President, some studies have been done which indicate that even if Russia could perform right on time, out of those 83 launches, 5 of the Russian launches could be failures under the best of circumstances—5 of those launches would be failures and 1 United States launch would be a failure.

In addition there will be launch delays. You have a 5-minute window. Senator GLENN is familiar with all of this. You have a 5-minute window to launch those things. If you don't do it in the 5 minutes, Lord knows how long you have to wait. To assume that 83 launches to just get this thing into orbit are going to go off without a hitch, without a flaw, is naive and simplistic in the extreme.

Going back to NASA's promises, in 1993, they said that in order to assemble this thing in space, it is going to require our astronauts to engage in what they called ''extravehicular activity,'' space walks for short, and it will take 434 man-hours, 434 man-hours of space walking to assemble this thing.

In 1995, they said, no, it is going to take 888, a little over twice as many as we first said. In 1996, they said, no, it is going to take 1,104 hours of space walking. In 1997, in April, they said, no, it is going to take 1,520 hours. And in December of 1997, they said, no, it is going to take 1,729 hours. There is a nice, solid 400-percent increase or, if you choose, a 400-percent mistake.

Mr. President, we ought to expect something as a return on our investment. We send our children and grandchildren, our most precious possessions, off to school every morning. All of us got teary-eyed as we sent our children off to school the first time. And incidentally, we sent them for 7 or 8 hours that day to be with a teacher who was going to have almost as much, and possibly more, influence on that child than the parents.

How many debates have you heard in this Chamber about how the school buildings in this country are deteriorating? And how many debates have you heard about how we have to lower the size of the classes? Incidentally, that is a lot bigger issue. I haven't had any children in school in some time. I have grandchildren, and one of my daughters-in-law told me the other day my grandson was in a class with 34 students, and that is not extraordinary; that is fairly common, even though every educator will tell you anytime a classroom is bigger than 20 students, the chances of that child getting a decent education go down dramatically. Twenty is the optimum size for classrooms. So we wail endlessly on the floor of the Senate about our commitment to the education of these children, to teachers. That teacher to whom we send our child off to be with 7, 8 hours a day in my State, his or her entry level salary is in the $20- to $25,000 range.

Just as an aside—this doesn't cost anybody anything— if I were President Clinton, I would tell the American people I hope to raise teacher's salaries to $50,000 a year. I married a schoolteacher, and I can tell you categorically it is the roughest, toughest job in America. I would work for the Washington sanitation department before I would teach elementary and secondary education. And we pay tribute to them but we don't pay them money.

Around here you hear all of these things. When we were marking the Agriculture Appropriations bill, virtually every Member of the Senate came to Senator COCHRAN or me or both saying, please, help me with this little project back home; we just need $400,000 for this; if we could just get $1.5 million for that. Do you know what Senator COCHRAN and I were dealing with? A budget that was $1 billion less than last year, a little over $13 billion for the whole Agriculture Department of America. This cost overrun just to build the space station on Earth would fund 50 percent of the agriculture budget. Think what it would do to send children to college. Think what it would do to improve teacher's salaries. We tried to appropriate $5 billion to upgrade the classrooms in this country. And we are talking about a $7.3 billion overrun here.

Well, you trust the teacher with your child because oftentimes it is a joy to do it and sometimes because you have to.

I started off this debate by saying that Congress is arrogating to itself a knowledge it does not possess as to what kind of research is likely to go on on the space station. If you think it can only happen on a space station, or if you think there is something peculiar about microgravity that we have to do all of this research in a vacuum, let me read to you, at the expense of boring you to tears, a few quotes.

Here is Dr. Ursula Goodenough, a cell biologist from the University of Washington and past president of the American Society for Cell Biology. She wrote to Dan Goldin, the administrator of NASA, and said:

> The frontier of microgravity never did interest first-rate scientists, physical or biological. And this is all the more true now that it is clear that nothing of any real interest has emerged from the many in-flight studies on the effects of microgravity on this or that.

John Pike, of the American Federation of Scientists:

> As soon as the most visible justification for piloted space craft becomes science, you got BS detectors going off all over America.

Here is Marcia Smith. Marcia Smith is with the Congressional Research Service and probably knows as much or more about space than any person in America. She has done a report that is very current, issued in the month of July, that before any Senator votes to continue spending up to $100 billion or $150 billion, that Senator ought to read. Here is what she said in a publication in 1995:

> I don't know of any breakthroughs that have come out of Russian space station programs in terms of new or cheaper-to-produce materials or scientific discoveries. Mostly, they have learned how to operate a space station for longer periods of time.

Longer periods of time—nothing in there about cancer, AIDS, myopia—nothing. They say the Russians have had space stations up for almost 30 years, Mir being the last one, and what have they learned? They have learned how to keep space stations up for longer periods of time.

Here is a quote from Tim Beardsley, Scientific American. He, in turn, is quoting Elliott C. Levinthal, a former program director of the Defense Advanced Research Projects Agency. And he says:

> Levinthal, who has been a professor of genetics and mechanical engineering at Stanford University, asserts that no neutral committee handing out funds for basic research in biology would support microgravity studies.

James Ferris, Rensselaer Polytechnic Institute, June, 1996:

> Nothing has come out of microgravity research to convince me that a material can be fabricated in orbit that is going to be better than what you can make on Earth.

Why are we spending $150 billion if you believe that?

Here is Dr. James Van Allen. Did you ever hear of the Van Allen radiation belt? One and the same person.

With the benefit of over three decades in space flight, it is now clear that the conduct of scientific and applicational missions in space by human crews is of very limited value.

He goes on to say:

For almost all scientific and utilitarian purposes a human crew in space is neither necessary nor significantly useful.

That is pretty powerful stuff from a man like Van Allen, isn't it—not necessary or useful?

Here is Dr. Allen Bromley, Presidential Science Adviser, March 11, 1991, in a letter to the Vice President:

The space station is needed to find means of maintaining human life during long space flights. This is the only scientific justification, in our view, and all future design efforts should be focused on this one purpose.

That is George Bush's Vice President, Dan Quayle. That is back before AL GORE and Bill Clinton. And Dr. Bromley is writing to the Vice President, saying bear in mind that the only scientific justification should be focused on one purpose and that is maintaining human life during long flights.

The American College of Physicians—medical doctors. The American College of Physicians:

We agree that much, if not all, of the money slated for the space station, the superconducting super collider, SDI, and for Defense Intelligence could be better spent on improving the health of our citizens, stimulating economic growth, and reducing the deficit.

That was in 1992 when people thought the deficit was absolutely out of control and so was Congress. And sometimes I wonder about Congress today, when I see us appropriating money to keep this thing going.

Here is one from the American Physical Society, all the physicists in America:

The principal scientific mission of the station is to study the effects on humans of prolonged exposure to a space environment.

Listen to this:

Medical researchers scoff at claims that these studies might lead to cures for disease on Earth.

Why, you are going to hear all these things about, ''We don't know what is up there; we have to go up there and find out.'' We have been going up there for 30 years. We have been in space for 30 years. The space station will keep us there longer, but we have been there before.

On cancer research—that is one of the things you always hear about, cancer research. Everybody deplores and is so frightened of cancer and AIDS and other terminal diseases like that. All you have to do is throw ''cancer research'' out and you can have all the money you want. And here is what Dr. David Rosenthal at the Harvard Medical School said on behalf of the American Cancer Society:

We cannot find valid scientific justification for these claims and believe it is unrealistic to base a decision on funding the space station on that information. . . . Based on the information we have seen thus far, we do not agree that a strong case has been made for choosing to do cancer research in space over critically needed research [right] here on Earth.

Mr. President, I will save some of the other quotes. I know it gets a little tiresome listening to somebody read on the Senate floor. I get a little wrought-up in debating this issue. But you show me somebody who can't get wrought-up over an issue and he ought not to be on the floor of the Senate. If you don't feel strongly enough about it to get excited and agitated about it, maybe you should not offer it in the first place.

This is my last year in the Senate. This is my eighth and last effort to kill this program. But this year I am doing something a little different. Of the $2.3 billion we are talking about putting in the program for 1999—I would terminate the space station. It will cost roughly $800 million to terminate it. I would take $1 billion that is left over and put it in veterans medicine. The veterans have been squealing like a pig under a gate about how they have been mistreated this year, and they have been mistreated. If anybody in this body wants to redeem themselves, here is a chance to ingratiate themselves with every veterans organization in this country, who are totally wired to the fact that they have been shorted by the tune of about $1 billion.

So I will put $1 billion of this in veterans programs. And I will put $450 million into low-rent housing. We are doing a magnificent job during this unprecedented era of prosperity; 67 percent of the people in this country own their own homes, or like me, have a fighting interest in one. But people who are poor and people who work that are poor, 60 percent of them spend over 50 percent of their wages on a home, on a house, on rents.

The poor people always get the shaft, don't they? I have always thought they did. If it hadn't been for the Government providing me with the GI bill to go to a prestigious law school, I wouldn't be standing here right now. It was that mean old Government that everybody talks about how terrible it is that gave my brother and me a great education and gave us a fighting chance that we might otherwise not have had.

People don't like to admit it, but the truth of the matter is, most people who make it in this world make it because they had a little luck along the way or because the Government gave them a little hand with an education or a small business loan or some kind of Government assistance. A lot of them, like me, got all three—luck, Government help, and I chose my parents well. Everybody doesn't get that chance. A lot of people do a miserable job of choosing their parents, but they can't help it.

We can help it. We can do something for the least among us. I call on my colleagues for one time to rise above the politics of this. Eighty-five percent of the money goes to Alabama, California, and Texas. The rest don't have that much money in your State to warrant voting a bad vote. Anybody who can't justify a ''no'' vote on the space program doesn't have much business being here. Maybe you feel strongly about it, and I am not going to quarrel about that, but if you are looking for a political justification, anybody who can't justify voting to kill that thing has no business being in the debate on the floor of the Senate.

Mr. President, I yield the floor.

Mr. GLENN addressed the Chair.

The PRESIDING OFFICER (Mr. KEMPTHORNE). The Senator from Ohio.

Mr. GLENN. Mr. President, I have listened very carefully to the statements made by my distinguished colleague from Arkansas, Senator BUMPERS. Some of his statements I agree with, and, obviously, some of them I do not agree with. One I agree with very strongly is, when he and I arrived here together, we became closest friends. He is one of my best friends, if not the best friend, I have in the Senate today. We vote in a very similar fashion on most things. But every year it seems we lock horns on this particular issue. I am sorry that is the case, but I feel as strongly in the other direction with regard to the space station as he does on the other side.

Let me put this in a little larger context perhaps. Let me start out with the big picture of this country and what made this country great, because I have always believed that there is one thing that does set this country apart from other nations around the world.

By the very nature of people coming to this country in the early days and their expansion across the unknown territory that we know today as America, they exhibited a questing curiosity, a questing spirit that led them not only to explore lands and oceans and skies and geography, but also to do not just the macro exploration, but the micro exploration in laboratories, classrooms of our Nation, and express our curiosity in learning new things. And that is at the heart of science. The heart of science is learning the new and putting it to use in ways to better our lives and understanding of the world around us—indeed, the universe around us.

This questing spirit is at the heart of our history, from those first settlers who landed on our rocky shores, to Lewis and Clark pushing into hostile lands west of the Mississippi, to Thomas Edison and the electric light, to the Wright brothers struggling to break the bond of gravity, to the past and present-day pioneers in our country's space program.

Along the way, there have always been plenty of doubters about our efforts to explore, to learn the new. There have always been those who said, ''Well, we haven't solved all of our problems yet, so we should spend our

money on the here and now until we get those answers and never look into other new areas; don't waste money on what might be.''

There have been plenty of doubters about our efforts to explore the new, and one of the most famous is one I have quoted on this floor before, a distinguished orator and Senator, Daniel Webster.

Daniel Webster used to get very impassioned. All you have to do is see the desk on the other side of the aisle which is always reserved for the senior Senator from New Hampshire. That is the only desk in the U.S. Senate that has a solid top on it. It does not raise. It does not have hinges. That is because Daniel Webster became so impassioned on the Senate floor, he used to bang so hard on the desks during his speeches, that he broke the tops of the desks. They finally got so tired of replacing the tops that they put on a solid top of additional thickness so he couldn't break it. That is how impassioned he became about some of the matters in which he believed.

He rose in the Senate when our Government was considering buying lands west of the Mississippi from Spain and Mexico, lands that now make up more than half of the area mass of today's United States. Daniel Webster would rise during floor debate to say words to the effect of these: ''What use can this area west of the Mississippi be, this area of cactus and prairie dogs, of blowing sand, mountains of snow, impenetrable snow to their very base? Mr. President, I will not vote one cent from the public Treasury to move the Pacific one inch closer to Boston than it now is.''

We can see in the past we have had some of our greatest statesmen who have taken a rather myopic view of branching out and looking into the new and unknown. The Wright brothers faced their skeptics, too. Some people said at that time that if God wanted us to fly, God would have made feathers on us so we could fly. Yet, their curiosity and persistence led to airplanes and the aviation industry and really have changed the nature of the world and commerce and how we do business over this Earth.

I hate to say we face reincarnation of some of those skeptics when debating our space program. I think people who take some of these views are just as misled as Daniel Webster and critics of the Wright brothers were years ago. Each year they ask, ''Why do we invest billions of taxpayers' dollars for space exploration and research''—even though it does have a great promise, which I will go into in a few moments—''while we still have other problems right here on Earth we haven't solved? It is not just exploring the West. So why do we put new money into research and laboratories when we haven't solved the problems on which we are already working?''

You can look at the macro research or micro research area, either one. We do research for one reason, and I can give a short answer for that: We do it to benefit people right here on Earth and to address those very problems they raise, and that has been true ever since I was involved in the space program many years ago during Project Mercury, and it is true today.

I cannot think of one area of our society, whether it is communications or transportation or medicine, manufacturing, agriculture, the environment, education—that has not demonstrably benefited from our space program.

I know my distinguished colleague from Arkansas, Senator BUMPERS, will say he is not against the space program—and that is true, he is not, he votes for it—that he is just against the space station. Yet, the space station, to my mind, is one of the most preeminent examples of where we stand the potential of benefits for the future beyond anything we can foresee at the outset right now. That is the nature of basic research. That is the nature of geographical research and exploration or research in laboratories.

This year, as in years past, we will debate what the benefits are of the International Space Station. Fortunately, we have continued to fund the space station. I think it is one of the greatest cooperative scientific enterprises in the history of this world—in fact, the greatest. A total of 16 nations have teamed up to launch the most ambitious technical undertaking known to man. The first components will be launched later this year. As a matter of fact, the scheduled date is December 3 when the first U.S. node will be put up. The Russians will their first component, the Functioning Cargo Block on November 20.

The station will be a laboratory in permanent orbit. Much of its research will be a continuation of work currently being done on the shuttle, which is more limited as a research facility because of several things, including space available inside it, and because of technical considerations and the length of time it can be in space. That is the main one, the length of time that it can actually stay in orbit.

Let me go into a little bit about some of this research that I do believe is important. We had a recent set of experiments called Neurolab in April of this year. It was started on the shuttle and will be continued on the space station to a greater extent. It will deal with probably the greatest single frontier, the greatest unknown, the greatest area for potential advancement of anything we could think about, and that is a study of our human brain and our nervous system and how they operate. It can't be much more important than that. That is the part of the human body that is most complex and least understood by scientists.

Neurolab flew this past April carrying seven astronauts and a whole host of different animals. It is NASA's view that it is the most complex and scientifically sophisticated research mission they have ever flown. Researchers used state-of-the-art techniques and technologies to gather information about how the nervous system's control of various body functions changes in the microgravity of space and how gravity influences the development of our nervous system right here on Earth—trying to get an insight from the lack of gravity as to how these whole systems work.

A Neurolab lab performed research in the area of our vestibular system, balance; cardiovascular functions; spatial orientation and development biology; and circadian rhythms. The lay person listening to me recite those might wonder what all these terms involving research with a bunch of astronauts have to do with me right here on Earth. That is a good question. But there are some very ready answers to that.

The vestibular system relates to how the inner ear links to our sense of balance which is disrupted when the astronauts are in microgravity and space. The research lab will help to better understand how balance is disrupted and then restored. Is that of importance here? There are 12.5 million Americans right now over the age of 65 who suffer from balance disorders just as a pure result of the aging process. In fact, balance disorders affect most people at some point in their lives, and hopefully this may give us a new approach to those problems.

Cardiovascular Functions: Blood pressure control is upset in space. Many astronauts faint or become dizzy when they come back to Earth. This ''orthostatic intolerance'' also affects 500,000 Americans. Neurolab's research will be helpful in developing treatments for those who suffer from inadequate regulation of their blood pressure.

Spatial Orientation and Development Biology—that s a big title: Research in this area examines the development of motor skills like walking and manual dexterity. Findings could be helpful in learning how the nervous system connects to motor development, which could have applications in treating children whose motor development is retarded by disease or genetic defect, or for people who are seeking to regain motor function after a stroke or an accident.

Sleep and Circadian Rhythms: Astronauts in space have trouble sleeping. So do millions of Americans, especially older Americans, and those who work night shifts. But trials on Neurolab examine the hormone Melatonin and its efficacy as a sleep aid. For those over 65 in this country, it is estimated about one-third of those people have serious enough sleep problems that it really interferes with their lives. So this may give us a handle on looking into some of those problems.

All of the Neurolab's research is not something NASA just dreams up and says, hey, I think we will put something on this flight that might be a good idea; it looks pretty cool. We will

try that next time out and see what we find out. No, that is not the way it is done. All the research has been peer reviewed and the Neurolab research involved collaboration between NASA and the National Institutes of Health, the Office of Naval Research, and some of the world's leading scientific experts in this area. Neurolab will be continued on the space station in a longer and more sustained way. I think we are only scratching the surface now of what will be learned.

Neurolab is not the only research being done that has benefits right here on Earth. One field of research we have talked about on the floor before that I find most intriguing and I know this is denigrated somewhat as being sort of esoteric, but it is anything but that. It is very important. That is protein crystal growth in space. Most people are probably not aware—outside of the medical profession, that is—most people are probably not aware of the importance of protein crystals or proteins in our bodies and the fact that in space there is a big difference.

Contrary to what was said on the floor a few moments ago, there are differences in microgravity, there are differences in ''zero-G'' as to the kind of research you can do. You can't do all these things on Earth. In space, the protein crystals grow to a larger size and a greater purity than anything you can do here on Earth because of disruption caused by gravity. Research going on now with drug companies is fascinating and it brings a whole new input to medicine, to the thousands of different proteins and combinations that make up our bodies and literally stands to transform the way medicine looks at itself and the way we treat disease and what we can do with regard to immunities by these things we are learning from changes in protein crystal growth in space. Some of our leading drug manufacturers are cooperating very, very closely in that particular area.

Let me give an example dealing with the treatment of flu. The flu remedy is being developed with space-grown crystals where you can find out how the flu bug itself reacts. As far as flu is concerned, the loss of productivity due to flu is staggering—with some estimates as high as $20 billion a year that it costs our economy—with the high mutation rates of the flu virus. New data from the protein crystals grown in space and on Earth appear to unlock some of the secrets of the flu bug and reveal its Achilles' heel. This gets rather technical, but the secret lies in a small molecule attached to the host cell surface and each flu virus, no matter what strain, must remove this small molecule to escape the host cell to spread infection. But using data from space and space-grown crystals, researchers from the Center for Macromolecular Crystallography are designing drugs to bind with this protein's site. In other words, they lock on this site, and this lock and key reduces the spread of flu in the body by blocking its escape route.

I think that is fascinating. It gets a little technical for discussion on the Senate floor, again, but for critics to say there is no benefit coming from this research is just not right. These are very, very promising medical breakthroughs that are coming from the fact that we can grow protein crystals in space of far greater purity and size than we can here on Earth in a one-G environment.

The Center for Macromolecular Crystallography, in collaboration with a private sector affiliate, has developed several potent inhibitors of viral influenza. It is anticipated that phase I human trials will begin this year. This is an excellent example of the kind of research in our space program that has direct relevance to us here on Earth. We have 20 to 40 million people every year that get the flu, causing some 20,000 deaths a year in the U.S. alone. This new data on space-grown crystals has helped unlock a secret to let us treat flu in a different way. That is just one example.

Another benefit from these same kind of space-grown crystals is trauma from open-heart surgery that can lead to complications due to massive inflammation of heart tissue. Factor D plays a key role in the biological steps that activate the immune response. Being able to block factor D's effects could enable heart-surgery patients to recover more rapidly, and data from space-grown crystals allowed researchers to develop inhibitors which specifically block factor D. The industrial partner for these activities recently received approval to start human clinical trials.

Another example is space crystals in the fight on AIDS. A new combination of drugs, including protease inhibitors, has proven immensely successful in treating AIDS. In an ongoing experiment with DuPont Merck, NASA has crystallized HIV protease enzymes with an inhibitor to support structure-based drug design research. This may be a successful second generation approach to treat this disease.

A final example: the CMC has determined the structure of NAD synthetase, a protein found in all bacteria. Several leading drug candidates have been developed that have shown positive effects against E. coli, salmonella, strep pneumonia and tuberculosis.

Think how helpful these discoveries might be. On E. coli alone, we have all become unfortunately aware in the last couple of years of its breakout in tainted meat and the resulting illnesses and deaths in many children across the country.

Protein crystal growth is only one field of research which has already benefited from access to space. Another area of research which shows great potential is advanced cell culture research. Researchers will take advantage of the weightless environment of space to study tissues as they grow and develop in three dimensions without settling to the bottom of the vessel. The rotating wall bioreactor, developed by NASA to mimic this capability on the ground is already finding wide application in medical research here on Earth. The bioreactor has the potential for changing disease treatment through tissue transplants.

Forthcoming experiments plan to grow human pancreatic islet cells in the bioreactor for possible transplantation into diabetic patients. If the upcoming experiments are successful, diabetic patients will not need to rely as heavily on insulin injections and will have less complications from their disease.

Another example: Modeling colon cancer with bioreactor. Mr. President, 166,000 cases of colon cancer are diagnosed each year in the United States, and it is one of the leading causes of death. Colon cancer tissue grown in a bioreactor develops remarkably similar to tumors extracted from humans. Studying these tissues outside the human body may allow researchers to understand how cancer spreads, as well as identifying new therapies which may prevent it.

This bioreactor is a marvelous thing. It lets tissues be cultured in the same way they occur in the human body. If you go into a laboratory and try to do experiments there, quite often the experiment becomes two-dimensional because it wants to settle to the bottom of the petri dish. A bioreactor in space, with all the right fluids that simulate the body, allows growth in a 3-D situation. They can be studied better so possible treatments can be put into a culture that is very similar to what occurs in the human body.

Growing cartilage with the bioreactor is another potential application. An application of the bioreactor is culturing cartilage tissue for replacement and transplantation. Experiments with the bioreactor indicate it can successfully culture cartilage tissue that is quite similar to human cartilage.

I use these few examples today just to illustrate how relevant this research is to our future on Earth. The international space station will make it possible to continue some of the same experiments for longer periods of time. A longer duration of time is absolutely critical for the success of many of these experiments.

In this regard, I quote a friend and one of the most respected surgeons in this country—as a matter of fact, in the world—Dr. Michael DeBakey, chancellor and chairman of the department of surgery, Baylor College of Medicine, who said:

> The space station is not a luxury any more than a medical research center at Baylor College of Medicine is a luxury. Present technology on the shuttle allows for stays in space of only about 2 weeks. We do not limit medical researchers to only a few hours in the laboratory and expect cures for cancer. We need much longer missions in space—in months to years—to obtain research results that may lead to the development of new knowledge and breakthroughs.

NASA has already had some 1,000 or more proposals per year for ground-based and flight investigations involving precursor research for the International Space Station project. Selection of principal investigators and commercial developers is beginning this year for limited flight opportunities starting in 1999, and this population will increase from 650 to 900 principal investigators and from 100 to 200 industrial affiliates by the time the station assembly is complete.

About 650 life and microgravity sciences principal investigators are now participating at over 100 institutions of higher learning around the country, and the number of investigators is expected to grow to over 900 before assembly is completed. These researchers, in turn, employ about 1,400 graduate students at present, with that number expected to grow.

What are they looking into? Well, a number of different areas, and I won't be able to go into all of them today. Biotechnology with an x-ray diffraction system, for instance. Microgravity allows researchers to produce superior protein crystals, which I mentioned a moment ago, for drug development and to grow three-dimensional tissues, including cancer tumors, for research and cartilage for possible transplant.

Another area that can be looked into on the international space station also is in the area of materials science. Researchers use low gravity to advance our understanding of the relationships among the structure, the processing and the properties of physical materials.

The long-term benefits: We advance the understanding of processes for manufacturing semiconductors, metals, ceramics, polymers, and other materials. We also determine fundamental physical properties of molten metal, semiconductors, and other materials with precision impossible on Earth.

Another area being looked into, and this too is a fascinating one, is combustion science. Scientists are using low gravity to simplify the study of complex combustion processes, burning processes. Since combustion is used to produce 85 percent of Earth's energy, even small improvements in efficiency will have large environmental and economic benefits.

Now, that is an interesting one because if you light a candle in space, you don't have the flame standing up. There is no convection current, no rise of air from heating. It gathers in a mass around that burning area. So it enables combustion to be studied in ways that were never possible before.

These are only highlights of some of the prestation research that have already occurred. Dr. Robert Cheng and Dr. Larry Kostiuk, combustion science researchers at Lawrence Berkeley National Laboratory under contract to NASA, were awarded a patent for a ring flame stabilizer, which significantly reduces pollution from natural gas burners. Fitted into an off-the-shelf home heating surface, the device from natural gas burners. Fitted into an off-the-shelf home hearting surface, the device reduces nitrogen oxide emissions by a factor of 10 by increasing efficiency by 2 percent, and the device can be readily sized to industrial scales. That kind of experiment will continue on the space station.

Furthermore, the international space station will continue research into fundamental physics. Scientists use low gravity to test fundamental theories of physics with degrees of accuracy that far exceed the capacity of earthbound science. Physics and low gravity expand our understanding of changes in the state of matter, including those changes responsible for high-temperature superconductivity.

Scientists will study gravity's influence on the development, the growth and the internal processes of plants and animals, and their results will expand fundamental knowledge to benefit medical, agricultural, and other industries.

In that regard, on plant studies, I sat in a classroom at Houston during some of the training I have been doing there just last week. One of the experiments was explained. We will have growth of certain seeds and exactly how they differ in growth patterns in microgravity was assessed, and the different tissue that makes up these plant cells will be a subject of study on the flight that I will be on in October of this year. We were learning how to go about getting those samples, preserve them and bring them back to earth so they can be studied here.

Furthermore, the space station will be a unique platform from which to observe the Earth and the universe. That is planned with Earth Observation and Space Science, the Alpha Magnetic Spectrometer, and SAGE to be deployed in 2001. This research will further expand our knowledge of the solar system and beyond, as well as of the Earth itself.

I cite these examples to briefly indicate what a wide variety of scientific effort will go on with the international space station. There will undoubtedly be many unintended or ''spin-off'' benefits as well, especially if NASA's past record in this area is of any indication. There have been over 30,000 different spin-off benefits from our space program since its inception. I'd like to give just one of the latest examples that is highlighted in NASA's publication Spinoff 97. Several years ago, the agency developed a highly sensitive infrared detector, otherwise known as a QWIP, to observe the plume created by the shuttle when it is launched. Subsequently, QWIPs have been modified for use for other applications. They were used to track the Malibu fires in 1996 and served as an early warning system on hot spots not visible to the naked eye from the air. Recently, a QWIP was tested by surgeons at the Texas Heart Institute to see which arteries are carrying blood during heart surgery.

Now, let me address these next remarks about something that happens to all of us. As much as some might wish otherwise, there is no cure for the common birthday and as we advance in years our bodies start to change as we age. So research of the aging process has a direct relevance to all of us.

For several years now, NASA and the National Institute of Aging, which is part of the NIH, were working on a project looking at what happens to astronauts in space. I have been personally involved with this over the last several years. I will be flying as a test subject on board the space shuttle Discovery later this year, due to be launched October 29. Let me address how this whole thing came about because I think it is of interest and will be of interest to so many Americans that are in their senior years. Back about 3 years ago, I was looking at some of the results of what happens to the human body in space. NASA has been able to chart, through the years, over 50 changes that occur in the human body in space. Cardiovascular changes, osteoporosis, muscle system changes, coordination, immune system changes—things like that—sleep pattern changes, it seemed to me as I read the list as I was getting ready for debate on the Senate floor at that time—as we do every year—it seemed to me, when I read this list, that there are several things that appear to be part of the natural process of aging right here on Earth. I talked to some of the doctors over at NASA, and they said they noticed some of those things. But we didn't have any projects to go ahead research these observations. So I went out and talked to the people at the National Institutes of Aging who said yes, they noticed some of the same changes and thought that sometime we ought to look into it.

I looked at these changes. I was able to take the Merck manual on geriatrics, the handbook that most doctors have on their desks in their offices, and go back through and chart the different things where there is a special process that occurs just from aging, and a similar thing occurs with the younger astronauts in space in a much shorter time period.

Out of that we came up with a number of them: Osteoporosis; cardiovascular changes; orthostatic—the ability of the body to keep blood in the upper part of the body and keep it distributed so the brain keeps functioning; muscle degradation, or deterioration of the muscle systems that change in weightlessness; but also change is part of the natural process of aging right here on Earth; coordination; immune system changes. The body's immune system becomes less responsive for the aged right here on Earth and for younger astronauts in space right now.

Sleep changes: About one-third of our population of those over 65 have very serious sleep problems right here on Earth, as do astronauts in space. The

ability of the body to even take in nutrients and absorb them, drugs and nutrients; changes in space and changes for the elderly here on Earth. Those are a number of things that we noted.

When I talked to people, they thought that we should be establishing a project to look into these things, with the ultimate objective of trying to find out what turns the body's systems on and off in these particular areas, both for astronauts and for the elderly right here on Earth. We have some 34 million Americans right now who are beyond the age of 65. That is due to double by the year 2030 and due to triple to almost 100 million by the year 2050.

So this is an area of growing concern as we have so many more of our people enter some of these areas of frailties of old age. That is what we are trying to look into: What if I as an older person go up into space, and what if my immune system or my reactions are different than those people who are already up there now of a younger age? Will the things happening to them be additive to me, or will I be immune from them because those things may have occurred to me here on Earth as part of the natural process of aging?

This is the kind of research we are trying to look into. We can't look into them all at once. But some of the problems we can look into are some of the muscle system changes. Muscle turnover experiments, which I will take part in, where I will have isotope injections and take blood-urine samples on a regular basis to see what is causing the body to break down its own cells in space, which happens right here on Earth to the elderly; doing a sleep experiment in which I will have on a ''sleep net,'' as it is called, with a net put over the head that has leads over it, which picks up EEG—all the brain waves—picks up rapid eye movement with sensors here, sensors under the chin, a respiration sensor across here, as well as EKG measurements, as well as monitoring deep body core temperatures; swallowing of a pill that transmits the little signal, with temperature accurate to one-tenth of a degree, as recorded on a monitor card around your waist all the time as that pill works its way through your body.

This will be the most comprehensive study of sleep ever made. It will continue what was done on the Neurolab flight where several people were there provided good baseline data. NASA and NIA will now be able to compare data, at least with one person anyway of an older nature, such as myself. We will be able to start this kind of research then, which I think has the potential of being extremely valuable into the future. These are the things that have to be done in zero-G and can't be done right here on Earth.

The ultimate objective is to get a handle on what turns these body systems on and off, which will benefit not only the astronauts up there in space by allowing them to take preventive medicine, before these effects occur but also be used here on Earth to hopefully treat some of the frailties of old age that afflict too many people right here on Earth. We are all familiar with the syndrome of broken bones in the elderly through falling and breaking a hip. If we can learn how to strengthen bones with this kind of study, it would be of tremendous value.

That is what we will be starting some of the research on this fall, in October of this year. I will be a data point of one when we come back from the mission. Some people say we don't learn anything from a data point of one. My response to that is, well, you start to build a data bank with a data point of one.

I hope that through the years NASA will continue this kind of research. I hope we can bring back enough good information that they will continue this research through the years and see the value of this kind of research so it builds the storage of knowledge that we have and I think can be extremely valuable into the future. It can open up a whole new area of NASA and NIA research that will be so important into the future. I am looking forward very, very much to participating in that kind of research, as well as the other things that are going on on board the flight that I will be on.

I think the current number of research projects on STS–95, which will be the flight going up in October, is 83 separate research projects. It is going to keep everybody busy on a very tight timeline all during that flight to even keep up with that amount of research. There will be a tremendous amount of research going on on that particular flight.

I could talk for hours on that subject. I have all sorts of material that I brought to the floor today that I thought I might get to—we don't have time to do it today, but I learned in some of the briefings that NASA had in Houston. I think it would be a tragedy if we didn't continue to fund the space station where this research can be carried out in the future to a far better degree than they have ever been able to be done just on the orbiter itself.

Let me say a few words about the importance of international cooperation in space research.

If you had told me some 36 years ago when I made my flight in 1962—that in 1997 United States astronauts would take up residence on a Russian space station and work together with a Russian crew, I would not have believed it possible. I am a veteran of the cold war and the space race. I guess I could not be more pleased to see this kind of progress. Obviously, there is tremendous symbolic value also when former enemies work together cooperatively. But symbolism isn't the most important reason we cooperate. Again, it gets back to the basic research when we can do it better together working together in laboratories all around the world. Yes, we can.

The quality of research is going to improve if we have the best and brightest from 16 nations working on these various projects. The shuttle-Mir program also was called Phase I of the International Space Station. It is a perfect example of the benefits of such cooperation. The program consisted of nine shuttle-Mir docking missions. The program has helped both the United States and Russia learn countless valuable lessons which will be put to use on the International Space Station.

Just a few of those accomplishments, and I will just read them off: American astronauts had a presence on Mir for 812 days; conducted nine shuttle-Mir docking missions; Russian and American engineers, astronauts and cosmonauts, in performing joint operations, have developed a mutual understanding in these areas, even though we come from different cultures, and that is important for the future. We have learned how to plan and execute typical shuttle missions to station rendezvous and docking, joint ground and mission control, extravehicular activity, exchange of supplies, and on and on.

Most importantly, we are working together on joint research projects. Over 45 different research papers are expected to be published by the end of this year just on the experiments off of Mir. They encompass work on bone loss, bone marrow growth, growth of cancer cells and cartilage, protein to crystal growth research, and measurement of the Earth's magnetic field—a wide range of scientific matters.

They put us in an excellent position for assembly and subsequent operation of the International Space Station with reduced risk, greater confidence, and a reduced learning curve which will save us time and money.

Now, we had a number of charts here on the station. I think in the interest of time I will not put those up right now and take more time for discussion.

To summarize this particular part, we will have for the first time in history 16 nations involved in an International Space Station, cooperating instead of fighting each other. Working together, using the best and brightest of each of these countries to do research is a benefit to people right here on Earth. This is a new model for how people can reach across borders to work together to solve problems common to all mankind. It is truly a monumental and historic effort, and I am proud and honored to be able to support it.

I think there is one other important factor here too that I run into all the time going around the country, and that is—and this is, rather, an intangible benefit. I think our efforts in scientific research in these areas is something that the kids look up to; our young people in school are encouraged to study math and science and to work harder in school. We run into that all the time. We meet with teachers, and we will be doing some discussion from the flight that I will be on this fall. We

will be doing some talking back and forth to Earth in this educational area to hopefully inspire some of our young people in their academic efforts.

Now, the Senate will be debating an amendment that would, if passed, terminate the space station. I hope that the Bumpers amendment will be defeated. I urge my colleagues to oppose it, or any other amendments to cut back or restrict space station funding because I believe the difficult task of building and launching the station is being done in a most cost-effective manner while keeping safety paramount.

I think it is very, very difficult task. This is not like going to Detroit and saying, General Motors, we want to buy 5,000 trucks. What is your cost? And we will know within a dollar what we are going to get them for, and we will probably get them on time without any change in capability. We are dealing in an area that is out on the cutting edge of science, setting up a vehicle that will be used to initiate projects and do research on the cutting edge of science and is less amenable to accurate cost accounting.

I think it is difficult when we say we are expecting NASA to be able to foresee some of the things that have happened such as, for instance, congressional cutbacks in funding from time to time, cutbacks of programs and building up later on, cutbacks again. One estimate by one of the studies was that 80 percent of the overruns of the last few years, where there has been a budget increase, has been caused by that very factor alone. So perhaps we have to look at ourselves here in Congress a little bit as to what caused some of these increases.

This year's cost for the station, $2.3 billion in this particular bill, that is just $30 million above the President's 1999 budget that we are talking about here today. Back years ago, we were talking about a continuing basis of $2.1 billion per year. That is when we thought the total cost was going to be $17.4 billion. So for a scientific project like this, I don't see that that is too far out of line. This is not like going out and buying something that is a commonplace product, off the shelf in this country, or wherever.

It is not true that all scientists are opposed to the station as my colleague stated earlier, and it is not true, I don't think, that NASA has broken their promises. I think they have basically made the best estimates they could, and they have tried to live with them.

So I hope my colleagues will join me in defeating this amendment to terminate the space station because I think it is very valuable for the future. The voting patterns in the past in the Senate have shown that most in the Senate believe that, and I hope it continues today. Most of the hardware is either under construction or actually completed now, and the first nodes will be launched later this year. And we will get it onstream over the next couple of years so that we can start this research that is going to benefit all mankind.

I think one of the best decisions ever made by this country way back in the earliest days of the space program when NASA was just being formed was—the decision was made by Dwight Eisenhower—that our program would be open for the whole world to participate in. And here we are at the end of the cold war participating now with 16 nations in the greatest engineering effort ever made in the history of the world. It is inspiring to our young people. It has the tremendous benefit of a research laboratory we have never been able to have. In all the tens of thousands of years as people looked up and wondered what was up there, and the Wright brothers made the first flight off the surface of the Earth, and ever higher, and now we have the chance to use this for the benefit of all people on the Earth, I think it should continue and I hope my colleagues will vote to defeat this amendment.

I yield the floor.

Mr. BOND addressed the Chair.

The PRESIDING OFFICER. The Senator from Missouri.

Mr. BOND. Mr. President, we are in the process of seeking to reach a time agreement and have the measure set aside for a vote about 6:30. We have not yet cleared the time agreement. I intend to make some remarks now and would want those remarks charged against the time agreement if and when we do reach that time agreement. It is our hope that we will have this vote and be able to take another matter that is very important that Senator McCAIN is going to offer after this and vote on them at 6:30 and thereafter this evening. So for the information of all Senators, that is what we are working on, and we hope to have word from the Cloakrooms shortly.

There are many points that can be made. I certainly appreciate the very knowledgeable comments of our distinguished colleague from Ohio, a man who speaks about space from personal knowledge that none of the rest of us have, and I know that we are all very, very enlightened by his description of the work that could go on, the scientific inquiry that can go on. But I want to address a point that was made earlier, just one of them that I think is very important.

There was a statement made about 1½ hours ago that all scientists in America are opposed to it. Clearly, there are many scientists whose disciplines have not yet identified enhancements that might come from the microgravity environment of space. It is not surprising that many of these scientists would rather see money for science go into one of their disciplines. But taking money away from NASA does not automatically make that money available for other research programs for other Federal agencies.

Let me just indicate some of the scientific groups that have expressed support for the space station. The Federation of American Societies for Experimental Biology has called for a 58-percent increase in funding for NASA's live science research in its annual consensus report.

In a 1997 report, the National Research Council said in something called ''Future Materials Science Research on the International Space Station'':

> The microgravity environment . . . of space provides a unique opportunity to further our understanding of various materials phenomena involving the molten, fluidic, and gaseous states by reducing or eliminating buoyancy-driven convection effects. . . . the anticipated scientific results of microgravity materials-science research range from establishing baselines for fundamental materials processes to generating results of more direct commercial significance.''

I am not sure all of our colleagues understand exactly what they mean, but I get the drift of it, and that is that scientific investigation in space is good and they are going to make breakthroughs in areas that are very important.

The National Research Council further stated, in Microgravity Opportunities for the 1990's:

> Increasingly, fundamental processes that were thought to be well understood under terrestrial (1-g) conditions have, in fact, proved to behave in altered and even startlingly unfamiliar ways when observed and measured in reduced gravity environments. Space experiments in areas such as combustion, fluid flow and transport, phase separation fundamental physics, and biology, have revealed new phenomena and have demonstrated new and occasionally unpredicted behavior.

NASA and the National Institutes of Health have executed over 20 cooperative agreements in life sciences. The American Medical Association has passed a resolution in support of the International Space Station. In addition, we have quotes from people like Dr. Samuel C.C. Ting from the Massachusetts Institute of Technology, Laboratory for Nuclear Science. Dr. Ting is a Nobel laureate. He said:

> From my experience conducting experiments in particle accelerators for over thirty years, I conclude that the space station is an ideal place to address fundamental issues in physics. In the final analysis, the construction of the Space Station this year will provide scientists from many disciplines with the unprecedented opportunity to carry out large scale, precision, and long-duration experiments unimpeded by the effects of the Earth's atmosphere and gravity.

I might cite Professor of Engineering Physics and Combustion, Director of the Center for Energy and Combustion Research at the University of California, San Diego, Professor Forman A. Williams, who said:

> The practical objective of learning how to burn our precious fossil fuels more cleanly, efficiently and safely certainly would benefit from the fundamental studies that the Space Station would allow us to pursue. Considering the astronomical costs of petroleum, the investment in Space Station thus seems to me very well conceived.

Obviously, we have statements from other scientists who indicate the importance of this scientific research.

But when you look at it, realize that the space station is not just justified in terms of science alone. The international space station is not and never has been simply a science platform. It serves many other functions, not the least of which is the greatest peaceful, international, scientific endeavor in history.

It will offer practical applications beyond the realm of research, as a testbed for manufacturing, for technology. It has a potential for great commercial involvement in manufacturing, in materials processing. If we choose, as a matter of policy, the station also can play a key role in civilization, taking another step beyond Earth's orbit. It is not just science. It is a laboratory with the capability that many of our top scientists are eager to begin using, and many who would hope to commercialize and provide benefits through the private sector, not only through investigations, scientific explorations, but actual production in space, may be able to realize.

For these reasons, I hope, when the time comes for a tabling motion, an overwhelming majority of my colleagues will join us in so tabling the amendment.

Mr. President, I yield the floor.

The PRESIDING OFFICER (Mr. GORTON). The Senator from Maryland.

Ms. MIKULSKI. Mr. President, I, too, rise in opposition to the Bumpers amendment to strike the funding for the space station.

We have heard, prior to Senator BOND's speech, from a distinguished American. Senator BOND is also a distinguished American, but Senator BUMPERS, the Senator from Arkansas, has really raised very important and significant flashing yellow lights regarding the space station. He has raised questions related to the funding of the space station; also, as to whether we are getting our money's worth in terms of research, wouldn't it be better deployed in other areas? And he has consistently raised many of those questions over the years.

The result of that has been that, while he has not always won his amendment, he has certainly won our attention, that of those on the Appropriations Committee, and the attention also of the space agency itself that has resulted, I believe, in greater management efficiencies and a greater focus on specific research outcomes than would have been the case had those important issues not been raised.

Senator BUMPERS has been a champion particularly in the area of health care and medical research. I remember when I first arrived in the Senate, he was the leading advocate to make sure we had adequate immunization for the children of the United States of America, and what is now a standard public policy he raised and he supported, and we thank him for that.

He also speaks eloquently of the funding for the National Institutes of Health, and I, too, join him on that. I hope by the year 2000 or thereabouts, in the new century, we double the funding for the National Institutes of Health, an agency that resides in my own State but really belongs to all of America and really benefits the entire world.

I feel so strongly about the benefits that could be derived from the collaboration between NIH and NASA that I encouraged then Administrator Goldin and the Director of NIH then, Dr. Bernadine Healy, to really develop joint research projects. And they actually entered into a memorandum of agreement that stands today to ensure collaborative research in that area, a great deal of which is being manifested in the space station research arena.

So, we thank Senator BUMPERS for the yellow flashing lights that he continues to signal to the committee. We thank him for his steadfast advocacy for biomedical research. And we want to thank him for his important contribution.

However, having then said those accolades, we do not want his amendment supported. I think another wonderful American, Senator JOHN GLENN, has outlined very clearly and extensively why we should continue to support Space Station *Freedom*. I would not duplicate, but hope to amplify, Senator GLENN's remarks. I recall I was a young social worker when Senator GLENN himself had just finished orbiting the Earth looking for these important scientific breakthroughs, and I think of the year 1968 when we also orbited the Moon and our astronauts read from Genesis in space to remind us all of our link between here, the planet Earth, and outer space.

I also remember that many Democrats, members of my own party, ridiculed the whole effort to go to the Moon and to take that ''one giant step for mankind.'' In fact, one Senator from Minnesota at that time called it ''moondoggle.'' No one looks back on the success of that endeavor, what it meant to our country both in terms of national prestige and scientific breakthroughs in that era of the cold war, and no one would call that program, now, ''moondoggle.'' I hope we will not also just dismiss, in the same way, Space Station *Freedom*.

This endeavor was begun under Ronald Reagan, sustained under President George Bush, and continues to be supported by President Bill Clinton. But it is not only the Presidential support that gives this program validity, it is also the support of the scientific community. I would like to bring to the committee's attention the Nobel laureate, Dr. Samuel Ting, who has played a major role in developing much of the research on the space station.

Another Nobel laureate, Dr. Herbert Hauptman, has addressed the Biomedical Research Caucus of Congress on the value of orbital research for biomedicine.

Dr. Michael DeBakey of Baylor Medicine said:

> The space station is not a luxury any more than a medical research center at Baylor College of Medicine is a luxury.

Since 1992, NASA has signed 20 different cooperative agreements with NIH. The National Academy of Sciences has repeatedly expressed its support for research on the space station. The Planetary Society supports it. The American Medical Association has adopted a resolution in support of it. The Society for In Vitro Biology hosts an annual workshop on what culturing cells in microgravity will mean.

Who knows what breakthroughs we will find?

I have five pages of quotes from different deans and professors of medical schools from all over the United States of America in support of this. They range from MIT, to Harvard Medical School, to the Harvard Institutes of Medicine; Brigham and Women's Hospital. I could go on about it.

Let me quote Dr. Jessup who heads up the Deaconess Hospital, Harvard Medical School:

> The space program offers a chance to improve out models of cancer and to develop new drugs and treatments as well as to gain knowledge about how cancer spreads . . .

The space station is the place to do it.

Mr. President, my family was affected by two major diseases: Alzheimer's and diabetes. My very dear father died of Alzheimer's, and I am deeply committed to continuing the research to find either the cure or the ability to stretch out the intellectual ability for anyone who has it. My dear mother was stricken with diabetes and overcame her in her final years and resulted in her death.

What I think about now, as I listen to scientists brief us on what this means, is it is outstanding, in those two areas, and what it will mean. Let me tell you about what Dr. Ken Kosik of the Harvard Institute says:

> By raising rats in an environment that lacks gravity, we have the opportunity to zero in specifically on the brain system that controls orientation. This brain system is exactly the part of the brain attacked by Alzheimer's disease. We will use the rats to search for the specific molecules which fail to appear in the brain circuits controlling orientation.

And this could lead to incredible breakthroughs in knowing how to help those who have Alzheimer's or a propensity to it.

I have a quote from a letter from Dr. Jim Mulvihill, the president and CEO of the Juvenile Diabetes Foundation International encouraging the support of the space station because of what it will mean.

Dr. Murray Loew, member of the Juvenile Diabetes Foundation, Lay Review Committee, at Georgetown says:

> Although it may not be immediately apparent, persons with diabetes and astronauts share some of the same challenges. Consequently, NASA and the Juvenile Diabetes Foundation last May signed a joint Space Act Agreement so that both organizations can together begin fully sharing information . . .

And research in juvenile diabetes, there are links here to do this. I could elaborate on this, but I turn to my colleague from Missouri, and ask him if the time agreement is ready.

Mr. BOND. It is in the process.

Ms. MIKULSKI. Mr. President, I ask unanimous consent to have printed in the RECORD these statements unsolicited from scientists who do both basic research and applied clinical research, not only on diabetes and Alzheimer's, but on many others diseases. I want their testimony to speak for itself.

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

August F. Witt, Ford Professor of Engineering, Massachusetts Institute of Technology:

. . . your program is now generally recognized as absolutely critical in efforts to maintain for the U.S. a competitive position in the development of new materials. The facilities and scientific infrastructure provided by your Agency [are] a unique national asset which will unquestionably even increase in value, with the establishment of the International Space Station.—Letter to Administrator Goldin, April 22, 1998.

G. Paul Neitzel, Professor, Virginia Institute of Technology:

The presence of a ''permanent'' manned platform on orbit will provide unprecedented opportunities for long-term experimentation in a weightless, or ''microgravity'' environment. . . . the results of research done outside the confines of gravity may be able to point the way to the improvement of processes and products produced here on Earth.—Letter to Administrator Goldin, April 22, 1998.

Forman A. Williams, Professor of Engineering Physics and Combustion, Director, Center for Energy and Combustion Research, University of California, San Diego:

The practical objective of learning how to burn our precious fossil fuels more cleanly, efficiently and safely certainly would benefit from the fundamental studies that the Space Station would allow us to pursue. Considering the astronomical costs of petroleum, the investment in Space Station thus seems to me to be very well conceived.—Letter to Administrator Goldin, April 20, 1998.

Charles A. Czeisler, Ph.D., M.D., Associate Professor of Medicine, Harvard Medical School, Chief, Circadian, Neuroendocrine and Sleep Disorders Medicine, Brigham and Women's Hospital:

[The ISS] provides an ideal platform to explore the long-term effects of space flight on human physiology, and will provide critical information for us scientists to assess the feasibility of extended duration space flight such as will be required for a flight to Mars.—Letter to Administrator Goldin, April, 1998.

Samuel C.C. Ting, Massachusetts Institute of Technology, Laboratory for Nuclear Science [Dr. Ting is a Nobel laureate]:

From my experience conducting experiments at particle accelerators for over thirty years, I conclude that the space station is an ideal place to address fundamental issues in physics. In the final analysis, the construction of the Space Station this year will provide scientists from many disciplines with the unprecedented opportunity to carry out large scale, precision, and long duration experiments unimpeded by the effects of the earth's atmosphere and gravity.—Letter to Administrator Goldin, April 17, 1998.

Dr. Murray Loew, Member, JDF Lay Review Committee, Professor of Engineering, Georgetown University:

Although it may not be immediately apparent, persons with diabetes and astronauts share some of the same challenges. Consequently, NASA and JDF last May signed a joint Space Act Agreement so that both organizations can together begin fully sharing information and ideas.—Testimony of the Juvenile Diabetes Foundation International before the House Appropriations Subcommittee on VA, HUD, and Independent Agencies, April 22, 1998.

James E. Mulvihill, DMD, President and CEO, Juvenile Diabetes Foundation International:

Again, on behalf of the 16 million Americans with diabetes and their loved ones, I appreciate your partnership in the search for a cure. We look forward to continuing our close working relationship.—Letter to Administrator Goldin, April 21, 1998.

William T. Shearer, M.D., Ph.D., Professor of Pediatrics and of Microbiology and Immunology Baylor College of Medicine; Chief, Allergy and Immunology Service, Texas Children's Hospital:

All in all, the investment in International Space Station laboratories will yield rich rewards, in terms of the health of human astronauts.—Letter to Administrator Goldin, May 1, 1998.

Harry R. Jacobson, M.D., Vice Chancellor for Health Affairs, Vanderbilt University David Robertson, M.D. Director of the Clinical Research Center, Vanderbilt University:

The study will give us critical insights into how the brain regulates blood pressure and heart rate in human beings in the unique environment of microgravity, and this information directly relates to the clinical work we are doing regarding the abnormalities in the autonomic nervous system and its control of critical aspects of physiology, such as blood flow to the brain. Using the laboratory of space to examine the underlying regulatory mechanism in the absence of the confounding factor of gravity will allow us to understand these mechanisms at a level not previously possible.—Letter to Administrator Goldin Re Neurolab, April 28, 1998.

Gail H. Cassell, Ph.D., Vice President Infectious Diseases Drug Discovery Research and Clinical Investigation, Lilly Research Laboratories, Eli Lilly and Company:

As you know, Eli Lilly is interested in working with the Center for Macromolecular Crystallograph (CMC) in two different areas. First, because of the Center's expertise in macromolecular crystal growth in both 1-g and μg environments, we would like to fund the CMC to crystallize a large number of biologically important proteins that Lilly scientists have identified from a variety of sources including our own genomics data base. Second, because of our mutual interest in infectious disease, we would like to work with the CMC on the crystallization and structure determinations for several key proteins associated with a number of bacterial and viral pathogens. . . . In this regard, we hope to support and have access to your NASA-funded microgravity flight program.—Letter to Dr. Lawrence J. DeLucas, Director, Center for Macromolecular Crystallography, April 8, 1998.

Kenneth S. Kosik, M.D., Harvard Institutes of Medicine; Brigham and Women's Hospital:

By raising rats in an environment that lacks gravity, we have the opportunity to zero in specifically on the brain system that controls orientation. This brain system is exactly the part of the brain attacked by Alzheimer's disease. We will use the rats to search for the specific molecules which fail to appear in the brain circuits controlling orientation.—Letter to Administrator Goldin Re Neurolab, April 20, 1998.

Dr. V. Reggie Edgerton, Vice Chair and Professor of Physiological Science for the Division of Life Sciences at The University of California, Los Angeles:

The significant advantage of studying the ability of the nervous system to adapt to a microgravity environment, known as plasticity, is the ability to identify the potential of the normal nervous system. This information is critical because it will allow us to differentiate the potential for plasticity of the nervous system in response to trauma and disease, in comparison to that associated with altered use of the normal nervous system.—Testimony before the U.S. House of Representatives Committee on Science, Subcommittee on Space and Aeronautics, April 10, 1997.

Ms. MIKULSKI. Mr. President, I acknowledge the validity of what Senator BUMPERS has raised about cost overruns, and I also raise the validity about what Senator BUMPERS has raised with NASA over the fact that the cost overruns in the space station could lead to raids on other well-managed NASA programs. To that end, working on a bipartisan basis with our colleague from Missouri, the chairman of the subcommittee, we established a separate account dedicated solely to the space station to create better accountability and financial management of this program and transparency in terms of the total cost of what the International Space Station is.

So it is not a million bucks here, 100 million tucked in over here, and so on. We are going to have a separate account providing accountability and transparency.

I would like to continue with my arguments, but we have reached a time agreement. I temporarily yield the floor to my colleague from Missouri so he can propound his unanimous consent request. I ask unanimous consent to return to speaking on the amendment.

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

UNANIMOUS CONSENT AGREEMENT

Mr. BOND. Mr. President, I think we have reached a time agreement. It may be a little convoluted, but if you will stick with me.

I ask unanimous consent that there be 1 hour 30 minutes for debate prior to a motion to table, and that the vote on the motion to table occur at 6:30 p.m. this evening. I further ask unanimous consent that the time be divided as follows: 40 minutes under my control, and we will charge the 15 minutes used to this point by Senator MIKULSKI and myself against that 40 minutes; 50 minutes under the control of Senator BUMPERS; that just prior to the vote on the motion to table, there be 10 minutes equally divided for closing remarks; that following the debate, the amendment be laid aside until 6:20 p.m. this evening, and at that time, I be recognized to move to table amendment No. 3062.

Mr. BUMPERS addressed the Chair.

The PRESIDING OFFICER. The Senator from Arkansas.

Mr. BUMPERS. Reserving the right to object, and I am most reluctant to, I would like, in this eighth year of my

travail, to get an up-or-down vote on this.

Mr. BOND. Mr. President, in response to that, I had offered to offer a separate amendment naming the space station after Senator BUMPERS.

Ms. MIKULSKI. It will be called the ''Bumper crop.''

Mr. BOND. In spite of that, I personally will forego the motion to table and ask that the vote be an up-or-down vote on the Bumpers amendment.

Mr. BUMPERS. I thank the Senator. I am more than happy to forego having the space station named after me.

The PRESIDING OFFICER. Is there objection to the unanimous consent request as amended?

Ms. MIKULSKI. There is no objection.

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

Mr. BOND. Mr. President, for the further information of all Senators, it is my understanding that Senator MCCAIN will be in position next to offer an amendment. It is our hope we can have a vote on that matter, or relating to that matter, perhaps on a Budget Act point of order, following the vote on amendment No. 3062. That is not part of the consent agreement. That is for information only. I thank my colleague from Maryland, and I yield the floor.

The PRESIDING OFFICER. The Senator from Maryland.

Ms. MIKULSKI. Mr. President, how much time have I consumed?

The PRESIDING OFFICER. The Senator from Maryland has used 11 minutes 9 seconds.

Ms. MIKULSKI. Thank you very much, Mr. President.

I believe this amendment is a choice between the future and the past. We must be willing to embrace science and technology, to take the bold risk in scientific endeavors of the future like the space station. Investments in science and technology will be determinative of the 21st century in what nations will continue to lead the world. I do not want the American century to come to a close without a continued commitment to science and technology.

We must use American ingenuity and know-how through this unique environment of the space station to tackle understanding of diseases or develop new techniques, like I just elaborated on a few minutes ago. Some will argue this type of research can be done more cost effectively on Earth. Other scientists will disagree because you cannot create a low gravity environment on Earth to perform many of these unique activities.

One is microgravity research and providing better research in better pharmaceuticals, medical advancement to develop new materials to use on Earth, such as new fire resistant materials. My gosh, wouldn't our fighters have benefitted from that in Florida?

Others might ask why this type of research cannot be done on the shuttle. The answer is we cannot rush the development of new technologies and science. If we did it on the shuttle, it means you would have 2 weeks maximum to be able to do it. I know no scientist working at my beloved NIH who could do research in 2 weeks, take a break, wait for another launch and go back for 2 weeks.

One of the arguments we hear every year is space station-related costs and, sure, the space station does cost money, but the fact is that over $51 billion of the $96 billion discussed by Senator BUMPERS is really related to shuttle missions, and those missions will fly whether we do the space station or not.

One of the real questions, too, is what is the cost to the United States of America and its taxpayers if we do not continue or stay the course for the space station? We hear about the cost to maintain it and to build it. The actual work on the space station means 15,000 highly skilled engineering and production contract jobs supporting the space station. There are 35,000 contract workers and 5,000 civil servants who work on the shuttle, who is our major customer. This is a major employer. About 2,000 pounds of hardware have already been built for the U.S. station.

What else do we lose? U.S. credibility with our international partners. Japan, Canada, and European Space Agency have all made this a truly international program. We have worked closely with the Russians. Like many, I am disappointed in the way the Russians have failed to deliver their promised technology on time, for which we paid. They have improved these actions, and I know President Clinton is moving on this.

U.S. competitiveness can only be maintained by continuing the long-term, cutting-edge, high-risk research and development that we have done. I am not going to elaborate any further on what Senator JOHN GLENN said. For all who are listening, we want to amplify that the space station is an important public investment and scientific breakthrough, where the very technology of doing the space station will lead to new breakthroughs in life science, information technology, and new kinds of materials—ceramic and so on—that will be very important to maintaining America's cutting edge.

I reserve further time on my time for when we need to conclude our debate.

I urge the defeat of the Bumpers amendment. Vote for the future and defeat the Bumpers amendment.

Mr. GRAHAM. Mr. President, I rise today to ask for your attention to an issue of great importance to the future of science and space exploration: the International Space Station. We have debated the merits of this project on many occasions. It is time to end this debate and declare our permanent support. We must press ahead with mankind's exploration of the cosmos.

President Franklin Roosevelt once said:

> The only limit to our realization of tomorrow will be our doubts of today. Let us move forward with strong and active faith.

I ask my colleagues to embrace Franklin Roosevelt's vision and support efforts to move the International Space Station forward.

The International Space Station is one of the most promising space projects in history. Over 60 percent of the station hardware, nearly half a million pounds, will be assembled by the end of this year. More than 75 percent of the developmental activities are completed. The end result of this 16-nation effort will be an international university in low-earth orbit and a launching pad for further exploration of the stars.

Mr. President, constructing this space station will not be simple or cheap. But why would we expect it to be? For the first time in the history of manned space exploration, we are assembling a laboratory, energy plant, and apartment complex the size of a football field in orbit 200 miles above the Earth. This is an ambitious technical feat.

Our nation's exploration of the galaxy has never been easy. While we prefer to remember glorious moments like our distinguished colleague JOHN GLENN's first orbit, Neil Armstrong's first moon landing, and the majestic first launch of the space shuttle, we should not forget that America's four decade adventure in space has also been plagued by technical difficulties and political struggles. We've faced tragedies—namely the three brave astronauts who lost their lives in the Apollo I fire, and the seven others who perished on the *Challenger*. Space exploration has been exciting, but it has never been easy.

But perseverance and patience have powered our space program past these difficulties, and they will be necessary ingredients in our effort to construct and maintain this International Space Station. Without the perseverance and patience of early space pioneers, we might not have been the first nation to land on the moon or successfully operate a reusable launch vehicle.

The International Space Station will excite the nation and the world. I cannot imagine any other project that will so readily inspire young people across our country to focus their attention on math and science. The first launch of space station components will cultivate the next generation of mechanical engineers, software designers, flight controllers, and of course, our astronaut corps. Throughout its lifetime, the space station will include student experiments and teleconferencing and telescience projects.

For this investment, we will have a permanent facility in space in which we can conduct numerous scientific and medical experiments, the end results possibly being cures for diseases known and unknown.

For instance, space-grown insulin crystals created in a microgravity environment are larger and better defined

than those developed on Earth. Scientists from NASA and the pharmaceutical industry hope to develop drugs that will bind insulin and attack the third leading cause of death in this country, diabetes.

Microgravity can also be used to study proteins and three-dimensional tissue samples. Previous success in advanced cell-culturing has led to partnerships with the National Institutes of Health in the study of transmission of the AIDS virus. This application of space technology has also led to new studies of cancer tumors.

Space flight is particularly applicable to studying the aging process, since astronauts experience many of the same symptoms seen in the elderly, such as anemia, loss of muscle, and imbalance. Women are five times more likely to suffer from osteoporosis, the medical term for weakening bones. What better way to study it than to simulate it in space? The results could be fewer broken bones in the years to come as baby boomers advance in age.

In addition to the tremendous health benefits we will reap from medical studies on the space station, our daily lives will be affected by numerous spin-offs and product developments. Aerogel is the lightest known solid, only three times heavier than air. Space-manufactured samples are four times better in quality than any produced on earth, allowing for the creation of super-insulators. Fortune magazine predicts the aerogel market could result in 800 potential product lines, from satellite parts to surfboard material.

Finally, as demonstrated by the devastating Florida fires, combustion represents a threat in many forms. Fires cause 5,000 deaths and $26 billion in property losses every year, a figure I am certain will be higher due to the terrible losses we have suffered in Florida. How can a space station help? In space, researchers can study flames without the interference of the earth's gravity. Such studies will help us better understand how combustion happens and better address problems such as air pollution and forest fires.

The House and Senate share a vision for the future of space and we must continue to act together on behalf of this visionary project. The future will soon be upon us. We don't want to see it pass us by. I urge my colleagues to vote against this amendment and endorse the International Space Station. We must not let the doubts of today stand in the way of the possibilities of tomorrow.

Mr. AKAKA. Mr. President, as the Senate considers funding for the International Space Station, I want to remind my colleagues about the achievements of the National Aeronautics and Space Administration (NASA).

Since 1915, American aviators, astronauts, and spacecrafts have expanded human knowledge. The advancements made by NASA are found in virtually every aircraft in use today. One example, used by Continental Airlines, is a NASA-developed device that warns of dangerous wind-shear conditions. In addition, NASA made valuable contributions to medicine by allowing scientists to utilize microgravity conditions in space to grow larger breast cancer cells, allowing different growth stages of these cells to be studied.

NASA technology has produced a pacemaker that can be programmed from outside the body and developed instruments to measure bone loss and bone density without penetrating the skin. NASA research led to the development of a three-inch implant for diabetes that provides more precise control of blood sugar levels, thereby freeing diabetics from the burden of daily insulin injections. These are just a few of the scientific and medical advances developed from NASA technology.

A panel of experts headed by aerospace consultant Jay Chabrow recently concluded that the space station's cost through the assembly stage could be $24.7 billion, which is $3 billion more than NASA now projects. While the overrun projected in the Chabrow report is a concern, the estimate in the report is modest in historic terms. For example, the initial contract for the lunar excursion module was $350 million. By the end of the contract, the cost had escalated to $2.3 billion, seven times the original cost. For the entire Apollo, Mercury, and Gemini programs, NASA spent approximately $100 billion to reach the moon. These programs, much like the International Space Station, ventured into unknown territory and were considered inherently risky.

It is also important to note that while the panel indicated that there may be cost overruns and schedule delays, the panel also recognized that NASA's management of the Space Station has been ''resourceful and effective'' in addressing the many challenges that have resulted from this project. With over 400,000 pounds of flight hardware completed, NASA and its international partners believe that by the end of this year, over half a million pounds will be completed and the first two elements of the station will be in orbit. Although Russia has only been able to complete 95 percent of the module, the Russian government has reiterated its commitment to the station. However, NASA continues to evaluate other contingency plans to address possible delays by Russia.

Once completed, the International Space Station will be the most complex structure ever sent into orbit, encompassing a laboratory and living quarters the size of two football fields. As demonstrated by several experiments conducted on the Russian Mir space station, Skylab, and space shuttle flights, advancements in science will be enhanced by the International Space Station. These experiments have been used to determine or refine existing protein structure models, create new drugs to battle viruses, such as AIDS, and develop inhibitors, such as those used to alleviate the complication of inflammation associated with heart surgery.

Mr. President, as I have mentioned, the importance of the International Space Station is evident. The technological advancements that may be achieved by this project are monumental. I urge my colleagues to continue funding the International Space Station and maintain American's leadership in space research and exploration.

Mr. FEINGOLD. Mr. President, I come to the floor to lend my support to the amendment offered by the Senator from Arkansas.

Senator BUMPERS has led a long, and often lonely, battle against the International Space Station. Since I joined this body in 1993, I have supported his efforts to terminate the program on the basis of its extraordinary cost and its crushing burden on the Federal budget deficit.

We now see that the space station is not only far more expensive than previous cost estimates, but also significantly behind schedule and losing the support of partner nations, including the Russians failing to keep its financial commitments. The reasons for terminating the space station are now more compelling than ever. Senator BUMPERS has been prescient in his efforts to save our tax dollars on this wasteful program.

In a May, 1998, report, the General Accounting Office stated that the new cost estimate for the space station had risen to almost $96 billion. And this extraordinary cost doesn't even include the cost of decommissioning and deorbiting the space station at the end of its useful life. This, in and of itself, will cost billions more.

Even a NASA-appointed commission found that NASA's own cost estimates were vastly underestimated. The blue ribbon Cost Assessment and Validation Task Force recently reported that the cost of simply developing and building space station hardware will probably cost $24.7 billion. Just last year, NASA officials promised Congress that developing and building space station hardware would cost $17.4 billion. Mr. President, how in the world did cost estimates rocket up by 42 percent in the course of one year?

The same blue ribbon panel also estimates it will take two years longer to assemble the space station than NASA now plans. The report pushes the completion of the space station back to early 2006. Let me remind my colleagues that in September, 1994, NASA said it would complete assembly of the space station by June, 2002. The schedule has slipped by four years, let me repeat, four years since 1994. Ironically, NASA recently announced a delay in launching the first piece of the space station by five months. According to the commission, each month of delay will add about $100 million to the final cost of the project.

Finally, Mr. President, NASA enlisted the support of Russia as a means

of fostering collaborative energy and as a means of defraying program cost. As we know, Russia is in the midst of economic instability and an unreliable space program, witness the problems with the Mir space station.

NASA estimated that the American taxpayers would save $2 billion by working with the Russians on this new space station. That savings is already gone. On top of that, the Russian Space Agency doesn't even have the money to safely deorbit Mir. How, then, can we safely rely on Russia to fulfill its obligations for the International Space Station?

Even our European partners in the European Space Agency are beginning to reconsider their commitment to the International Space Station. French Space Minister Claude Allegre said of the International Space Station project, ''People often do stupid things. There is no reason we should applaud them.''

Fortunately, Congressional leaders are growing skeptical of NASA's plans. Last month, the chairman and ranking member of the House Science Committee wrote the President asking for a plan for controlling cost growth and delays on the space station. Given the Administration's reluctance to offer such a plan and NASA's resistance to cutting back the program, I don't see how we can support putting good money after bad.

Mr. President, it is time to end this program.

Mr. SHELBY. Mr. President, today the Senator from Arkansas takes his final shot at terminating funding for the International Space Station. For the eighth consecutive year, he argues that America should abandon its commitment as the leader of this historic endeavor.

The Space Station is real and well on its way to orbit. Last year, NASA employees and contractors at the Marshall Space Flight Center in Huntsville, Alabama finished construction of Node 1, the first significant piece of flight hardware. Since then, the Pressurized Mating Adapters, Integrated Electrical Assembly, Z1 Truss, Long Spacer, FGB Control Module are being prepared for integration tests and launch.

Those who do not believe that America should maintain its leadership in space exploration speak only of the expense of building man's next great adventure of the space age. While I also am concerned about cost overruns and Russian participation, it is reasonable to expect some unforeseen costs given the complexity of the station. The critics also fail to mention that past funding for the space station now exceeds proposed future investment. More than 50 percent of the costs have been paid, and more than 80 percent of the development will be complete by the end of the current fiscal year. It does not make sense to abort this mission at this time.

It goes without saying that termination of the International Space Station will undermine the credibility of the United States with its international partners who have already invested nearly $10 billion. The other nations participating in the development of the space station reaffirmed their commitment by signing partner agreements in January 1998. At the same time, the U.S. has taken the lead in developing the space station and have made commitments to the international community to see it through. Leadership requires resolve and character. It is not in the American nature to break our promises and abandon our friends and partners, especially when we are on the verge of launching the first elements of the space station.

Continued development of the space station is the right course for the United States to take. The history of mankind, and especially of Americans, is one of curiosity and exploration. The same pioneer spirit that led past generations to explore the frontiers has manifest itself in our present journey to space. The United States is the undisputed leader in space technology development, and it would be arbitrary and reckless for the Senate to reject our destiny of discovery through the space station. I ask my colleagues to join me in reaffirming our country's commitment to our future by opposing this shortsighted attempt to strip funding from the space station.

The PRESIDING OFFICER. Who yields time?

Mr. BOND. Mr. President, I think the majority leader has asked for time. We ask unanimous consent he be granted such time, not to be charged against the debate on this amendment.

The PRESIDING OFFICER. The majority leader.

Mr. LOTT. Mr. President, I thank the Chair.

Mr. President, I do this in order to introduce a resolution. I am joining today with Senator TORRICELLI and a number of others in introducing a resolution on Taiwan. I ask now that additional cosponsors be added to this resolution until the end of business today.

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

(The remarks of Mr. LOTT and Mr. TORRICELLI pertaining to the submission of S. Con. Res. 107 are printed in today's RECORD under ''Submission of Concurrent and Senate Resolutions.'')

Mr. BUMPERS addressed the Chair.

The PRESIDING OFFICER. The Senator from Arkansas.

Mr. BUMPERS. Mr. President, I yield 15 minutes to my colleague from Arkansas.

The PRESIDING OFFICER. The Senator from Arkansas, Mr. HUTCHINSON, is recognized.

Mr. HUTCHINSON. Mr. President, I thank my colleague from Arkansas for yielding the time.

I ask unanimous consent to be added as a cosponsor to the Bumpers amendment.

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

Mr. HUTCHINSON. Mr. President, I rise in support of the Bumpers amendment, and I join him in his 8th year of travail on what I think has been an important provision. When I came to Congress in 1993, I came with great alarm about the cost overruns, the delays, the projected increases in spending, and what appeared to be a black hole absorbing precious taxpayer dollars. I also came with a willingness to be convinced that was going to change. I was promised that they were going to tighten their belts, slim it down and trim it down, that it was going to become a responsible kind of program and project. Well, the most recent GAO report—the 1998 GAO report—has convinced me that we need to cut our losses, that it is not going to happen, that it has not happened and, in fact, the projections are that we are going to continue to see exorbitant cost increases if we continue down the road of building the space station.

My colleague from Maryland spoke much of the value of microgravity and the need for the space station and microgravity research. I would like to quote Professor Robert Park of the Department of Physics at the University of Maryland in College Park, Maryland. Doctor Park said:

> Microgravity is the only unique property of a space station environment, and the station was originally envisioned as a sort of microgravity R&D laboratory. The microgravity research that was envisioned for the international space station has already been largely completed, either on the shuttle or on Mir.

So there you have it. The original and primary justification for building the space station has largely been realized by ongoing R&D, either on the shuttle or on Mir.

By cutting the international space station's lifeline, today the Senate has the opportunity to save billions of dollars that have been floating away now for over a decade. I want to commend Senator BUMPERS for his resolve, for his eloquence, and for his persistence on this issue. My distinguished colleague from Maryland said that in appreciation for Senator BUMPERS' efforts, he had turned on the yellow light. I can only say that what we need to do is turn on the red light on this project. It needs to be a stop light.

From fiscal year 1985 to fiscal year 1997, it has already cost the American people $19 billion. In its current form, the Senate appropriations bill would pour another $2.3 billion into this project. My distinguished colleague from Arkansas has offered an amendment to the VA–HUD appropriations bill which would end this cycle of waste. The Bumpers amendment would provide $850 million for the termination of the International Space Station, make $450 million available to HUD, and most important, redirect $1 billion of the savings from the space station and make that money available to the Veterans' Health Administration medical care account.

Since its inception, the International Space Station has become a looming monstrosity of skyrocketing costs and scientific indefensibility. According to the latest GAO estimate, this will now cost the American taxpayers $96 billion. That is up $2 billion from 1995—only 3 years ago. This enormous figure includes the costs of design, construction, launching, and 10 years of operation, but it does not include future schedule slippage, additional shuttle launches to test the crew return vehicle, deconstruction at the end of the station's life, as well as possible delays by our partners on their obligations to the project. With these additional factors, the space station will undoubtedly take several more years and several billion more taxpayer dollars. It is a record we have seen time after time on the space station.

Costs have been increasing steadily. So far, the American people have paid $19 billion into the project. Since the space station was conceived, cost estimates have risen dramatically. Under the original space station concept, space station *Freedom*, the Reagan administration estimated a cost of $8 billion in 1983. NASA's estimate rose to $16 billion by 1987. By 1993, the cost of developing and building the space station *Freedom* rose to $30 billion, with an additional $60 billion for 30 years of operation. In the same year, the GAO estimated a grand total of $118 billion for all space station costs, including launches. Now, under the revised concept of the International Space Station, NASA estimated $72 billion in costs, including 10 years of operations and shuttle costs. Those are a lot of figures. What is the American taxpayer to think? What are they to believe?

In the past 3 years, the GAO's cost estimate for the station has increased by $1.7 billion. You can believe that. From $93.9 billion in June of 1995 to $95.6 billion in April of 1998. Why have the costs increased? According to Allen Li, Associate Director of Defense Acquisitions at the GAO, during his June 24, 1998, testimony before the House Science Committee, there are a number of factors why that happened.

> The higher development costs—$21.9 billion [1998] versus $17.4 billion [1995]—are attributable to schedule delays, additional prime contractor effort, not covered by funding reserves, additional crew return vehicle costs, and costs incurred as a result of delays in the Russian-made Service Module.

My colleague spoke eloquently about Russia's role in the space station and their delays in the cost overruns, and the fact that they simply are not capable of bearing their share of this burden.

In other words, schedule delays and increased shuttle flights have driven costs up dramatically. Unfortunately, these delays are not new to the space station project. Phase II of the project, which involves construction of a U.S.-Russian space station that can be permanently occupied by three astronauts, was originally scheduled to occur from 1997 to 1998. NASA pushed phase II to occur from 1998 to 2000. Phase III, which involves additional construction, including the addition of European, Japanese and Canadian components, has been postponed from 1998 through 2002 to the years 2000 through 2004. The first launch for phase II was originally scheduled for November of 1997, later postponed to June of 1998, and is now scheduled for November of 1998. The completion date for the station, originally scheduled for June of 2002, then 2003, is now scheduled for January of 2004. On and on we could go with these delays.

Clearly, delays and launches are likely to increase, driving costs even to newer heights. There is much that I would like to say. When I came up here, NASA lobbied me hard, telling me that though there had been mistakes and there had been cost overruns, they were going to tighten their belt, that it was going to be a new kind of project with a new kind of fiscal austerity. I believe that the GAO report, in addition to the cost assessment and validation task force that gave a similar report, provides compelling evidence that NASA is not capable or is unwilling to make those kinds of tough decisions. This is a project it is time to end.

I remember all of the eloquent arguments that my colleague from the House side from the State of Texas made in defense of the Super Collider. ''We have to have the Super Collider.'' Almost every argument I heard today was made in defense of the Super Collider and the benefits, the spinoff benefits, we were going to receive in society. Congress made a tough decision that it could be better used in other forms of scientific research, and we cut our losses.

I cite the Cost Assessment and Validation Task Force established by NASA in September 1997 to independently review and assess the cost schedules and performance schedules on the International Space Station. That was led by Mr. Jay Chabrow. They issued a report this past April. This is what they said. The most optimistic estimate of the cost growth for the space station was over $2.195 billion. The most pessimistic estimate was $7.5 billion. It estimated that it will take 2 years longer to assemble the space station, pushing the completion date to 2006. Personnel requirements spiral from 1,285 originally predicted, to over 2,000.

I would say to my conservative friends on the Republican side of the aisle that we were not sent up here to build up more government. We were not sent up here to support projects that are good sounding, that have noble objectives, but have a track record of wasting taxpayer dollars. That is not why we were sent up here. That is the record of this project. If we just step back and set aside our conservative Republican prejudices on this issue, and ask if it were any other project, would we defend it; were it any other project with these kind of cost overruns, delays, and wasteful spending record, would we defend it? I would suggest to you we would not. But this is our little baby that we are going to protect at all costs regardless of how much taxpayer dollars it wastes. We were not sent up to float a barrel of pork in outer space.

I want to say one other thing before I end my remarks. We go from the extraterrestrial to the terrestrial, because I think it is good that we are taking $1 billion of what is being wasted on this project and putting it toward veterans health care.

There are 26 million veterans in this country. We hear from them. We hear of the waiting lines. We have 173 hospitals, and we have not built a new one in a long, long time. We are rightly moving to outpatient care. We cannot open enough clinics for veterans. We cannot make health care accessible enough. The average age of veterans is increasing, necessitating more frequent care and longer convalescence. These are going to be greater needs as the World War II generation of veterans faces greater and greater health care needs. The increased demand in care strains the resources of VA medical facilities. Many of them have to drive many miles to get health care. High-quality medical personnel shy away from VA hospitals because they find them less appealing and less lucrative. Nurse practitioners rather than doctors have become the norm in many VA facilities.

This is an opportunity for us to do a service to this country by stopping a program that needs to be stopped. This is not—and I emphasize this is not—an antiscience, an antitechnology vote. NASA will continue to have over $11 billion in fiscal year 1999. This is a protechnology Congress. We consistently voted for increased funding for NIH and NAS, the National Academy of Sciences. This is not an antiscience and antitechnology vote. It is a vote to say here is one area that has been so egregious in wasteful spending that we draw the line, we cut our losses, we stop the bleeding, and we are going to take those savings and put it in where we know it is going to be an investment in human beings in VA health care.

Michael Daly, a seventh grader from Sherwood, AR, wrote me a letter asking me the value of a future in the military. Do you know what that young seventh grader is thinking about? He is thinking not only about our commitment to our Armed Forces, but how well we are going to meet our commitment to our men and women who have served as they leave the armed services and as they become the veterans of this country. Are we going to remember them?

This is an opportunity for us to do a twin service to our veterans and to the taxpayers of this country in stopping an indefensible wasteful spending program. I urge my colleagues to support

Senator BUMPERS, who has been sometimes a lonely voice in pointing to the catastrophic waste in the space station, and join us in ending that program this year and support our veterans at the same time.

I thank my colleague from Arkansas for yielding me this time.

Mr. BOND addressed the Chair.

The PRESIDING OFFICER. The Senator from Missouri submitted a written unanimous consent agreement to include material that he did not state orally; namely a prohibition against second-degree amendments to amendment number 3062. Did he mean that to be a part of this unanimous consent agreement?

Mr. BOND. Yes. Mr. President, we amended that written statement as it first appeared to ask that it be a straight up-or-down vote on the Bumpers amendment pursuant to the request raised by the Senator from Arkansas who said there would not be any other motion.

The PRESIDING OFFICER. The material is a prohibition against second-degree amendments. Does the Senator from Missouri wish to include second-degree amendments?

Mr. BOND. Yes. We included in the amendment that there would be no second-degree amendments.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

The Senator from Missouri.

Mr. BOND. I thank the Chair. I yield 10 minutes to the distinguished senior Senator from Texas.

The PRESIDING OFFICER. The Senator from Texas.

Mr. GRAMM. Mr. President, I thank our colleague from Missouri for yielding.

Mr. President, it is certainly true that Congress has terminated many science programs in the recent past. In fact, in 1965 we were investing 5.7 cents out of every dollar spent by the Federal Government in non-defense research in science and technology. But as a result of political decisions that have been made for more than 30 years, we are now investing only 1.9 cents out of every dollar of government spending in science and technology research for the future.

You have to ask the question when so many of our colleagues are so quick to point out that they are not antiscience—and I believe them—how is it that the science budget in the budget of the U.S. Government, a budget which has exploded since 1965—''exploded'' is the only word for it—how is it that as the total budget has grown in leaps and bounds, our commitment to invest in science and technology and to invest in the future has declined from 5.7 percent of the Federal budget to 1.9 percent?

I submit, Mr. President, that our colleagues, Members of the House and Senate, are not antiscience. Their problem, however, is that they are constantly forced to choose in the process of spending the taxpayers' money between spending that money on programs that have big constituencies in the next election and investing that money in science and technology in the future that really has a constituency in the next generation. The problem with maintaining science and technology spending is that the value only comes in the future, whereas by spending money on programs with big political constituencies, the benefits politically come in the next election. The next election now is only a few months away.

It is not that Congress doesn't value investment in science and technology that would develop new products and new technologies, new know-how, and a scientific base that can create jobs in the 21st century and perhaps yield a capacity to heal some dreaded disease. It is that the benefits of such spending don't appear between now and November 3rd. They come to fruition over long periods of time as a result of the accumulation of scientific knowledge. Our problem, then, is not that Congress is antiscience, but that Congress invests in the next election rather than the next generation.

The amendment we have before us is an old amendment. We have debated this subject on many occasions. This is just the latest version of a long debate. But basically what the amendment before us proposes that we do is to cut the Nation's premier science project, and to use the money to invest in two programs that have very large and vocal constituencies. Both of these programs are good programs. They both are obviously very desirable. But the point is that we have a very limited science budget now. It has been reduced from 5.7 percent of our budget in 1965 to 1.9 percent today, and this latest effort to reduce it further comes at the very time when we are beginning to get interest in the country in an initiative to double our expenditure on science and technology and research, because we believe investment in the future is critically important if we are going to continue to lead the world in science and technology job creation. I think this amendment is simply a movement in the wrong direction.

I do not doubt the sincerity of our colleague from Arkansas. He has offered this amendment, it is my understanding, for 8 years. It seems we have debated it for a longer period of time than that.

I remind my colleagues that we have killed science projects. We killed the SSC. We have cut science expenditures in real dollar terms in virtually every area of the Federal budget. But the question is, Have we benefited as a nation from doing that? We killed the premier scientific project in the world when we killed the SSC, which was high-energy physics aimed at understanding the fundamental building blocks of nature. And while understanding atomic physics does not sound very sexy in Congress, I remind my colleagues that 40 percent of the GNP of our country is now based on scientific research that has occurred mostly in America since the 1920s and where high-energy physics has yielded products from the computer to the television.

So the point is that when America was investing in those programs, they were going to yield benefits 10 or 20 or 30 years in the future. They have always been politically disadvantaged. I would simply like to conclude by reminding my colleagues, we have an enormous Federal budget. We are spending a lot of money on programs that have big, powerful, political constituencies, and in a sense, politics is about listening and responding to those constituencies.

But I remind my colleague that there is another constituency, and that constituency is called the future. America has invested more money in science than any country in the history of the world, and in my opinion, there are two principal things that are responsible for the unique achievements of America. One is we have had a country with broad-based opportunities so ordinary people could do extraordinary things, and the other has been an investment in and a commitment to science. I think we are moving away from that commitment. I think we have already moved too far. I wish we were here today debating cutting other programs to invest in science and technology in the future, but we are here talking about terminating the premier scientific project in America which we have undertaken with many nations around the world.

I hope and trust this amendment will be defeated, and it should be defeated. This amendment will not lower federal spending by a nickel. This amendment simply reduces money going to the space station and to science and technology and to the future. So for that reason, I oppose the amendment.

I yield the floor.

The PRESIDING OFFICER. Who yields time?

Mr. BOND. Mr. President, I believe the Senator from Alaska has a unanimous-consent request to speak as if in morning business.

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that I may speak as if in morning business for not more than 5 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered. The Senator from Alaska is recognized.

Mr. MURKOWSKI. I thank the Chair.

(The remarks of Mr. MURKOWSKI pertaining to the submission of S. Con. Res. 107 are located in today's RECORD under ''Submission of Concurrent and Senate Resolutions.'')

Mr. BOND. I yield to my distinguished colleague from Arkansas.

Mr. BUMPERS. Mr. President, I yield my distinguished colleague from Iowa 10 minutes.

The PRESIDING OFFICER (Mr. SMITH of Oregon). The Senator from Iowa.

Mr. HARKIN. Mr. President, I thank the Senator for yielding me this time. More than that, I thank Senator BUMPERS for his relentless pursuit, over the years, of shedding more and more light on this issue of the space station. I say at the outset that a vote for the Bumpers amendment is a vote for space exploration. A vote against Bumpers is a vote for the status quo. It is a vote for the myopic approach to space exploration and it is a vote for wasteful spending for science that can be done better and cheaper.

I am foursquare with Senator BUMPERS on his approach on the space station. It is a boondoggle and a waste of money. Maybe Senator BUMPERS and I are not foursquare on the issue of space exploration itself. That may be for another time and another debate. But on this issue, Senator BUMPERS is absolutely right.

I have been a longtime supporter of aviation, aviation research, aviation technology, pushing the boundaries of aviation technology through science and technology and also for space. For 10 years, I served in the House on the House Science and Technology Committee. I was proud to chair the Aviation and Materials Subcommittee of that committee. I was proud to work to try to get more and more funds for space exploration. But I watched, during those 10 years in the House on the Science and Technology Committee, I watched in dismay as NASA shifted, gradually but determinatively, shifted from a civilian space agency to an arm of the military. That can be seen through the way that the space agency shifted in the late 1960s and early 1970s. It became more and more an arm of the Air Force. It became more and more an arm of our military establishment.

I can remember the debates we had on that in the Science and Technology Committee back in the mid-1970s. I kind of understood that. We were in a cold war with the Soviet Union. Space was being used more and more for military purposes—spy satellites, that kind of thing. But another interesting thing happened. We began to develop a thing called the space shuttle, which I believe was driven more by the desire of Air Force pilots to fly than anything else. I think it was driven more by the desire to be more than just a monkey sitting on a seat.

I remember when the first shuttle took off. I was there for the launch, and I remember we had the first shuttle astronauts back in the committee room for a hearing. I remember Neil Armstrong was there. One Congressmen stated how proud he was to see them land with dignity as they came back, rather than plopping in the ocean as they used to in the space capsules. I thought at the time, what a tremendous expenditure of money just so that we could land that thing on a runway rather than plopping it in the ocean.

Let's remember, the first man to set foot on the Moon was not a military person, it was a civilian, a civilian test pilot by the name of Neil Armstrong, and that was not happenstance. It was not an accident that happened that way, because we believed and our Government believed at that time that space should be a civilian exploration enterprise. Then we watched as two things happened; as NASA became more and more militarized and as we retreated from Moon exploration to near-Earth orbits.

Then we were sold the space shuttle. Oh, it was going to be a great flying machine. It was going to reduce the cost of launching material into near-Earth orbit by a factor of 10. I remember being told that. I was on the Science and Technology Committee. It was going to reduce launch cost by a factor of 10. We were going to have these reusable rockets and all that kind of stuff. We are still waiting. We are still waiting for that factor of 10 reduction. It has never happened.

I am convinced today, perhaps more than I was at that time, that the shuttle should never have been built. I am convinced that, had we not gone ahead with the space shuttle but had commenced and continued our space exploration with the Saturn, that we could have had a fully operational Moon base at this time with all that would mean for the world and for our country and, yes, for science and technology.

Now, that brings me to the present time. If we build this space station for $98 billion and counting, it will effectively suck all of the dollars out of space exploration. That is why I said, in an oddly curious way, a vote for the Bumpers amendment is a vote for space exploration. A vote against him—forget about it. You are not going to do anything in space, because this is going to suck all the money out of it. Suck money out for what, scientific experiments?

I listened to the speech given on the floor by my good friend, Senator GLENN from Ohio, on all of the wonderful science that is going to be done and the experimentation. We estimate the cost per man-hour for those scientific experiments to be about $155,000 per man-hour. NIH can do it for less than $300 an hour. The Senator from Ohio says, ''Just think how much this is going to energize young people to go into science and into medical research.'' If you want to encourage young people to go into medical research in this country, take that kind of money and put it into NIH. You will hire thousands of times more researchers doing that than you will spending $155,000 per man-hour for scientific research on this space station. Put the money into NIH.

I think it is time to cut our losses. Do you know what this reminds me of, I say to Senator BUMPERS, this debate we are having on the space station and listening to Senator GRAMM from Texas? It reminds me of the debates we had on something called the Clinch River breeder reactor. How many years we debated that; how much good it was going to do for our country and the science and the research. Billions of dollars we poured down the rat hole on that one. We finally terminated it. We came to our senses and terminated it. How many billions of dollars, though, did we waste?

And then, most recently, something called the Superconducting Super Collider that was going to be built in Texas. Oh, my gosh, to listen to the debates that went on around this floor about that—why, if we ended that one, all science was going to come to a halt. Why, building the Superconducting Super Collider was going to unlock and unravel the mysteries of the universe for us. Nonsense. Stuff and nonsense, that is what it was.

We came to our senses and we killed it—rightfully so, because the Superconducting Super Collider would have had the same effect on physical sciences as the space station is going to have on medical science. It is going to suck all the money right out of it, because once you build the space station, then you have to justify it. How do you justify it? Through medical research at $155,000 per man-hour. Where is the money going to come from for NIH? Where is the money going to come from for the research that has to be done here? It will not be left around. This will do to medical research just what the Superconducting Super Collider would have done to physical science research. And that is why so many physicists and scientists were opposed to the Superconducting Super Collider. They were right. That is why so many scientists are opposed to the space station. They are right. It is time to cut our losses.

I remember—I was not here then, but I know my history—back in the 1950s, the Atomic Energy Commission, the head of it, Lewis Strauss, testified before a Senate committee and said that atomic energy would be so cheap in making electricity we wouldn't even have to meter it. We are still waiting. But look at the billions of dollars that we have spent on nuclear power. I am not saying it hasn't done some good, that we don't get power from it. My gosh, we are still fighting the battles of what we are going to do with the waste. Of course, we know now it is more expensive than anything else. If we build this space station, forget about it, there will be no money left.

The PRESIDING OFFICER. The Senator has spoken for 10 minutes.

Mr. HARKIN. If I can have an additional 5 minutes.

Mr. BUMPERS. I yield an additional 5 minutes to the Senator from Iowa.

Mr. HARKIN. The microgravity kind of research that has been talked about can be done on the shuttle. We don't need a space station to do that. Or it can be done other ways.

In 1994, Mr. President, I read an article that was in Discover magazine and became entranced with it. Just today, I had a long talk on the phone with Ed Belbruno, a former NASA mathematician. He has devised a new way of space

exploration. I won't go into it. I don't have the time. I think it is fascinating, however.

Because of his theories, we could use 40 percent less energy to go to the Moon and beyond—40 percent less—and it has already been proven. He did it once already in the early nineties. The Japanese space agency is looking at it more, and so are the Europeans. I am sure my friend from Ohio will recognize it by using what we call the ''weak stability boundary theory.''

I won't go into all the theories of it, but physically it is fascinating about how we can use the gravity of the Sun, the Moon, and the Earth to launch vehicles from here to the Moon or to Mars or beyond and use 40 percent less energy.

What that means is today we have the ability to return to the Moon and beyond using a lot less than we did before. Think of the excitement in that. Think of what we can do with exploration if we actually build a Moon base. Think of what that will mean in terms of scientific research and technological advancements. Think of what that will mean to us if we want to explore the universe, not from the space station, that is not going to help it one single bit, but now we have the theory and it has been proven; it has already been done once.

Mr. President, this weekend I was in Iceland. It occurred to me that in about the year 900, around the year 1000, Leif Ericson sailed to the New World, from Norway to Iceland to Greenland to Newfoundland, almost all the way down to what we now consider to be New York City. And they did it for years. Almost 500 years later, Christopher Columbus decided to go a different route, and it took him forever.

But you see, the Vikings had it right. They could sail the North Sea on the new great circle route, come to the New World, turn around, and catch the Gulf Stream and zip back. They had it figured out. You can't hardly blame Columbus. They didn't have it figured out. They didn't know. They sailed the southern ocean, down through the doldrums, and it took them a long time. They never quite figured it out. The Vikings did. You can't really blame Christopher Columbus. They didn't have that knowledge.

You can't blame us. We now know that there are cheaper and better routes for space exploration than building a space station. We know that there are better and cheaper ways of doing microgravity research than on a space station. We know there are better and cheaper ways of doing medical research than spending $155,000 per man-hour on the space station.

If we rush ahead with this space station, we have no one to blame but ourselves. I ask my colleagues to think back to the promises of the fifties when we were going to meet our energy needs so cheaply with nuclear power. Think about the Clinch River breeder reactor and how many votes were cast for that and all the promises it was going to give us. Think about the Superconducting Super Collider and what that was going to do for us. And then think about the scientists who opposed the Clinch River breeder reactor. Think about the scientists who opposed the Superconducting Super Collider. And now think about the scientists who oppose this space station.

Senator BUMPERS had it right. I saw a quote that he sent around in a ''Dear Colleague'' letter where the scientists were saying, basically, why would you want to spend so much money on something—here it is, Discover magazine. Here we are back to my favorite magazine:

> Is it possible to imagine a technological undertaking so enormous that could garner less respect from the scientific community?

Discover magazine, May 1997.

They know why. If we build this space station, it is going to suck so much money out of here, there won't be anything left. Oh, I suppose, as Senator BUMPERS said, it will lose. I hope not. I hope it wins. I hope we come to our senses.

I do believe this: The space station is not going to be built. It will never be completed. We may put up a module. We will do some shuttle flights. The Russians will never come through with their, what, 50 flights or 60 flights? Forget about it, the Russians are not going to do it. They don't have the money. So who is going to pick up that slack? Our taxpayers? We can take that $98 billion and start multiplying it out.

That is why I say today, this will be like Clinch River; it will be like the Superconducting Super Collider. We built some trenches down there. We spent a couple billion dollars on it. We spent a couple billion on the Clinch River breeder reactor also, and we finally came to our senses and said it was a boondoggle. That is what will happen with the space station. It is not going to be built, but what we can do is take this money and do something a lot cheaper and a lot better than building the space station.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. BUMPERS. Does the Senator from Maryland wish the floor?

Ms. MIKULSKI. If we are going to rotate time, I know that the Senator from Ohio had a few minutes that he wanted to use. I yield the Senator from Ohio no more than 5 minutes for his comments.

Mr. GLENN. Just 2 minutes.

The PRESIDING OFFICER. The Senator from Ohio.

Mr. GLENN. Mr. President, I thank the floor manager of the bill, the distinguished Senator from Maryland.

I want to make a point on a comment that was made by the other Senator from Arkansas, Senator HUTCHINSON, about the cost overruns and the budget situation, because the Chabrow task force report has been alluded to today, sometimes correctly and sometimes incorrectly.

In this case, it was referred to incorrectly because, contrary to the assertion that the program has a large overrun, the Chabrow task force reported that the program was—and this is a quote:

> Diligent and resourceful in managing the unique challenges of this complex venture given the significant complexity and uncertainty of international involvement and the difficult task of staying within annual and total funding caps established prior to final program content definition.

That indicates that there has been very responsible management. That is in the Chabrow task force report.

Further, the task force stated, referring to the ISS, the International Space Station Program specifically, and their quote is out of their report:

> Although cost and schedule growth have occurred, the magnitude of such growth has not been unusual, even when compared with other developmental programs of lesser complexity.

I think that is a compliment. I think we should also note that many defense research and development programs have exceeded development cost estimates by 20 to 40 percent, way out of the ball park of what we are talking about here, which indicates to me that major technical developmental programs have a degree of complexity that makes cost assessment very, very difficult—the point that I made in my original, more lengthy statement.

We need to keep in mind what the Chabrow report said in their task force report, which is, to my way of thinking, complimentary to NASA about how they managed this program and kept things under control. NASA personnel numbers are way, way down. The NASA budget has been flat over the last couple of years, and yet we have gone ahead with more efficient management within NASA and I think they should be complimented for given the complex management environment in which they have to work. So the Chabrow report has been quoted here today, but I think the two quotes out of the Chabrow report should be noted.

I reserve the balance of my time.

The PRESIDING OFFICER. The Senator from Arkansas.

Mr. BUMPERS. Mr. President, I yield myself such time as I may consume.

Mr. President, first of all, let me remind my colleagues of how this all started. This is a classic case of a space station looking for justification. This chart shows where we started years ago, with a crew size of eight and a cost of $8 billion. Here are the capabilities we were told that the space station would have.

First of all, it would be a staging base to go on to Mars with. Carl Sagan said that was a justification for it. He didn't think much of its research potential. But as a staging base to Mars, he thought it was a great idea.

A manufacturing facility—make gallium arsenide crystals, I suppose; space-based observatory; a transportation node; a servicing facility, to

service shuttles or whoever might come up to visit the space station; assembly facility—I don't know what they were going to assemble; a storage facility.

One by one, every single one of those missions was eliminated as a justification for the space station. We have one remaining, and that is a research laboratory. So that is the reason you hear about how we are going to cure AIDS, cancer, and all these magnificent things that will happen in medical research in the space station—because that is the last only justification anybody can dream up.

If you are having difficulty with that, write NASA and ask Administrator Goldin to send you a copy of his Chamber of Commerce glossy. It has it all in here. It has it all. If you are a conservative—and most people in this body profess to be conservatives—and you have any pang of conscience about spending $100 billion for a boondoggle, for utterly no redeemable purpose, if you are having problems with that, write to NASA and get their glossy brochure. It will just make you sleep so much better.

Mr. President, I can remember, as the Senator from Iowa has pointed out, it took me 4 years to kill the Clinch River breeder. Howard Baker was majority leader, and no matter how close we got, he always had two more votes he could pull out of his pocket. I remember that fateful date when we had too many votes for him to pull out of his hip pocket, and he turned everybody loose, and we got 75 or 80 votes to torpedo the Clinch River breeder. Who has lost any sleep about the Clinch River breeder? And we saved billions. Everybody said, ''They have broken ground; it is too late. We can't quit now; we have our nose under the tent.'' We quit, and it has been God's blessing ever since we did.

The Superconducting Super Collider, the gigantic hole in the ground in Texas—all I can think about is the Senator from Texas, the senior Senator from Texas, who defended the hole in the ground until the last dog died. I was arguing all along that there was a superconducting super collider in Switzerland, at the European consortium called CERN. No, the SSC's supporters said, our's got to be bigger than that one; got to be more expensive than that; got to have a 50-mile racetrack; none of that 20 mile racetrack business. We finally killed it after we spent $2 billion. And who here has lost any sleep over the Superconducting Super Collider? Everybody ought to rejoice every night that we saved $10 billion.

So now here we go. How can a good conservative justify the kind of cost overruns we are looking at? How can you justify $100 billion when you think of the unmet needs in health care and education in this country? This program as a research vehicle is precisely 1,000 times less effective than doing the same research on Earth. So you ask, why are we doing it?

The Senator from Texas has a very legitimate reason for standing on the floor and defending the space station. Texas gets $661 million a year out of it. In all candor, I might be standing here up here arguing on the other side if Arkansas got $661 million a year. For my colleagues who think you have a few jobs in your State, 85 percent of this money goes to Alabama, Texas, and California. The rest of you are just barely a layer; you are nothing.

If you consider yourselves a conservative but only when it fits your convenience, you go ahead and vote against my amendment. But if you say you are a conservative and you don't believe in squandering billions and billions of dollars of the taxpayers' money, ask yourself a very simple question: What is your threshold? How high would this thing have to go before you would have to rethink your position? Forty-three percent cost overrun, just to build it on the ground? Is that not troubling to you? Is the $7.3 billion overrun just announced in the past 8 months, is that not troubling to you? Is the fact that we are already acknowledging a $7.3 billion cost overrun and headed in for the launching of this thing into space, and depending on the Russians for 49 launches, does that bother you? Who here believes that the Russians will be a player in this 1 year from now? They are not going to meet their deadline right now for launching the service module or what they call the functional cargo.

If we are going to keep the Russians in the program, buy them out right now. They are not going to participate. They can't. Let me reiterate. The Russian Cosmodrome at Baikonur, the principal launching place, which is in Kazakhstan, has the electricity cut off because they don't pay their bills. How can you launch a space station from a cosmodrome that has had its utilities cut off?

My junior colleague from Arkansas, Senator HUTCHINSON, invited you to read the GAO report. Let me add the Congressional Research Service report to that. You don't have to believe what I say or what Senator HARKIN said or Senator HUTCHINSON. Read the reports that you always rely on, and see what they say.

Take a look at this chart. This summarizes the so-called Chabrow report. The Chabrow Commission was appointed by Dan Goldin to analyze the space station. They were appointed by Goldin, and Jay Chabrow is considered one of the best space technology analysts in America. He says it will not cost $17.4 billion as NASA promised as recently as last year; it will cost $24.7 billion—a little over $7.3 billion cost overrun. How many children in America could you educate with that? How many teachers' salaries could you educate with that? How many classrooms could you build with that? How many students could you cut out of classrooms with $7 billion? We act like it is nothing around here. Nobody even gasps; nobody drew a deep breath when I started throwing these figures out.

I commend my distinguished colleague from Maryland, and I thank her most heartily and profoundly for her kind words about my efforts on this. She mentioned the yellow lights that I had thrown up. I attended a meeting that she and the distinguished chairman of the subcommittee allowed me to attend, and in that hearing—incidentally, Daniel Goldin was testifying—I asked this question: ''Mr. Goldin, is there a threshold for you? Is there a figure beyond which you are not willing to go? Is there a cost figure on the space station you are not willing to go beyond?'' He must have paused at least 15 seconds. Finally, he said, ''I really hadn't thought about it.''

I have thought a lot about it. I have thought almost of nothing else since I started working on this.

So I ask my colleagues, what is your threshold? In 1984, when Ronald Reagan first started talking about a space station at $8 billion, and now we are talking about $100 billion.

Let me show you something. You see this $98 billion figure here? That is not all of it. No. 1, the cost overruns are going to skyrocket from here on. But even if they didn't, this does not include getting the space station down. Add $3 billion for that. So you are already well over $100 billion. When Ronald Reagan said it would be $8 billion to build this thing, I can only shutter to think what Ronald Reagan might think today if his $8 million was up to $100 billion. The conservatives who were in the Senate when Ronald Reagan was President would be gasping for breath. Nobody ever believed we were headed for such a pickle.

If you believe that all the premier scientists in America don't know what they are talking about when they say microgravity research is of micro importance, vote no, vote against my amendment. If you think we are already spending enough at NIH on cancer, Alzheimer's, cardiovascular illnesses, vote no. If you think $11.5 million per man-hour for every hour of research that goes on in the space station is reasonable, vote against my amendment. That is right, $11.5 million an hour—as the Senator from Iowa has already said, at NIH you can get researchers who are the best in the country for $300 an hour. Divide the man-hours for research that you are going to get for this program for 10 years into $100 billion, it comes out to a cool $11.5 million per man-hour.

Is nobody disturbed by this?

Mr. President, I am reluctant to start reading it to you again. But I do want to quote Dr. Robert Park, a professor of physics at the University of Maryland and who has long been the spokesman for the American Physical Society, which is all the physicists in America. Here is what he said while testifying before a committee in the House on July 1, 1993. He was speaking

for the American Physical Society, which is 40,000 physicists. I promise you that virtually every one of them—except those who are employed by NASA—are opposed to this. Dr. Park, in testimony, speaking for all those physicists, said:

> It is in the view of the American Physical Society that scientific justification is lacking for a permanently manned space station in Earth's orbit. We are concerned that the potential contribution of a manned space station to the physical sciences has been greatly overstated and that many of the scientific objectives currently planned for the space station could be accomplished more effectively, with a much lower cost, on Earth.

It goes on and on. He has a magnificent statement. He says:

> The only unique property for the space station environment is microgravity. In 23 years of research, it has found little to no advantage from such an environment.

Mr. President, what are we afraid of? Here we have a chance to save $80 billion. That ''ain't'' beanbags. We are going to spend an additional $80 billion minimum on this program, plus the 20-something billion we have already spent. If we continue to rely on the Russians, you can depend on the space station costing $120 billion to $150 billion, easily—the most monumentally expensive scientific undertaking in the history of the world, all at the expense of the taxpayers.

I plead with you—plead with you—to use your common sense. You don't have to abandon common sense when you come on to the floor of the Senate. I promise you that you can justify this to your constituents. I said earlier, and I will say again, if you can't justify a vote against this program, you have no business being in the U.S. Senate.

Mr. President, I know there are legitimate concerns by people who have honest differences with me. I would certainly never denigrate my friend, JOHN GLENN. I know he believes fervently in this. We all wish him well in the endeavor he is about to take in another trip to space, and we applaud him. As far as I am concerned, I hope they get some beneficial research out of him. But I can tell you that he didn't have to go into a research project. If he just wanted to go up there and look out the window, it would be fine with me, and it would be fine with everybody else in America, too. Before I ever met him, he was a hero of mine. I had tears in my eyes, like every American did, when we saw JOHN GLENN get out of that capsule. We all shared in his joy. We have shared the joy of JOHN and Annie ever since he came to the Senate. We love him and we wish him well on everything—except the vote on this space station.

I yield the floor.

Mr. BOND. Mr. President, the offer still stands. I would be delighted to offer an amendment to name it after the distinguished Senator from Arkansas.

I now yield 5 minutes to the Senator from Tennessee.

The PRESIDING OFFICER. The Senator from Tennessee is recognized.

Mr. FRIST. Mr. President, I rise in support of the continued funding of the International Space Station. Mr. President, there is no denying that the International Space Station has problems. It has had real problems with the prime contractor, the performance of foreign partners and program management, all of which are acknowledged, but all of which, I repeat, are being addressed by NASA and the U.S. Congress.

In the Commerce Committee, a price cap was approved for the International Space Station. This price cap, in my opinion, begins to address many of the guiding principles that I have discussed here on the Senate floor—guiding principles which direct our investment in research and development, and that is good science, fiscal accountability, and program effectiveness. This program, indeed, represents a long-term investment, and it is very hard for us on the floor of the U.S. Senate and in this Congress to understand the importance of long-term investments. But this provides a long-term investment in a one-of-a-kind research facility.

Although the price tag of this facility is approaching $100 billion over the life of the station, the potential of the research to be conducted in this space station is enormous. As a scientist, as one who has conducted research, I understand that there are no guarantees in research. However, if we are to continue to dream, to continue to want to improve the quality of our lives, continue to promote the economic stability of this country, vis-a-vis our neighbors, we must continue to conduct such research, investing long-term.

The space station will provide a unique environment for research with a complete absence of gravity, allowing new insights into human health that we simply cannot explore today in any environment: research on cardiovascular disease, disease of the heart and the vessels of the body, understanding cancer, understanding hormonal disorders and osteoporosis and how the immune system functions. Yes, we have heard a lot about it in the last several hours—the whole issue of cost. We spent over $20 billion on this effort since its inception in 1985. Since the major redesign and the inclusion of the Russians in 1994, the program has spent an additional $11 billion. These amounts are for development only and don't include the costs associated with the shuttle to visit the Mir station.

The real question is, Should we sacrifice this $20 billion investment and terminate this project by some action today? By ending this project, we not only forego the importance of research to be conducted aboard the station, but also the technology development that will be necessary to build and operate the space station. Research and development simply has played too important a role in the economic vitality of our Nation to put it at such great risk. There are many that expect the next great industry to be space. And, yes; I hope the Senate will soon take up consideration of the Commercial Space Act of 1997 as a new industry. Commercial space accounted for $7 billion in 1995. By one estimate space could be a $120 billion worldwide business by the year 2000. This type of growth will mean substantial changes in how things are currently done.

Historically, the government has taken the lead on many long-term research projects. Many are high risk. The outcome we simply don't know. The benefits of that research we cannot predict.

The Federal Government should continue this tradition by continuing to build the International Space Station. However, NASA simply cannot be given a blank check. We, the Members of this body, must continue to hold NASA accountable for good management of the program.

We must be prepared to deal with the various risks associated with the program. There are many challenges; many we can't predict in assembling the components of the space station. The men and women who will make this happen need and will continue to need the support of the American people.

There has been much discussion of the report on the Cost Assessment and Validation Task Force. They don't recommend ending the program. They simply say the program plan shall be revised so that it is achievable within the financial resources available. I think Congress should determine what resources are available for the program and allow NASA to complete it accordingly.

Mr. President, I look forward to the launching of the first element of the station this fall, and I hope that we will soon see the beginning of another successful NASA project.

Mr. President, I urge support for continued funding of the International Space Station.

I yield the floor.

Mr. BOND. Mr. President, is the Senator prepared to yield back time?

Mr. BUMPERS. Mr. President, happily we have a Senator here. I have 4 minutes 20 seconds remaining. I would like to yield that to Senator DURBIN.

Mr. DURBIN addressed the Chair.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DURBIN. Thank you, Mr. President.

Ms. MIKULSKI. Mr. President, if the Senator will withhold, a question to the Senator from Arkansas: Will he yield back the time, or is he going to use it all?

Mr. BUMPERS. I only have 4 minutes 20 seconds. I fully expect the Senator from Illinois to use all of that. My time will be used.

Ms. MIKULSKI. I expect it, too.

Mr. BUMPERS. Under the unanimous-consent agreement we will still have 5 minutes each prior to the vote. Is that correct?

Ms. MIKULSKI. That is correct. If the Senator will withhold a second, I

wish to advise the Chair that I will leave the floor and delegate my authority to Senator GLENN until I return.

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

The Senator from Illinois is recognized.

Mr. DURBIN. Mr. President, before I start, I believe there is an inquiry as to whether there is any time remaining on the other side on this amendment.

The PRESIDING OFFICER. There are 4 minutes.

Mr. DURBIN. Mr. President, I rise in support of the Bumpers amendment. I thank the Senator from Arkansas. This is a battle he has been waging for many years. I joined him as a Member of the House, and I am happy to join him as a Member of the Senate.

Some might ask if I have taken leave of my senses to be on the floor of the U.S. Senate debating the elements of the space program with JOHN GLENN on the other side. How do I find myself in that predicament? In this instance, I have to say I disagree with my friend from Ohio and my long-time hero. I believe the Senator from Arkansas is right. In 1984, President Reagan said to the American people that he had a dramatic announcement to make. A permanent-manned space station, an international cooperative effort, is going to be a staging area for further space exploration. It is a great opportunity, and we will be able, at the cost of $8 billion from the U.S. taxpayers to make this happen. Over the years, we have watched the concept diminish and the price explode.

As the Senator from Arkansas explains to us, just last year, after a thorough professional study was done, they gave us an estimate that the first phase of this project would cost—no, not $17 billion, but in fact $24.7 billion, a 40-percent cost overrun. Those who have been watching this project since its inception and suggestion in 1984 have to wonder whether there is any end in sight.

For each year the cost of this project continues to mushroom, the uncertainty grows and the scope of the project diminishes. Over the years, the debate over this space station has been enlarged to go way beyond its original intent. It is now going to be a research laboratory.

I have listened to those who have argued for the space station say with a straight face, ''If we could just have this space station, then we might one day find a cure for AIDS, a cure for cancer. We need to get up in a weightless atmosphere with microgravity research, and that might be the breakthrough.''

Competent scientists rebut that conclusion, and common sense does as well, because we in the United States of America today fund only 20 percent of the approved applications for medical research at the National Institutes of Health. Here on God's green Earth we are unable to come up with the money for sound research to find a cure for diabetes, Alzheimer's, cancer, and heart disease, and instead, we are going to take another $80 billion and plow it into this project and send it up into space.

I know that some people are energized with the idea of space exploration, and I am one of them. I can remember JOHN GLENN, and I can remember the walk on the Moon, and so many other experiences in life, and going down to Cape Kennedy for a liftoff, and to feel that Earth rumble under your feet when that rocket takes off is something you will never forget. That is exciting.

Let me tell you what else is exciting. It is exciting to pick up the morning paper and to read that we have found a cure for a disease. It is exciting to be able to tell the parent of a child that their baby can live, that we have come through with a new medical breakthrough. It is exciting for us to know that the next generation may not have to worry as much about Parkinson's and Alzheimer's. I find these revelations just as exciting, if not more so, than a space liftoff.

The Senator from Arkansas presents a challenge to us today. He basically is saying to this Chamber, Will you look at the facts as presented? Will you acknowledge the dramatic increase in cost of this space station? Will you come to the understanding, as we did with the Superconducting Super Collider—that big tunnel in Texas, which we finally decided was headed for nowhere—come to the conclusion that this $80 billion could be better spent right here on Earth for real needs of real people, whether it is in the area of medical research or education?

I urge my colleagues to join me in supporting the Senator from Arkansas and to defeat this funding for the space station.

Thank you, Mr. President.

Mr. GLENN addressed the Chair.

The PRESIDING OFFICER. The Senator from Ohio.

Mr. GLENN. Mr. President, how much time?

The PRESIDING OFFICER. Two minutes.

Mr. GLENN. I thank the Chair.

Mr. President, I want to reply to a couple of things which Senator HARKIN indicated a little bit earlier. I was a little bit disquieted by the fact that he indicated that NASA is now an arm of the military Air Force. I don't know where on Earth that came from because NASA has never been that. Military payloads have been put up. But it has not spilled over in that direction at all. It is still going along as a civilian agency. It was declared to be by Dwight Eisenhower, and has continued to be that every since.

As far as money being sucked out, there is $98 billion. We are talking about $2.3 billion in this bill for the next year for the International Space Station. Most of the hardware has already been constructed, or is in the final stages of being constructed.

The fact is that we have doubled the budget for NIH over the last couple of years. It is not that we are not doing things in that area.

I repeat what I said earlier. If we are to wait until every problem in our country is solved before we put money into basic fundamental research out there, that is just the wrong way to go.

Senator DURBIN talks about child diseases. Some of the protein crystal growth advances we are making these days is something that we can look forward to as maybe helping solve some of those childhood diseases.

Back to what the Senator from Iowa said again, though, I will point out that on the very flight that I will be on this fall in October, we have three different areas of commercialization of space in which one of the projects is commercial protein crystal growth. I will not go into details. My 2 minutes won't permit. But in that area, we are in the commercialization of protein crystal growth experiments. We are into another one on the commercial generic bioprocessing apparatus that we are taking up in space. We have another one. I have already been briefed on these. We will be taking part in some of the research that is being done at that time.

The other one is on what is called the cybex mission, and it is to perform IDA-funded, corporate microgravity biomedical cancer research; second purpose: perform other IDA corporate commercial microgravity research, and provide a turnkey service of commercial access to space.

That is the way NASA has been going. That is the direction they want to go.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. GLENN. So this is almost built. It would be foolish to cut back now and waste the money we put into it right when it is just about to pay off in a great way, I think.

The PRESIDING OFFICER. The Senator from Missouri has 1 minute.

Mr. BOND. Mr. President, we have heard much discussion today about the cost of the space station. We have seen from independent analysis by leading scientists that there are truly significant scientific advances which can come from the International Space Station, and we noted it serves many other functions. As the international scientific endeavor is furthered, it offers practical applications in research and potentially commercial manufacturing and materials processing. This is a tremendous step forward. We have heard about the Chabrow report. In it the NASA advisory council says that the task force members, with considerable experience, found the program to be consistent with the level of funding and that they have endorsed it. We think that it is an important measure. We would urge when the vote occurs that Members oppose the amendment offered by Senator BUMPERS.

The PRESIDING OFFICER. All time has expired.

Under the previous order, the amendment is set aside until 6:20.

Mrs. HUTCHISON. Mr. President, I would like to take a moment to commend an extraordinarily successful collaboration between NASA and the JASON Project, a private foundation which is working to engage middle school students in grades 5–8 in science and technology. Each year, JASON electronically takes hundreds of thousands of our students on real scientific expeditions with world class scientists, researchers and explorers to work together with them on projects of discovery. NASA participates through three of its research centers and the expertise of many of its scientists. This collaboration is bringing real science to many students and teachers in the US and abroad, and I wanted to commend NASA's work with JASON as a model for public/private partnerships and educational leadership.

Mr. BOND. The committee is aware of NASA's partnership with JASON and we encourage NASA to continue and to expand this work during the next fiscal year.

HOUSING FOR THE MENTALLY ILL

Mr. DOMENICI. Mr. President, I would like to raise the issue of housing for the mentally ill as the Senate discusses this important VA–HUD–Independent Agencies Appropriations bill.

I have worked for many years to focus attention on the serious diseases that are mental illnesses. These are devastating diseases that can leave a person significantly disabled and in need of a variety of services, including affordable housing.

Mr. President, I recently met with representatives of a non-profit organization, Cornerstone, Inc., that has provided capital funding to construct quality housing for the seriously and chronically mentally ill who reside in the District of Columbia. This program began in 1994 when Congress directed that $5 million of funding previously for St. Elizabeth's Hospital be allocated for community-based housing. With $3 million of this funding, Cornerstone has leveraged other resources to a total of $15 million that has been used to construct over 300 units of housing for those with mental illness.

Cornerstone is now into its final year of funding under the original program. Continuation of this program with another $5 million in capital funding would enable over 350 patients currently residing at St. Elizabeth's to be housed in affordable housing at significant savings over continued residence at the Hospital. Housing supported by Cornerstone, Inc., costs less than $40,000 per unit compared to an estimated cost of $100,000 per patient at St. Elizabeth's Hospital. This is the type of public-private partnership that can do so much to help our communities.

Would the Chairman agree that it would be worthwhile for the Secretary of Housing and Urban Development to consider a proposal for continued funding of the Cornerstone, Inc. affordable housing program for the seriously and chronically mentally ill as the Department distributes its 1999 funding?

Mr. BOND. I understand the concern of the distinguished Senator from New Mexico in providing sufficient housing for the mentally ill. I know that here in the District of Columbia the supply of supportive housing is of ongoing concern. I would concur with my colleague with New Mexico that the Secretary of Housing and Urban Development should consider a proposal from Cornerstone, Inc., to continue constructing affordable housing for the seriously and chronically mentally ill in the District of Columbia.

Mr. DOMENICI. I thank the distinguished Chairman for his consideration of this important matter. I join him in urging the Secretary of Housing and Urban Development to work with Cornerstone, Inc., on the continuation of an affordable housing program for the mentally ill in the Nation's Capital.

Mr. LUGAR. Mr. President, Senator COATS and I have shared with you this year our strong support for $2 million through the HUD Economic Development Initiative Account for the Midwest Proton Radiation Institute (MPRI). The MPRI is an important economic development and cancer treatment initiative at Indiana University, Bloomington, Indiana. This is an important effort for the University, the City of Bloomington, and the State of Indiana. Funding for this project was not included as one of the 87 projects listed for this account in S. Rept. 105–216. The MPRI project—like several science-related projects slated to receive funding as listed in S. Rept. 105–216—is beneficial from an economic development perspective as well as in the area of health sciences research and cancer treatment. This is our only project request from the VA–HUD Subcommittee this year. As you move forward with consideration of the final VA–HUD Appropriations bill, I hope you will give consideration to including funds for this valuable and worthwhile economic development project of importance to my State.

Mr. BOND. I appreciate the Senator's strong interest in the Midwest Proton Radiation Institute. I believe this project will create economic growth in Indiana and contribute to improving our nation's cancer treatment activities. As we move to conference with the House on S. 2168, we will give this project every consideration for funding.

Mr. LUGAR. I thank the Chairman, for his comments and for his interest in this project.

Mr. COATS. Of the $85 million set aside for the EDI account in S. 2168—as stated in S. Rept. 105–216—only $67 million earmarked for individual projects in 40 states. It appears funding is available for additional projects within the appropriated spending provided in the bill. I believe the Midwest Proton Radiation Institute is an important effort that will be of great benefit to the city of Bloomington and to Indiana University. In addition, Senator LUGAR and I believe the MPRI is a worthwhile and appropriate project for funding under community development programs at the Department of Housing and Urban Development. I join with Senator LUGAR in requesting your assistance and consideration for funding for this important project as you move to conference with the House on the FY '99 VA–HUD Appropriations bill.

Mr. BOND. Yes, I share the Senator's view that the MPRI project is a meritorious one that should receive serious consideration for funding by HUD in FY 1999. I am pleased to know of your support for this MPRI initiative, and that you join with Sen. LUGAR in seeking funds for this effort.

Mr. COATS. I thank the Chairman.

SMALL SYSTEM TECHNICAL ASSISTANCE AND THE SAFE DRINKING WATER ACT

Mr. CHAFEE. Mr. President, page 67 of the committee report accompanying the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations bill of 1999 includes $8 million for the National Rural Water Association. In addition to the appropriation to the National Rural Water Association, the Committee notes that ''States are authorized to set aside 2 percent of the funds provided under their drinking water State revolving fund allotment.''

I ask my friend from Missouri if he and other members of the Appropriations Committee are implying that the 2 percent set aside authorized in Section 1452(g)(2) of the Safe Drinking Water Act Amendments of 1996 is to be used for grants made to the National Rural Water Association and various regional community action organizations?

Mr. BOND. Mr. President, I am not making such an argument. It was not the Committee's intention to imply, encourage or require States to use the 2 percent set aside authorized in Section 1452(g)(2) for the so called ''circuit rider'' program. The Committee is aware that Section 1452(g)(2) gives States the discretion to use up to 2 percent of their allotted revolving loan funds to provide technical assistance to small public water systems. The language was included in recognition of the fact that States have the ability to increase funding in this area above the $8 million provided directly in this bill at their discretion.

Mr. CHAFEE. Mr. President, I thank the chairman of the Subcommittee on VA, HUD and Independent Agencies for clarifying the report.

ENHANCED VOUCHERS

Mr. MACK. Mr. President, in the last two appropriations acts, the Congress provided enhanced section 8 tenant-based subsidies to low-income residents of certain multifamily housing properties whose owners have elected to prepay their FHA-insured mortgages. These enhanced vouchers were provided to protect residents from displacement from their homes. I understand, however, that the Department of Housing

and Urban Development (HUD) has interpreted the appropriations language so that previously assisted residents would pay an amount based on the same amount of rent on the date of prepayment regardless of a change in their adjusted income. In other words, HUD would require previously assisted residents to no longer base their rent contribution as a percentage of income. This policy interpretation will likely force a section 8 assisted resident to pay a higher percentage of their income in rent if their income decreased and potentially result in displacement.

Mr. President, HUD's interpretation seems contrary to the intent of the appropriations language and the statutory requirements under section 8 or other rental assistance programs. I would like to ask the Chairman of the VA, HUD Appropriations Subcommittee if HUD has correctly interpreted the intent of the appropriations language.

Mr. BOND. I appreciate the Senator's attention to this issue. HUD has incorrectly interpreted the enhanced voucher language. Previously assisted residents who receive enhanced vouchers should be paying the same percentage of income for rent as they had before they had received the enhanced voucher. This means that if a resident's income decreases, their rental contribution should also decrease. The purpose of providing enhanced vouchers to previously assisted residents was to ensure that these residents would be protected from displacement or unaffordable rent increases.

I would also like to state that I expect HUD to administer the enhanced voucher program in a manner that will ensure a smooth transition for residents in prepayment developments. I have heard of some administrative problems with the enhanced voucher program that has created undue and unnecessary hardship for the residents. I would like to reemphasize that the transition should be administered so that residents are able to continue their tenancy with as little disturbance as possible.

Mr. MACK. I appreciate the Senator's response and his leadership in protecting low-income families.

EXCEPTION RENTS FOR RURAL AREAS

Mr. HARKIN. Mr. President, under last year's VA/HUD appropriations act, the Congress created a program called ''mark-to-market'' to reduce over-market section 8 contract rents on FHA-insured multifamily properties. Section 514(g)(2)(A) of the mark-to-market program would authorize the Secretary of Housing and Urban Development (HUD) to allow for exception rents over the 120 percent of fair market rent (FMR) limit for up to five percent of the restructured units in a year. There is some confusion, however, if this five percent waiver is a national limit or a geographical limit. I am concerned that certain areas, such as the upper Midwest, the need for waivers may exceed five percent because of the proportion of elderly facilities and the way FMRs compare to the relative costs of operating those facilities in certain areas as well as the random circumstances that may occur in certain geographical areas in a given year.

I would like to ask the Chairmen of the HUD authorizing and appropriations subcommittees for their clarification on the congressional intent of this issue.

Mr. MACK. I thank my colleague from Iowa for raising this issue. The five percent waiver is a national limit, and the Secretary should exercise his authority in waiving this limitation for areas such as the upper Midwest.

Mr. BOND. I also thank my colleague from Iowa for raising this issue. I concur with the Chairman of the Housing Subcommittee that the five percent waiver is a national limit. This provision was included in mark-to-market to ensure that properties, especially those that serve elderly persons in rural areas, are not adversely affected by the debt refinancing and rent reduction process.

Mr. HARKIN. I thank the two Senators for their assistance in this matter and for their work on housing issues.

Mr. MACK. Mr. President, the ''mark-to-market'' program that was enacted last year in the VA/HUD appropriations act was expected to be implemented by late October of this year. While I applaud the efforts of the Secretary of Housing and Urban Development (HUD) in preparing the implementation of the law, I am still concerned about its progress and ability to meet the October deadline.

I am concerned about the President's failure after 9 months to nominate a Director of the Office of Multifamily Housing Assisted Restructuring and that interim regulations have not yet been published. I, however, would like to focus on the fact that HUD has not begun the process for selecting participating administrative entities (PAE). Without them, the program will not work. In the original mark-to-market legislation that passed the Senate as part of the Balanced Budget Act of 1997, State and local housing finance agencies (HFA) that had qualified under the mark-to-market demonstration and FHA risk-sharing programs would automatically qualify as PAEs. The Banking Committee felt strongly that HFAs not only were the best entities to administer mark-to-market, but it also had concerns about HUD's ability to select qualified entities in a timely and objective manner.

Mr. BOND. I thank Senator MACK for raising these concerns. I completely agree that it is critical that the PAEs be in place by October if the program is to be able to operate at that time. I also add that the consequences of not implementing mark-to-market in a timely manner are serious and could create havoc with contract expirations and renewals. Even if the program is only delayed, HUD may have to extend the contracts at above market levels to provide the PAEs adequate time to restructure the properties. This will result in additional costs to the government and result in shortfalls in the appropriation for renewals. Further, the uncertainty surrounding the rules and regulations of the program will make it difficult for project owners and residents to prepare for mark-to-market.

Mr. President, based on the Administration's less-than-adequate performance in selecting restructuring agents under the mark-to-market demonstration programs, I would say that the concerns expressed by the Chairman of the Housing Subcommittee are valid.

Mr. MACK. I thank the Chairman of the VA/HUD Appropriations Subcommittee for his response and shared concerns. I would like to stress that the credibility of HUD is directly linked to its successful implementation of the mark-to-market program. It is imperative that the Department not only ensures that the program is implemented in time and in compliance with the letter and spirit of the law, but it also ensures a smooth transition. I believe that the legislation provides the Secretary with sufficient flexibility in selecting PAEs and would highly recommend that the Secretary use its current restructuring agents to continue as PAEs under the permanent program, especially if the program is to be implemented in time. As I have advocated before, I would specifically recommend the use of State and local HFAs as PAEs.

HFAs have proven that they have the capacity and willingness to serve as the federal government's partners in affordable housing. Thirty HFAs have been qualified by HUD to participate under the mark-to-market demonstration program. Twenty-eight HFAs are participating in the FHA risk-sharing program. Almost every state HFA has administered the successful Low Income Housing Tax Credit program since the Congress created it in 1986. HFAs have financed more than 200,000 Section 8 units and administer Section 8 contracts on behalf of HUD in many cases. Thirty-four HFAs administer the HOME program, under which multifamily properties are being financed every year.

It is clear from this evidence that the HFAs are the most qualified to act as PAEs under the mark-to-market program and more importantly, they are publicly accountable and have missions that are aligned with HUD. I expect HUD to approve many HFAs as PAEs and provide them as much flexibility as possible within appropriate parameters to administer the program.

Mr. BOND. Based on their demonstrated performance as the Senator from Florida has pointed out and my own knowledge of the Missouri Housing Finance Agency, I would also expect HUD to approve many HFAs as PAEs. I also agree that HUD should not require the HFAs that act as PAEs to go

through any unnecessary administrative steps in restructuring properties. I would especially be concerned if HUD created impediments in the HFAs ability to provide financing, such as risk-sharing, for restructuring transactions.

OWNERS' RIGHT TO PREPAY FHA MORTGAGES

Mr. MACK. Mr. President, I understand that the Manager's Amendment to the VA/HUD Appropriations Bill contains an important provision that allows owners to prepay its FHA-insured multifamily housing mortgage. This provision would continue current policy.

I would like to ask Senator BOND, the Chairman of the VA, HUD Appropriations Subcommittee, if he could confirm this.

Mr. BOND. I thank the Chairman of the Housing Subcommittee for raising this issue. The Senator is correct that the Manager's Amendment contains language regarding the owner's right to prepay its mortgage and continues current housing policy that has been in effect for the past three years. This policy change was originally made in past appropriations legislation.

Under the appropriations legislation and this year's legislation, the Congress restored the owner's right to prepay its mortgage under the Low Income Housing Preservation and Resident Homeownership Act of 1990 (LIHPRHA). However, as a condition of prepayment, some resident protections were included in the appropriations law to prevent hardship for affected residents. Specifically, upon prepayment, an owner could not raise rents for 60 days and eligible residents were provided enhanced or ''sticky'' vouchers so that they could choose to remain in their homes at an affordable rent. The provision of sticky vouchers were provided in lieu of the resident protections under LIHPRHA. In other words, the provision of sticky vouchers and the prevention of raising rents for 60 days permanently replaces the LIHPRHA resident protections that included (1) providing relocation benefits, (2) keeping rents at levels existing at the time of prepayment for three years, and (3) requiring owners to accept voucher holders.

Mr. MACK. I thank my colleague for his assistance.

Mr. ROCKEFELLER. Mr. President, as the ranking member of the Committee on Veterans' Affairs, I am pleased to offer my support for S. 2168, the FY 1999 Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies appropriation bill, and most particularly for Title I, the section outlining funding for VA.

Once again, the chair of the VA–HUD Subcommittee, Senator BOND, the ranking member, Senator MIKULSKI, and the other members of the Subcommittee, have taken a reduced allocation and tremendous limitations on funding, and have miraculously created a bill which adequately addresses the needs of America's veterans. While I would always want to increase support for veterans programs further, I am enormously pleased with the result of their efforts. I would like to highlight several accomplishments in particular.

On the health care side of the ledger, the Committee on Appropriations recommended $17.25 billion for VA medical care, a substantial increase of $222 million over the President's request and $192 million above the FY 1998 level. When these funds—$17.25 billion—are coupled with receipts collected under the Medical Care Cost Fund, the Veterans Health Administration will have access to $17.92 billion in discretionary resources to care for sick and disabled veterans.

I am also particularly gratified by the Committee's report language on the need for community-based outpatient clinics (CBOCs) in the Eastern Panhandle of my home state of West Virginia. Indeed, the Committee noted that clinics in Petersburg and Franklin will benefit approximately 2,000 veterans who have been forced to drive long distances and spend the entire day at VA medical center for routine health care. I am hopeful that VA will begin providing needed health care services by the end of this year, if not sooner.

I must also mention the extraordinary work done by the Committee to appropriate substantial funds for the VA medical and prosthetic research account. For the first time in many years, the Administration had proposed funding this account at the level of $300 million. Although this amount represents an increase compared to last year, unfortunately, this level of funding is not sufficient even to keep up with inflation, much less provide for any real growth.

For many years, the VA research program has suffered from flatline funding that has hampered its ability to improve the quality of care provided to veterans, attract well-trained physicians, and advance medical treatments that can benefit the nation as a whole. In light of this, the Committee has gone beyond the $300 million mark and allocated an additional $10 million. These additional funds will produce research discoveries which will benefit veterans and non-veterans alike.

The bill before us also includes a substantial increase for grants for construction of state extended care facilities. The Committee recognized the important role State Veterans Homes play in providing domiciliary and nursing home care to veterans and chose to recommend $90 million for this program. This recommendation is $10 million more than the fiscal year 1998 funding.

The Committee also included report language which emphasizes the need for VA to ensure funding for grants and per diem payment assistance to community-based providers of services to homeless veterans. In the past three years, VA has closed approximately 4,500 acute mental health and substance abuse beds. At the same time, the number of unique patients receiving outpatient mental health and substance abuse treatment has increased by 8 percent. There is no question that outpatient based treatment for homeless veterans with mental illnesses and substance abuse disorders can be effective, but such treatment must be coupled with safe, supervised transitional housing programs. VA grant programs help to fill the void caused by the closure of inpatient services.

On the benefits side, I was very pleased to see that the Committee included an increase of $5 million for the Veterans Benefits Administration and tied the release of these funds to submission of a plan implementing the recommendations of the National Academy of Public Administration. VA continues to struggle to correctly adjudicate veterans' benefits claims in a timely manner, and faces a backlog of pending cases and an increase in new claims being filed. Additional funding, spent in a targeted manner, should greatly improve VA's decisionmaking ability.

The Committee has also recommended a $2.2 million increase in funds allocated for the Office of the General Counsel (OGC), Professional Group VII, which represents the Secretary before the U.S. Court of Veterans Appeals. There is a growing backlog of cases at the Court created by the loss of experienced attorneys and increased productivity of the Board of Veterans' Appeals (BVA). Our veterans should not have to wait additional time for a decision because the OGC does not have the staff to litigate their cases.

Mr. President, in closing, I am pleased with what the Committee on Appropriations has been able to do for VA. I applaud the leadership of all the members of the Appropriations Committee, and especially those members on the VA–HUD Subcommittee.

AMENDMENT NO. 3057

Mr. CHAFEE. Mr. President, I would like to thank Senators BOND and MIKULSKI for including a provision in the manager's amendment that makes it explicit that State Clean Water State Revolving Loan Fund programs may continue the practice of collecting a loan service fee to help cover the cost of administering the loans and managing the revolving loan fund.

Mr. President, there are approximately fourteen States that charge a loan administration fee to revolving loan fund borrowers to cover some of the costs associated with the loan transaction. As a service to the borrower, most of the States roll this fee into the loan so that it is repaid with interest over the duration of the loan. This is a tremendous help to the borrower, who is often unable to pay the fee upfront. The Environmental Protection Agency (EPA) has recently objected to this practice despite the fact that it has been used since the inception of the revolving loan fund. EPA contends that this practice violates the

four percent limitation on administrative fees in Title VI of the Clean Water Act.

The language included in the manager's amendment will resolve this problem by allowing States to charge administrative fees regardless of whether they exceed the four percent limitation. To ensure that this practice is not abused, the fees cannot exceed an amount the Administrator of EPA deems reasonable.

Mr. President, without this amendment many of the Clean Water State Revolving Loan Fund programs would face severe financial hardship that would be detrimental to the health of the revolving loan fund program.

Once again, I would like to thank Senators BOND and MIKULSKI for including this very important amendment in their manager's package.

FEMA

Mr. LEAHY. Mr. President, I have a great appreciation for the fine work Senator MIKULSKI and Senator BOND have put into crafting this difficult bill. The VA, HUD and Independent Agencies Appropriations bill in particular deals with many tough issues and competing demands. One of the smaller agencies which I would like to bring attention to today is the Federal Emergency Management Agency (FEMA).

Just a few weeks ago FEMA invited Lamoille County in Vermont to become a part of Project Impact, FEMA's pre-disaster mitigation program. This is a program that is partnering with communities, and the private sector, to make communities more resistant to natural disaster.

The importance of this kind of pre-disaster planning was driven home this past weekend as Lamoille, along with Addison, Chittenden, Franklin, Orange, Rutland, Washington, and Windsor Counties in Vermont were again devastated by severe storms and flooding. On June 30th, the President declared these areas in Vermont a major disaster. I toured the area with FEMA officials last week and, thanks to the hard work and spirit of the people of Vermont, the local public safety forces and FEMA, those communities are beginning to recover. Project Impact could help counties like Lamoille take steps to reduce the costs and public health risks of these kinds of disasters in the future.

FEMA Director, James Lee Witt is a friend to just about every member of the Senate. He and his staff, both here and in the regional offices, have been there for our states through all manner of natural disasters. To maintain FEMA's capability to respond so quickly to the needs of our states, I believe Congress should support the levels of funding for FEMA recommended in the President's budget. Again, I congratulate Senator BOND and Senator MIKULSKI for their fine work and know they share my support for FEMA and the work it does.

ENVIRONMENTAL SELF-EVALUATIONS

Mr. ALLARD. Mr. President I was prepared to offer an amendment to the VA/HUD Appropriations bill that would have taken away EPA's authority to withdraw Colorado's delegated environmental programs. EPA has been threatening Colorado's authorization to administer delegated programs because of an environmental self-evaluation law the State passed in 1994. As many listening know, self-evaluation laws allow companies, individuals, and local governments to go above and beyond what is required in seeking out environmental problems under their jurisdiction. In return the entity who performed the audit is protected from fines. Colorado's law makes good sense, in fact in the short time it has been in existence those who have availed themselves of it have found and corrected many environmental problems that otherwise would have gone undetected.

However, last February I became aware that EPA may not have been taking the State of Colorado seriously with respect to negotiations on the self-evaluation law. At that time I stated my intention to object to an EPA nominee. Subsequently, I dropped my objection to their nominee after speaking with Assistant Administrator Herman about my concerns. He agreed to do his best to ensure that negotiations occurred in good faith and that they were inclusive of Colorado's elected officials who had an interest in the manner. Over the past several weeks I became concerned that EPA had not followed through on this commitment.

I was particularly distressed at the prospect that EPA had promised me they would take an action and then turned around and ignored their promise. Earlier today Assistant Administrator Herman called me and assured me that he had been faithful with respect to the previous agreement we had made. However, he agreed to redouble his efforts in negotiating an agreement to the audit issue in Colorado that has broad based support because of broad based involvement among policy makers and other local officials.

While my inclination is still to offer my amendment, I am willing to forego it in this instance. However, should I find that EPA is attempting to exclude people from negotiations on Colorado's environmental audit law I will revisit this issue soon.

VETERANS' TOBACCO-RELATED ILLNESSES AND DISABILITY

Mr. MCCAIN. Mr. President, I had every intention to offer an amendment to the Veterans' Affairs/Housing and Urban Development Appropriations bill that would restore the $10.5 billion in funding that was so egregiously and eagerly taken from our nation's veterans to fund pork-laden highway programs in the Intermodal Surface Transportation Efficiency Act of 1998 (ISTEA). Unfortunately, there was simply no possibility that this amendment would be adopted, simply because of the inflexibility of the Appropriations Committee's allocation of funds between the Transportation and VA/HUD Subcommittees.

Because of the arcane rules of the Senate, I and my cosponsors are precluded from righting this profound wrong that has been perpetrated against those who have served and sacrificed for our country.

This amendment would not have been my first attempt to rectify this shameful treatment of our Veterans. On the tobacco bill, I sponsored legislation that would provide not less than $600 million per year to the Department of Veterans Affairs for veterans' health care activities for tobacco-related illnesses and disability and directed the Secretary of Veterans Affairs to assist such veterans as is appropriate. The amendment would have provided a minimum of $3 billion over five years for those veterans that are afflicted with tobacco-related illnesses and disability. Additionally, the amendment would have provided smoking cessation care to veterans from various programs established under the tobacco bill. Unfortunately, when the tobacco bill was returned to the Commerce, Science, and Transportation Committee, the funding vehicle for those afflicted veterans suffering from smoking-related illnesses, went with it.

The failure to address the tobacco-related health care needs of our men and women who faithfully served their country in uniform would be wrong. Congress cannot continue to rob from veterans, whose programs have been seriously underfunded for years, to pay for special interest projects.

Mr. President, I want to assure my colleagues, and more importantly, our veterans, that this issue is far from dead. I am even more compelled and committed to find a vehicle to restore the critical funding that was so selfishly taken by members of this body. Mr. President, our veterans—those who served and sacrificed, those who trusted, and in this case were betrayed by their government—deserve no less.

AMENDMENT NO. 3063

(Purpose: To amend the Public Health Service Act and the Employee Retirement Income Security Act of 1974 to protect consumers in managed care plans and other health coverage)

Mr. DASCHLE. Mr. President, I have an amendment and I send it to the desk.

The PRESIDING OFFICER. The clerk will report.

Mr. DASCHLE. Mr. President, I know there is an understanding that we will go to the veterans amendment at some point, and I would be happy to lay aside this amendment to accommodate Senator MCCAIN and others who may wish to offer their amendment, with the understanding that we might have a vote on both amendments at some point in the future. But I wanted to lay this amendment down, and I will be brief because I know the distinguished Senator from New Mexico also wishes to speak.

The PRESIDING OFFICER. If the leader will withhold, the clerk needs to report.

The assistant legislative clerk read as follows:

The Senator from South Dakota [Mr. DASCHLE] proposes an amendment numbered 3063.

Mr. DASCHLE. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

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

The amendment is printed in today's RECORD under ''Amendments Submitted.''

Mr. DASCHLE. Mr. President, the issue of patient protection is among the most important health questions facing the American people today. In survey after survey, the American people have said without equivocation that they want Congress to deal with this issue. More and more, from places all over the country, we hear reports about victims of our current system and cries for reform. The need to address this issue, this year, has become more and more pronounced.

For many months, we have worked in concert with the White House and with our House colleagues to come up with a way to comprehensively respond to the growing array of concerns and problems that people from all over the country have raised as they talk about the current situation we face with regard to health insurance and HMOs.

After a great deal of attention, study, thoughtful analysis, and working with over 100 organizations from all philosophical and political persuasions, we have introduced legislation that provides a number of very basic patient protections: providing access to needed specialists including pediatric specialists for children; ensuring access to an independent appeal board when insurance companies deny care and requiring timely resolution of those appeals; guaranteeing access to the closest emergency room so that people don't have to waste precious time as they drive miles to save their insurance company a few dollars; allowing patients to see the same doctor through a pregnancy or a difficult treatment even if their doctor stops participating in an HMO; allowing women direct access to their ob/gyn without asking their insurance company for permission; preventing drive-through mastectomies and other inappropriate insurance company interference with good medical practice; and holding HMOs accountable when their decisions to deny or delay health care result in injury or death.

These provisions, and a number of others that I will not list now, were very carefully thought through before we incorporated them in this patient protection bill. I do not know of another piece of legislation that has higher priority. I do not know of another piece of legislation that deserves the attention of the Senate more than this one.

Every day we fail to act on basic patient protections, the list of families who suffer continues to grow. We have fewer than 10 weeks remaining before the end of the session. We have yet to spend 1 day talking about the Patients' Bill of Rights, debating patient protections, and dealing with this issue in a comprehensive way. My hope is that we can work through this amendment and come up with a way in which to address this issue on this bill.

I also would like very much to be able to schedule debate and a vote on this legislation. To date, we have not been able to do that. So I offer this amendment in good faith and hope that we can finally come to closure on what I consider to be the single most important piece of health legislation facing the Congress and our country today.

I yield the floor.

Mr. BOND addressed the Chair.

The PRESIDING OFFICER. The Senator from Missouri.

Mr. BOND. Mr. President, I regret that the minority leader has chosen to add a totally new subject to this debate. I know there have been discussions at the leadership level about scheduling debate on it.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. KENNEDY. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

Mr. BOND. Objection.

The PRESIDING OFFICER. Objection is heard.

The assistant legislative clerk continued with the call of the roll.

Mr. BOND. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. INHOFE). Without objection, it is so ordered.

AMENDMENT NO. 3062

The PRESIDING OFFICER. The pending question is the Bumpers amendment No. 3062.

Mr. BUMPERS. Mr. President, I yield myself 3 minutes.

I assume most everybody in this Senate now understands that we are debating an amendment that would terminate the space station, save $80 billion over the next 15 years, and this year alone put $1 billion in veterans medicine, $450 million into low-rent housing.

I hate to call a program that has been successful in most ways, almost comical, but there is no way to describe what is going on with the space station right now any other way. We have been told from the beginning it would cost $17.4 billion to build the station on Earth. There are three stages: No. 1, you have to build it; No. 2, you have to put it in space; No. 3, you have to operate it for 10 years.

What are we looking at? We are looking at a $100 billion cost today. Since last October 1, since last October 1, the Chabrow Commission, appointed by Daniel Goldin, the administrator of NASA, Jay Chabrow, probably the best space policy analyst in America, comes back and says the first part is not going to cost $17.4 billion; NASA is going to take 10 to 38 months longer than they told you, and it will cost $24.7 billion. That is $7.3 billion—a 43-percent cost overrun and we haven't even finished building it yet.

If you think that is a cost overrun, wait until the Russians start reneging. Jay Chabrow says you will not have this thing finished in early 2003. You will be lucky to have it finished early 2006. So when the Russians start reneging on their part of it, we have about 80 launches to deploy this thing, and the Russians are going to be responsible for about 40 of them, between 40 and 49. Who here believes that a country who can't even pay the electric bill at their principal cosmodrome is going to come through on their commitment with that many flights? Every time they renege it will cost us close to $1 billion.

I asked my colleagues this afternoon, and I repeat the challenge, I have talked endlessly about the cost overruns we are experiencing and the ones we are going to experience, and according to the way we have debated this thing this afternoon, those cost overruns are like Ross Perot's crazy aunt in the basement; we ignore it. I can tell you that crazy aunt in the basement will have a lot of company unless we kill this program now.

You can save $80 billion. We have yet to spend $80 billion. If the cost overruns are anything even close to what they are looking at now, what Jay Chabrow says is a distinct possibility, you are talking about $100 billion to $150 billion, and every research scientist in America says it is of highly questionable value. As a matter of fact, virtually every one of them are adamantly opposed to it.

I reserve the balance of my time.

Mr. BOND. I yield 2 minutes to the distinguished Senator from Texas.

The PRESIDING OFFICER. The Senator from Texas.

Mrs. HUTCHISON. I want to thank Senator BOND very much for allowing me to be in the summation. Because of a family emergency I just arrived.

Mr. President, I do admire the tenacity of the Senator from Arkansas, for he has tried 15 straight times to submarine the space station, in a mixed metaphor. But I do think the Senator is wrong.

I think the Senate will rise above his arguments, which would have the world's greatest superpower saying to all of the other nations that have put their money into this project, we are going to walk away from an experimental project, 90 percent complete. This project is succeeding. What we are going to be able to do has already begun to be tested in the early stages, and that is use microgravity conditions to grow tissue, which you can't do on Earth. You can't simulate this procedure on Earth. It means we will be able

to take defective tissues, without harming the patient, and experimenting without harming the patient. It is biomedical research. We have partners—the United States, Canada, Italy, Belgium, Netherlands, Denmark, Norway, Spain, France, Germany, the UK, Japan, and Russia—in this project. Yes, the Russians are having trouble. We know that. Does that mean we will walk away from all of our other international partners? The United States has been the leader in technical advances. It is why we have been able to get all of the benefits that we have seen from space research, because we have been willing to take the risk. Experiments are not precise. You make mistakes when you are the first one out there.

You can't draw the budget for the first time and say you have to stay within this budget. Yes, it may take a couple more years. But if we can find a cure for ovarian cancer, for breast cancer, for osteoporosis, then I think a couple of years or 3 years working this out together, perhaps getting new partners, which is what we ought to be doing, instead of saying let's walk away, 90 percent into a project, with all of the other countries that have depended on us.

We are the world's greatest superpower. We are not going to walk away from our partnership. We are not going to walk away from the leadership, at least that is not the country I represent. Most certainly, I don't think the Senate would do something so narrow.

Mr. BUMPERS. The Senator from Texas just alluded to curing breast cancer and curing several other diseases. You could fund the National Institutes of Health God knows how many times for what this thing will cost. You are not going to cure anything with this. That is the reason America's physicists, cell biologists, and medical scientists are all opposed to it.

You know what this space station is going to cost per man-hour of research?—$11.5 million per hour. Can you imagine us, with our eyes wide open, saying we are going to build a space station for research purposes that will cost $11.5 million an hour. It is the height of irresponsibility.

The American people have a right to expect us to be fiscally responsible. I want to ask my colleagues in closing, how far are you willing to go? What is the threshold beyond which you are not willing to go? We have gone from $8 billion to $100 billion for the space station and we are headed for $150 to $200 billion. We kill the Super Collider, we kill the Clinch River Breeder, and who here misses them? We save America billions of dollars. You have a chance to save $80 billion right now and help veterans, help veterans and help people who are desperately needing low-rent housing.

I plead with my opponents to support this amendment.

Mr. BOND. Mr. President, I yield the remaining time on this side to the distinguished Senator from Ohio.

Mr. GLENN. Mr. President, how much time remains?

The PRESIDING OFFICER. There are 2 minutes 48 seconds remaining.

Mr. GLENN. Mr. President, we have addressed costs here. This $96 billion is a fictitious figure; $40 billion of that, by NASA estimates, includes shuttle costs that are going to go on anyway. Besides all those big figures taken into a 15-year account here, what we are talking about in this bill is for fiscal 1999? We are talking about $2.3 billion versus $2.1 billion for last year, not a huge increase.

Now, there are always going to be competing needs for every bit of research. If we ever tried to solve all problems and to do everything we wanted to do before we made research, we would never have moved off the east coast. Basic research is a way of life, fundamental. This is a new laboratory we are working on. It is our experience that dollars spent on research seem to have a way of paying off in the future beyond anything we ever foresee at the outset. That has been the history of this country. We have gotten to the place now where much of the space program is increasingly going commercial.

On the flight we will be on, STS–95, we will have three specific projects. We will have basic research, besides what we are talking about, in the physical sciences, in the bio area. We will have the Spartan spacecraft making the measurements of the Sun and solar winds. We will have research on aging, with which I will be involved. We will have ultraviolet measurements that will be probably the most accurate ever made in space. These things cannot be done except in zero-G, not on the ground.

We are talking about payoffs in commercial areas with three different projects on STS–95. We are almost there. The figure was quoted a moment ago that 90 percent of our hardware has been built. I think 75 percent of the milestones have already been passed. The first elements are due to be launched later this year. I think the Russians are due to launch the first node, module, on November 20, and we are scheduled to launch the first United States one on December 3.

It is a 16-nation commitment that we have. Certainly, it is better to be working peacefully together than to be thinking about war, which we were a few years ago. It is the biggest, most incredible scientific engineering experiment ever tried internationally. I think there can be incredible scientific possibilities and results from this, not only in medicine, but learning about our world and our solar system, inspiring our young people to explore and to learn. The benefits are not out there in space. The benefits are for us right here on Earth. That is the important part of this whole thing. The Chabrow report said this. Although costs in scheduled growth have occurred, the magnitude of such growth has not been unusual, even when compared with other developmental programs of lesser complexity.

The PRESIDING OFFICER. The question occurs on amendment No. 3062 offered by the Senator from Arkansas.

Mr. BOND. Mr. President, I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. The question is on agreeing to the amendment. The yeas and nays have been ordered. The clerk will call the roll.

The legislative clerk called the roll.

Mr. FORD. I announce that the Senator from Hawaii (Mr. INOUYE) is necessarily absent.

The PRESIDING OFFICER. Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 33, nays 66, as follows:

[Rollcall Vote No. 185 Leg.]

YEAS—33

Abraham	Dorgan	Leahy
Ashcroft	Durbin	Levin
Baucus	Feingold	Lugar
Bryan	Harkin	Moynihan
Bumpers	Hollings	Reed
Byrd	Hutchinson	Snowe
Chafee	Jeffords	Specter
Coats	Johnson	Thomas
Collins	Kennedy	Warner
Conrad	Kohl	Wellstone
Daschle	Lautenberg	Wyden

NAYS—66

Akaka	Ford	McCain
Allard	Frist	McConnell
Bennett	Glenn	Mikulski
Biden	Gorton	Moseley-Braun
Bingaman	Graham	Murkowski
Bond	Gramm	Murray
Boxer	Grams	Nickles
Breaux	Grassley	Reid
Brownback	Gregg	Robb
Burns	Hagel	Roberts
Campbell	Hatch	Rockefeller
Cleland	Helms	Roth
Cochran	Hutchison	Santorum
Coverdell	Inhofe	Sarbanes
Craig	Kempthorne	Sessions
D'Amato	Kerrey	Shelby
DeWine	Kerry	Smith (NH)
Dodd	Kyl	Smith (OR)
Domenici	Landrieu	Stevens
Enzi	Lieberman	Thompson
Faircloth	Lott	Thurmond
Feinstein	Mack	Torricelli

NOT VOTING—1

Inouye

The amendment (No. 3062) was rejected.

Mr. LOTT addressed the Chair.

The PRESIDING OFFICER. The majority leader is recognized.

Mr. LOTT. Mr. President, for the information of all Senators, this vote in relation to the space station was the last vote of the evening. Wednesday, the Senate will consider the IRS conference report. I expect a considerable amount of time for debate to occur with respect to this IRS reform and restructure bill. A lot of Senators put a lot of time into it. There are some important provisions I know they will want to emphasize. Therefore, a late afternoon or early evening vote can be

expected to occur with respect to the IRS reform legislation.

WELCOME BACK, SENATOR SPECTER

Mr. LOTT. Also, at this point I would like to welcome back our colleague, the senior Senator from Pennsylvania, Mr. SPECTER, who is recently back from surgery, and he just made this vote this afternoon.

(Applause, Senators rising.)

Mr. LOTT. I am sure he was watching that on TV essentially, but he did make this vote, and we are glad to have him back.

PRODUCT LIABILITY REFORM ACT OF 1997—MOTION TO PROCEED

The Senate continued with the consideration of the motion.

Mr. LOTT. Mr. President, I know of no further requests for time on the pending motion to proceed to the product liability bill.

Mr. DASCHLE. Mr. President, could we have order?

The PRESIDING OFFICER. The Senate will come to order.

Senators will take their conversations outside.

Mr. LOTT. I believe the question is on the motion?

The PRESIDING OFFICER. That is the regular order.

Is there further debate on the motion?

The motion was agreed to.

PRODUCT LIABILITY REFORM ACT OF 1997

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A bill (S. 648) to establish legal standards and procedures for product liability litigation, and for other purposes.

The Senate proceeded to consider the bill.

AMENDMENT NO. 3064

Mr. LOTT. Mr. President, I send an amendment to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

The Senator from Mississippi [Mr. LOTT] proposes an amendment 3064.

Mr. LOTT. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

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

The amendment is printed in today's RECORD under ''Amendments Submitted.''

CLOTURE MOTION

Mr. LOTT. Mr. President, I send a cloture motion to the desk.

The PRESIDING OFFICER. The cloture motion having been presented under rule XXII, the Chair directs the clerk to read the motion.

The legislative clerk read as follows:

CLOTURE MOTION

We, the undersigned Senators, in accordance with the provisions of rule XXII of the Standing Rules of the Senate, hereby move to bring to a close debate on the pending amendment to Calendar No. 90, S. 648, the Product Liability Reform Act of 1997:

Mr. LOTT. Mr. President, this is the cloture motion on the substitute product liability bill, and so for the information of all Senators, this vote will occur on Thursday of this week. I will consult with the Democratic leader as to exactly what time that will be.

And I now ask that the mandatory quorum under rule XXII be waived.

Mr. BYRD. Mr. President, reserving the right to object, and I do not intend to object, may we have a reading of those Members who signed the cloture motion.

The PRESIDING OFFICER. The clerk will continue to read.

The legislative clerk continued the reading of the cloture motion.

Senators Trent Lott, Don Nickles, Slade Gorton, Phil Gramm, John McCain, Spencer Abraham, Dan Coats, Dick Lugar, Lauch Faircloth, John Chafee, Sam Brownback, Ted Stevens, Jon Kyl, Jeff Sessions, Mike Enzi, and Judd Gregg.

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

Mr. LOTT. As a reminder, then, to all Senators, under the provisions of rule XXII, all first-degree amendments must be filed by 1 p.m. on Wednesday, and all second-degree amendments must be filed 1 hour prior to the cloture vote.

INTERNAL REVENUE SERVICE RESTRUCTURING AND REFORM ACT OF 1998—CONFERENCE REPORT

Mr. LOTT. I now move to proceed to the conference report to accompany H.R. 2676, the IRS reform bill.

The PRESIDING OFFICER. The question is on agreeing to the motion.

The motion was agreed to.

The PRESIDING OFFICER. The report will be stated.

The legislative clerk read as follows:

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill, H.R. 2676, have agreed to recommend and do recommend to their respective Houses this report, signed by a majority of the conferees.

The Senate proceeded to consider the conference report.

(The conference report is printed in the House proceedings of the RECORD of June 24, 1998.)

Mr. DASCHLE addressed the Chair.

The PRESIDING OFFICER. The minority leader is recognized.

Mr. DASCHLE. Mr. President, my reaction is, here we go again. Yet another piece of legislation laid down without any opportunity——

Mr. FORD. Mr. President, may we have order? I make a point of order the Senate is not in order.

The PRESIDING OFFICER. The Senate will come to order. The minority leader has the right to be heard. The Senate will come to order.

The minority leader.

Mr. DASCHLE. I thank the distinguished Senator from Kentucky.

Mr. President, I am very disappointed with the action just taken by my good friend, the majority leader. He has filed cloture on one of the most controversial, complex, far-reaching pieces of legal legislation that we will address in this decade. We have done this before, and it would seem to me that our colleagues would understand that when this happens, we are denying the very function of the U.S. Senate, the right of every Senator to offer amendments, the right to have a deliberative——

Mr. DODD. Mr. President, the Senate is not in order.

(Mr. ALLARD assumed the Chair.)

Mr. DASCHLE. It is the right of all Senators to fulfill the functions of their responsibilities as U.S. Senators to offer amendments, to have a debate. For us to file cloture, for the Senate to file cloture on a bill of this import, without one speech, without one amendment, without any consideration, is absolutely reprehensible.

I am very, very disappointed that the majority leader has seen fit to do it. I guess I would ask, What are they afraid of? What is it they don't want us to offer? What is it about the amendment process that worries our colleagues on the other side? What is it about not having a good debate that so appeals to them? Mr. President, I don't know.

But I do know this. Senators on this side of the aisle will continue to fight for our rights to offer amendments, regardless of circumstance. There are many of our colleagues who may support this bill on final passage, and I respect their rights even though I disagree. I personally think this bill is as bad as all the others that have been proposed, and I hope that we have a good debate about how good or how bad this legislation truly is. But for us to start the debate by saying that there will be little or no debate, especially when it comes to our opportunity to offer amendments, precluding the very right of every Senator to be heard, precluding the opportunity for us to offer ways in which we think it could be improved.

So we will have this debate over and over and over again. But on so many occasions now, our colleagues on the other side insist on denying the rights of every Senator to be heard. That doesn't have to happen. This is not the House of Representatives. This is not the most deliberative body in the world so long as we continue to utilize this practice. There is a time and a place for cloture, but that time and that place is not as soon as the bill is laid down. Many of us could have objected to the motion to proceed. We could have voted against going to the motion to proceed. We could have even filibustered the motion to proceed. We didn't do that. Why? Because, in good faith,