

RECESS

The PRESIDING OFFICER. Under the previous order, the hour of 12:30 having arrived, the Senate will now stand in recess until the hour of 2:15 p.m.

Thereupon, at 12:36 p.m., the Senate recessed until 2:15 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer (Mr. CAMPBELL).

DEPARTMENT OF VETERANS AFFAIRS AND HOUSING AND URBAN DEVELOPMENT, AND INDEPENDENT AGENCIES APPROPRIATIONS ACT, 1997

The Senate continued with the consideration of the bill.

EXCEPTED COMMITTEE AMENDMENT ON PAGE 104, LINES 21-24

The PRESIDING OFFICER. Under the previous order, the vote will now occur on the Smith motion to table the committee amendment.

The yeas and nays have been ordered. The clerk will call the roll.

The legislative clerk called the roll.

Mr. NICKLES. I announce that the Senator from Oregon [Mr. HATFIELD], the Senator from Alaska [Mr. MURKOWSKI], and the Senator from Pennsylvania [Mr. SANTORUM] are necessarily absent.

I further announce that, if present and voting, the Senator from Oregon [Mr. HATFIELD] would vote "nay."

Mr. FORD. I announce that the Senator from New Jersey [Mr. LAUTENBERG] is necessarily absent.

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

The result was announced—yeas 42, nays 54, as follows:

[Rollcall Vote No. 266 Leg.]

YEAS—42

Abraham	Grassley	McCain
Akaka	Gregg	Murray
Baucus	Harkin	Nickles
Biden	Hatch	Pryor
Boxer	Helms	Reid
Brown	Inhofe	Roth
Bumpers	Jeffords	Smith
Cohen	Johnston	Snowe
Conrad	Kennedy	Specter
D'Amato	Kerrey	Thomas
Dorgan	Kerry	Thompson
Faircloth	Kohl	Warner
Feingold	Leahy	Wellstone
Grams	Levin	Wyden

NAYS—54

Ashcroft	Domenici	Lott
Bennett	Exon	Lugar
Bingaman	Feinstein	Mack
Bond	Ford	McConnell
Bradley	Frahm	Mikulski
Breaux	Frist	Moseley-Braun
Bryan	Glenn	Moynihan
Burns	Gorton	Nunn
Byrd	Graham	Pell
Campbell	Gramm	Pressler
Chafee	Heflin	Robb
Coats	Hollings	Rockefeller
Cochran	Hutchison	Sarbanes
Coverdell	Inouye	Shelby
Craig	Kassebaum	Simon
Daschle	Kempthorne	Simpson
DeWine	Kyl	Stevens
Dodd	Lieberman	Thurmond

NOT VOTING—4

Hatfield	Murkowski
Lautenberg	Santorum

The motion to lay on the table the committee amendment on page 104, lines 21-24, was rejected.

Mr. BOND. I move to reconsider the vote.

Mr. LOTT. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. Without objection, the underlying amendment is agreed to.

The committee amendment on page 104, lines 21-24, was agreed to.

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

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

AMENDMENT NO. 5178

(Purpose: To reduce the appropriation for the implementation of the space station program for the purpose of terminating the program)

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. KERRY, Mr. JEFFORDS, Mr. KOHL, Mr. SIMON, Mr. WELLSTONE, Mr. BRYAN, Mr. FEINGOLD, Mr. LEAHY, Mr. BRADLEY, and Mr. WYDEN, proposes an amendment numbered 5178.

Mr. BUMPERS. 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 as follows:

On page 82, strike lines 6 through 7, and insert in lieu thereof the following: "sion and administrative aircraft, \$3,762,900,000, to remain available until September 30, 1998. *Provided*, That of the funds made available in this bill, no funds shall be expended on the space station program, except for termination costs."

Mr. BUMPERS. Mr. President, as most of my colleagues know, this amendment would terminate NASA's space station program. This morning on the way to work, I was discussing this amendment with my administrative assistant, and we were discussing the fact that this is perhaps the fifth year I have offered this amendment in an effort to stop what I consider is a disaster in the making. She said, "Why do you persist in doing this every year?" That is an easy question to answer. The short answer is that I believe very strongly that we are embarked on the expenditure of \$100 billion that, in the final analysis, is going to be considered by every physicist, every top medical man in the country, and by most Members of Congress, those who are willing to admit that we may have

made a mistake, as a terrible financial disaster.

We still have a chance to prevent that disaster. If we were to adopt the Bumpers amendment today, we have a chance to save between \$50 and \$74 billion. I invite all of my colleagues to look at the budget for the future. Defense continues to go up. Entitlements will continue to go up. Everything will go up, except that roughly 18 percent of the budget which we call domestic discretionary spending, within which lies this \$100 billion for the space station.

Do you know what domestic discretionary spending is? It is not Social Security. It is not Medicaid. It is not senatorial pensions, Government pensions, or military pensions. It is not interest on the debt. It is that very small portion of money that Congress still has some control over that determines the kind of nation we are going to be. It is the money we spend on education. How many times have I said that when American families sit around the dinner table in the evening and talk about what they love the most, it is not that Mercedes out in the driveway, it is not the farm out back, or that posh office downtown, or the country club and the golf course on weekends. It is their children.

The more money you pour into wasteful spending, like the space station, the less you are going to have for the thing you love most, your children. When people talk about how much they love their children, what do they talk about? They talk about their education. What else? They talk about their children, long after the parents are dead, being able to breathe clean air and drink clean water. And where are the environmental constraints and improvements located? In domestic discretionary spending right there with the space station.

When people talk about their children, they talk about how to keep them out of gangs, the place where so much of the crime in this country is located. Where is law enforcement found? Right in that small pocket of money for domestic discretionary spending.

So this vote is about whether you believe in space. This vote is not about whether you get teary-eyed every time you see the shuttle take off. You are making a big, big decision, a big, big choice on where you want our country's money spent. For every dime you put into the space station, it is a dime that will not be available for our children's education. It will not be available for legitimate, honest-to-God medical research. It will not be available for all of those things that go right to the heart of what kind of nation we want to be.

In 1984—some Members of this body remember it well—Ronald Reagan stood on the floor of the House of Representatives and he talked about the space station and how we were going to build a space station and have it completed by 1992. In 8 years we were going to build this monumental demonstration of our scientific skills. For how

much? \$8 billion. That was the cost. By the time we spent \$11 billion we didn't even have a good blueprint.

So President Clinton came to town and said this thing is out of control. It is much too expensive. Back in those days it was called Space Station *Freedom*, and the cost was absolutely staggering. So President Clinton said, "Bring me another plan." So they brought him this plan called the Alpha, and he signed off on it. But it is not the Alpha anymore. It is the international space station because the European Space Agency is participating. And Russia is going to participate, if we give them the money. They are totally incapable of participating otherwise.

Mr. President, do you realize that we have been in space for almost 35 years? We have been in space for almost 35 years, and the Russians have had a space station of one kind or another since 1971. For 25 years the Russians have had a space station. The first one in 1971 was called the *Soyuz I*. Then there were five succeeding *Soyuzes*. Then the *Mir*, which they deployed in 1986 and is still there in 1996. The *Mir* has been up 10 years.

You are going to hear during the course of this debate all of these monumental claims about what we have gotten out of the space program so far. You are going to hear people talk about AIDS, cancer, arthritis and all of the terrible diseases that people fear so much. I am going to respond on the front end right now by saying, "Ask the Russians." They have had a space station up for 25 years. Ask them. What have they gotten? I will tell you the answer. Nothing. You are going to hear all kinds of exotic technical arguments about different kinds of cells and crystals, protein crystals, gallium arsenide crystals. You are going to hear about bone structure, cell structure, and what all you get in space.

I am going to give you a bunch of quotes that are not particularly interesting to listen to, but I am going to quote them to you anyway before I finish this statement, where every single scientist in America, every physicist who is not on NASA's payroll, every medical doctor worth his salt in America, says that to try to justify the space station on the grounds of scientific and medical research is laughable. You will not hear me reading to you a statement prepared by NASA. You will not hear me reading a statement to you that was prepared in a big four-page ad by Boeing. I am telling you that I am not a scientist. I am not a doctor. You can tell me anything, and I cannot refute it. But I will let the experts refute the arguments for the space station.

I used to say that I believe in picking the best brains in America. On any subject I can find the best brains. If I were going into anything, say, into the popcorn business, I would go to somebody that has been successful in the popcorn business. If I want to know about medical research, I might go to the Harvard

Medical School. I will quote for you some of those people. If I were going to do something in an area of physics, I would go to somebody in the American Physical Society. Do you know who that is, Mr. President? The American Physical Society is 40,000 physicists. It is virtually every physicist in America. I will tell you before I finish this statement how adamantly opposed to this space station the American Physical Society is. I will tell you why the top medical people at Harvard and all across the country, from the Arthritis Foundation on down, are utterly opposed to the space station. You do not have to be a scientist to know the reason they are opposed to it. They are opposed to it because it is an utter misuse of the money.

Let me digress for just a moment. I assume that most people in this body heard President Clinton's acceptance speech at the convention the other night, and you heard him say that in the past 4 years we have doubled the life of AIDS victims. That is a monumental success. Do you know what the space station had to do with that? Nothing. Do you know why we were able to do that for the people who are victims of AIDS? Because we put \$12 billion a year out at the National Institutes of Health where real medical research takes place. How does it take place? The National Institutes of Health passes the money out to schools like the University of Arkansas, MIT, Harvard, and Pennsylvania and all of the other great universities of this country.

It is those universities and the private sector who have been going all out to find a cure for AIDS, or something that would prevent it. But what is Congress doing? We are getting ready to drop another \$74 billion into the space station—\$74 billion. Where I come from, \$74 billion "ain't bean bag." When the year 2002 comes around, you are going to see this domestic discretionary spending account having gone from today's \$264 billion to \$220 billion.

We are going to cut it \$40 billion over the next 6 years. You tell me. How are we going to find the money to fund the things that we want to fund? We are not only going to have to cut \$40 billion out of the account by the year 2002 but we are going to continue to fund this space station. It will be safely ensconced in that \$224 billion.

Mr. President, when it looked as though the space station might be in serious trouble, everybody said, "Well, let's make it an international project. Let's get the Russians involved. Let's get Europe involved." And so we have been able to get them involved to some extent. But I can tell you that right now the Russians are 6-8 months behind. They are supposed to build a module where the astronauts will live and control the station. The Russians are going to build a module where the men actually live, or the men and women, whichever the case may be. They are behind. And the Russian Gov-

ernment has not given the Khrunichev Corp. that is supposed to build it any money to build it with.

I am one who has favored virtually all the assistance we have given to Russia and will continue to do everything I can to help foster democracy in Russia because I think it is to our advantage and we are the beneficiaries. But if you think the Russians are going to come in on time and they are going to be able to launch all their Soyuz rockets right on time, you have to be smoking something.

It is going to take 90, about, space shuttle flights to deploy the space station and to service it. You know something that is really interesting? How many times have you ever heard your mom talk about something that is worth its weight in gold? Well a pound of water sent by shuttle from Earth to the space station once it is deployed—1 pound of water, 1 pound of food, 1 pound of anything—will cost \$12,800, twice the cost of gold. Can you believe that? Every time we launch that shuttle today it cost almost \$400 million. We are going to have 90 shuttle flights to deploy the space station and to service it and take food and water to our astronauts.

And so when they talk about the \$50 billion for these shuttle flights to service and maintain the space station, there is a big assumption, and the big assumption is that everything is going to happen right on time, that the launches will take place precisely when they are supposed to, they will arrive at the space station right when they are supposed to, they will hook up right when they are supposed to. The editors of Space News say it is utter folly to plan on that basis.

The space shuttle was supposed to take off for the Russian space station *Mir* in July. But it was grounded for six weeks because of technical problems. Yesterday it was on the launch pad being prepared for a launch on September 14. Do you know where *Atlantis* is right now? It is back in the hangar. It is in the hangar in Florida because a hurricane is approaching Florida. So they had to probably download it, that is, take the fuel out of it, and put it in the garage. What if we were planning to launch the *Atlantis* today? We could not because of the hurricane. You say that is no big deal. It is a big deal. It cost millions every time you miss the target to take off in one of those things. To assume that every one of those missions is going to take off right on time and everything is going to go hunky-dory, as the General Accounting Office says, is the height of folly.

Now, Mr. President, we have already built 17 percent of the hardware of the space station. That translates into 167,000 pounds. So the argument on the other side will be that we have gone so far, we have already put this much money into it; we cannot stop now. Lord, how many times have I heard that argument in 22 years I have been in the Senate. Once a month.

I was absolutely the most shocked person in the Senate when we killed the super collider because I had listened to that argument for 3 years. Three years I had been trying to kill that thing. Incidentally, I do not take a lot of credit for that. The House killed it. The House killed it and held firm in the conference. We only got about 44 votes in the Senate to kill it. You cannot kill anything in the Senate that costs money. You can get a lot of noise about balancing the budget until you start trying to balance the budget.

Two weeks ago Aerospace Daily said that the space station construction budget is already \$500 million above target. If you think the current \$94 billion estimate, which is what the General Accounting Office says it is going to cost, NASA says 72 or 3—I will put my money on the General Accounting Office. They say it is going to cost \$94 billion if everything goes perfectly from now on. Everybody knows it is going to cost more than that because everything will not go perfectly.

On that night when Ronald Reagan assured the American people that we were going to build this space station in 8 years for a total cost of \$8 billion, NASA also said here is what we are going to do with the space station. Here is the mission. Listen. This is 1984.

No. 1, we are going to make it a staging base for future missions. If we decide to go to Mars, we will have the space station there. We can park a rocket there, refuel it and send it on to Mars. That mission is gone. No longer one of the missions.

No. 2, we are going to make a manufacturing facility out of it. For example, we will manufacture crystals for computers. They will be perfect because they are made in space. Nobody can tell you quite why zero gravity is important. Most physicists will tell you it is not important. But everybody assumes if you do it in space it must have some kind of benefit, or you must be able to do something in space you cannot do anywhere else. I will come back to that argument in a moment.

But, No. 2, it says we are going to make a manufacturing facility out of it—gone. It is no longer one of the missions.

No. 3, we are going to make a permanent observatory out of it. I assume we were going to observe Mars and space and observe the Earth also. So, No. 3 was to make a permanent observatory, observing the stars and the planets—gone. No longer one of the eight missions.

No. 4, we were going to make a transportation node, sort of a bus stop in space. But that mission is gone too.

No. 5, a servicing facility. It will be a place where shuttles could park and get any service work done. If they had to recharge the batteries, put on new fuel, whatever. We could also repair satellites there. It was going to be a garage in space—gone. No longer one of the missions.

No. 6, it was going to be an assembly facility where we would assemble a satellite or a spacecraft for further use, to go to Mars or maybe just to orbit the Earth or something else. That was the sixth one, to make an assembly facility—that is gone.

No. 7, a storage depot, where we would store fuel and parts and supplies, a gas station in space—gone.

No. 8, a research laboratory to study the impact of weightlessness—that is still there. Of the eight original missions, seven are gone. So, with this mission of research laboratory now the only mission remaining, what are they going to do? They are going to do medical research, according to a very lengthy statement that was put into the RECORD by my very good friend from Ohio.

Let me digress for a moment and say the Senator from Ohio and I came to the Senate together and we have become very close friends. He is one of the finest men I know. But he is entitled to be wrong occasionally. His wife, Anna, will tell you that. We just happen to disagree on this. We do not disagree on much.

But when it comes to the kind of research you are going to do, let us talk about the life sciences, the medical research part of it. As I said earlier, I am not a doctor, so I have to depend on people that I respect, whose judgment I trust. So, here is then-Presidential Science Adviser D. Alan Bromley. He wrote the Vice President remarks on March 11, 1991, and here is what he said:

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

He went on to say.

The primary thrust of whatever life research is conducted will be focused on manned space exploratory programs. Medicine and commercial applications will be secondary.

Carl Sagan—who, incidentally, favors the space station because he favors space exploration, but the purposes are quite different, according to Carl Sagan, than those of the proponents of the space station—said:

The only substantive function of a space station, as far as I can see, is for long-duration space flight.

Before I forget it, here are the organizations who oppose this thing: The American Physiological Society, American Society for Biochemistry and Molecular Biology, American Society for Pharmacology and Experimental Therapeutics, American Society for Investigative Pathology, American Institute for Nutrition, American Association of Immunologists, American Society for Cell Biology, Biophysical Society, American Association of Anatomists.

Let me continue. Here is what the American College of Physicians said, in April 1992:

We agree that much if not all of the money slated for the space station, the 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.

Here is what the American Physical Society said on July 24, 1994. Bear in mind they speak for 40,000 physicists who are charged primarily with building the space station. Here is what they said in 1994:

The principal scientific mission of the station is to study the effects on humans of prolonged exposure to a space environment. Medical researchers scoff at claims that these studies might lead to cures for diseases on Earth.

David Rosenthal, Harvard Medical School, testifying on behalf of the American Cancer Society. Listen to this:

We cannot find valid scientific justification for the claims that this will affect vital cancer research. 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 on the Earth.

Dr. Sean Rudy, who runs the American Arthritis Foundation:

I will submit to you the medical research done here on Earth is of greater value than that planned in space. Space station proponents have indicated that the space station will provide a first-class laboratory. We used to have first-class laboratories in universities and medical schools across the country. Reports by the National Institutes of Health and National Science Foundation have indicated that in over 51 percent of the biological laboratory research, space is deemed inadequate for the conduct of research. Furthermore, the National Science Foundation report estimated that the capital construction backlog for lab research space is \$12 billion. Should our priorities now be a first-class laboratory in space or correction of a long-standing deficiency in laboratories throughout the country?

His point is not debatable, not arguable.

Donald Brown, president of the American Society for Cell Biology, in an article in the Washington Post called "Who Needs A Space Station?" Here is what he said:

In reference to experiments on cellular processes in normal and diseased cells and organisms, there is no obvious need for this research. It is extremely difficult to imagine what special conditions space might provide for answering important questions about the causes, diagnosis and treatment of human diseases.

Dr. James Van Allen—everybody has heard about the Van Allen radiation belt around the Earth. Here is what he, the world's most famous astrophysicist, said:

There has been nothing that resulted from the manned space program, essentially nothing in the way of extraordinary pharmaceuticals or cures for disease or any extraordinary crystals which have revolutionized electronics. Claims to the contrary are false—not true.

If you are not going to listen to people like James Van Allen, I might as well sit down and go home. If you are not going to listen to people like Alan Bromley and Dr. Rosenthal, what am I

doing standing here? What I am doing is quoting the top people in America, the people everybody should look to on issues like this.

Then we have the subject of growing cells in zero gravity. For some reason or another, we have this cockamamie idea that if you want to do research, if you can just do it in zero gravity, somehow or another you are going to get some benefit that you could not possibly get on Earth.

But here is what the Space Studies Board said on the subject:

The promise of protein crystallography and potential usefulness of microgravity in producing protein crystals of superior quality should not provide any part of the justification for building a space station. Growing crystals of superior quality in space is not close, nor is it likely to become close, to being cost-effective. It currently is, and is likely to remain, faster and very much less expensive to obtain superior quality crystals on the ground.

On making industrial crystals, here is what T.J. Rodgers, the founder of a semiconductor company said:

I run a semiconductor company, and I am director of Vitesse, a gallium arsenide semiconductor company. So I know about this stuff. All I can say is, this program of growing gallium arsenide wafers in space is a colossal con job, and there is nobody I know in my industry who wants those wafers in the first place. There is no economic benefit to increasing the purity of crystal beyond the point we can currently improve it. The cost is huge, and the economic benefit is almost nil for that last step.

Namely, going into space.

Dr. Al Joseph, founder of Vitesse, a gallium arsenide semiconductor company. I have met Dr. Joseph two or three times. Here is what he said on industrial crystals:

The idea of making better gallium arsenide crystals in space is an absurd—

Absurd.

business proposition. Even if you give me perfect and pure crystals made in space, it won't help me commercially, because 90 to 95 percent of my costs and 85 to 90 percent of the integrated circuit yield on a wafer is driven by what I put on the wafer and not so much by the purity of the wafer itself. The cost of one trip to the space station would finance just about everything the American electronic industry needs to do to ensure its technological superiority for years to come. That's for sure.

I have never seen a project or a mission as desperate for a justification as this one. I look at those ads Boeing puts out. Of course, Boeing is the prime contractor. They stand to make billions out of this. And so that makes their efforts slightly jaundiced to me. I certainly understand why any Senator in Florida, Texas, California, and Maryland, I can understand why any of those Senators would vote for this. They have a lot of jobs in their State, and those jobs pay well over \$100,000 each. The cost of this project in jobs will be the most expensive jobs program in the history of America, by far.

On microgravity research, one of the most interesting statements I have seen was by Dr. Bromley when he talks

about manned space flights and how important that is to microgravity. Dr. Bromley said:

The human habitation of the space station is fundamentally incompatible with the requirement that the microgravity experiments be unperturbed.

In other words, if you are operating in microgravity, you don't want anybody jarring around in the space station. And so he says, having men on board is incompatible with any research that requires zero gravity or even microgravity.

The Space Science Board of the National Research Council said in 1991:

Continuing development of the Space Station Freedom cannot be supported on scientific grounds.

One article in Newsweek in 1994 I thought had the best one. "What is the space station for?" That is a question that nobody has been able to answer.

The author said something which was demeaning in a sense to astronauts, which I am reluctant to quote. But he called them a bunch of people floating around in space looking for something to do. Well, they are all very brave men. We are always proud of our astronauts. I don't know when I have ever been prouder than I was watching our astronauts repair the Hubble telescope, a magnificent thing to behold and they saved the country a tremendous amount of money, simply because it was flawed in the first place.

In 1995 the National Research Council's Space Studies Board said:

The committee reaffirms the findings of the previous report that there is little potential for a successful program to develop manufacturing on a large scale in space for the purpose of returning high-quality, economically viable products to space.

And the American Physical Society, once more:

It is the view of the Council of the American Physical Society that scientific justification is lacking for a permanently manned space station. We are concerned that the potential contributions of a manned space station to the physical sciences have been greatly overstated and that many of the scientific objections currently planned for the space station could be accomplished more effectively and at a much lower cost on Earth on unmanned robotic platforms or on the shuttle.

There are a lot more quotes I could give you. I am just telling you what all the top people in the country say.

I think about the fact that we have been in space almost 35 years and we have had space stations up since 1971, and nobody walks in here and says, "Here is where we found a cure for this," "Here is where we make great advances of that."

Tang, Velcro, magnetic resonance imaging, Teflon—the space station had nothing to do with those.

The space program had nothing to do with those. Yet those myths persist that somehow or other we have gotten Tang and Velcro and Teflon and all those things out of the space station. That has been debunked totally, so I will not use it anymore. But I will say

this. There are not 10 medical doctors in this country who would support the space station if you gave them the option of putting this \$2 billion into the National Institutes of Health, who in turn will put it out to the great researchers of this country to cure or make great advances toward curing some of the terribly incurable diseases we have—it is a no brainer. You think about the poor National Institutes of Health sitting over there able to fund only one out of every four good applications. I am not talking about one of four of all applications; I am talking about one out of four they would like to fund, that they consider viable, scientifically viable.

I saw a thing that my good friend, Senator GLENN, sent out about the National Institute on Aging, that they can do studies on aging on the space station. Do you know one shuttle flight would fund the National Institute on Aging for a full year?

When you say, What do you get out of the space station that you do not get out of just a shuttle flight? The answer is always, Well, it takes longer. You can't do this research in 2 weeks. It takes longer. I do not know how much longer.

Then if you ask what kind of research? You hear all of these possibilities. Well, we can look at this and we can look at that and we can look at this and we can look at that. They give you some complicated stuff. NASA has all that stuff cataloged on a computer over there. They can give it to you in spades.

As I say, we have been at it 35 years. We have not gotten anything yet except a space suit. Space suits are marvelous contraptions, but there is not much demand for space suits in this country. There is a lot of demand for education. There is a lot of demand to feed the poor. There is a lot of demand for cleaning up our rivers and lakes. There is a lot of demand for stopping gangs in high schools. There is a lot of demand for bringing crime under control and doing something about drugs. No demand for space suits.

So Mr. President, if I were to ask each Member of this body, if you had a chance to go back over the last 15 years and spend the \$4 trillion that we spent that we did not have—the deficit has gone up \$4 trillion since 1981—if I were to ask you, would you have spent the \$4 trillion over the last 15 years the same way we spent it? Why, of course you would not have. If you had a chance right now, if somebody came to you and said, Look, here's a chance to save \$74 billion on this space station. Do you think you could solve some of this country's problems? Why, it would be like a child at Christmas; people saying, Oh, my gosh, we could educate every child in the country for what that's going to cost. We could pave every road in the country for what that's going to cost. We could go through all those things.

Every problem we have in this country can be traced not to a lack of

money, but to the way we spent it. It would not have been for a space suit, even though I am a strong proponent of the space program. I got teary-eyed with the rest of America when I watched JOHN GLENN soar into space. I have gotten teary-eyed a lot of times, but not as teary-eyed as I am going to get after we have spent the rest of this \$74 billion on the space station.

Mr. President, I yield the floor.

Mr. HOLLINGS addressed the Chair.

The PRESIDING OFFICER. The Senator from South Carolina [Mr. HOLLINGS] is recognized.

Mr. HOLLINGS. I thank the distinguished Presiding Officer.

Mr. President, just a brief statement. Someone, sometime, somehow should get out here and support the wonderful leadership of our distinguished colleague from Arkansas on this particular score. I have been relatively quiet on the space station because I have learned after 30 years how to stay quiet up here.

With respect to any kind of space program, necessarily having been the chairman and now the ranking member of the Commerce, Science, and Transportation Committee, I am very much an enthusiast of the space program. So my brief comment is to save that space program. I have watched it over the past several years.

I can remember back in 1993 that we had President Clinton coming in and having to ask that the space station be redesigned. Why, Mr. President? Because in 1984 when we started this program it was sold to the American public as an \$8 billion program. Then in 1987 it went to \$16 billion. By 1993, when President Clinton took office, it was some \$30 billion. So the distinguished President said, "Well, go back to the drawing boards. I don't want to come in here as the new Chief Executive and cancel an important program for space, so let's see what we can do to redesign it." And the cost went down on that redesigning to some \$19.4 billion. That was in early 1993.

By the end of the year, those working on the program realized that even that was not realistic. So the President and Vice President announced a joint program with the Russians of \$17.4 billion. That was only for the station itself. We found out, after we went down and asked GAO to look at the costs and everything else, that with launch and operational costs through the year 2012 the total cost of the space station is \$93.9 billion.

So I am sitting there and I am trying to be a good friend, which I am, of the space program. I think it has been a wonderful American success. There is nothing that has thrilled me more than seeing the distinguished Senator seated here in front of me, the Senator from Ohio, who is a true American hero—we all thrilled at his courage and his valor and his common sense. I am sorry we differ on this particular score. But I am forced to talk money.

When I talk money, Mr. President, I get to that space program. I found out,

when I listened at the hearings, that the science, aeronautics, and technology account of NASA, everything except the human space flight and the civil service salaries and related mission support—all the rest of it, other than the human space flight and civil service salaries—was some \$5.9 billion this past year and by the year 2000 is estimated to be or cut back by NASA to \$5.2 billion, which does not take care of inflation, which does not take care of cost-of-living adjustments and everything else.

So I am in a catch-22 situation. I want the space station like everyone else, but I am looking at the formative basic fundamental space program, including these unmanned programs as well as the rest of the human space flight account, and I am saying that investment in human valor and technique and courage, namely, the astronauts themselves, what we have going on in Houston and at Cape Kennedy is just too valuable to risk cutting to save this massive hardware project. We should not be cutting back and paring and scraping and everything else in NASA, like that little debate we are having and have just voted with respect to the Bion Program. I agree with that scientific program. The Post picked up the word "monkey" and said you can run a touchdown on this one, saying let us get rid of this program. We already had humans up there and now you want to finance \$15 million worth of monkeys. That is good at election time, but it is outrageous nonsense.

Our problem here in the U.S. Senate is that we choke on the gnat and swallow the camel. All those debating and wanting to do away with the \$15 million should be voting for the \$15 million, and all those looking at space and its program, generally speaking, ought to be withholding votes for the space station. There are priorities, there are times we have to make choices, and we still, Mr. President, are not out of the woods in a budget sense.

The distinguished Senator from Illinois, Senator SIMON, has been a leader in trying to get us on a pay-as-you-go basis. He knows exactly of which I speak. I can give you exact figures where we still are increasing that deficit and debt. I say that too quickly, where we are still increasing that deficit. When we increase the deficit, we increase the debt, which increases interest costs on the debt, which increases taxes, because you can't avoid interest costs. They say there are two things you can't avoid, death and taxes. Well, put interest costs in the column with taxes. They can't be avoided. They must be paid.

All of that crowd running around on the floor of the U.S. Congress saying, "I am against taxes, I am against taxes, I am against taxes" are raising the debt \$1 billion a day, and \$353 billion is the estimate. If growth continues and inflation starts in, it will be more.

I was around, Mr. President, as chairman of the Budget Committee when we were at less than \$1 trillion in debt. Then comes what gobbled us all up, namely that supply-side nonsense, which my distinguished friend from Kansas, Senator Dole ridiculed. He had a favorite story. I can hear it on the floor of the Senate. "Mr. President, there is good news and bad news." You would say, "Senator, what is the good news?" He said, "A bus load of suppliers just went over the cliff." You said, "What is the bad news." He said, "There was one empty seat." Now, my poor friend Bob Dole has taken the empty seat, and we are doing it seriously here.

Haven't we learned anything going from less than \$1 trillion under Ronald Reagan, who was going to balance the budget in 1 year, to \$5 trillion under the Reagan-Bush administrations? And they are talking about who is really for balanced budgets. Well, to balance the budget, we have to do all of the above, as they say in the classroom, on that local option quiz, not just true or false. It is all of the above. Yes, you are going to have to freeze spending, cut spending, and yes, you are going to have to increase taxes to get on top of this monster.

We in the Budget Committee, with eight votes, two of our distinguished Republican colleagues, and six of us on the Democratic side, 10 years ago almost voted for a value-added tax dedicated to eliminating the deficit and the debt. The reason we did it is because we realized that freezes were insufficient. The spending cuts under the best of the best spending cutters, Ronald Wilson Reagan, were not enough. Gramm-Rudman-Hollings was not enough, automatic cuts across the board. So we needed taxes. We voted it at that time. Now, all discipline and reality is gone.

You have to withhold new programs. That was my vote against voluntarism—against AmeriCorps. Maybe I am the only Democratic Senator who voted against it. I helped start the Peace Corps. I can give you chapter and verse, where we had the conference down in Miami, and we called first the then-candidate, John Kennedy. We could not get him and we got Myer Fellman, his legislative assistant on the line. I proposed a program to Jim Gavin at the conference, head of Arthur D. Little, and quoting William Paley, called it the Freedom Corps. That is how we started it. The first broach of the subject was in Cadillac Square in Detroit, and we fleshed it out during the week to be presented in San Francisco.

So I believe in voluntarism, which the Peace Corps is. But I had to withhold on this new program because in order to get it we played the peanut in the shell trick. We took away 347,000 student loans—the money, therefore—in order to finance 25,000 volunteers, who get paid at the cost of \$25,000 apiece. I wish I could have gotten out

of high school hoping to go to college and jumped into a \$25,000 program. But that is what we are doing here, trying to identify with pollster politics. We have a real problem on our hands. We are not talking here on the floor of the U.S. Senate about saving the space program, and we should be.

When I see my distinguished colleague who has really gotten into the subject in tremendous detail, the Senator from Arkansas—and nobody here to support him—I feel I must speak by way of conscience, having listened, because we got these hearings before our committee on all the facets of the particular program. When you get the environmental satellites, the aeronautics programs, all those things that will be just practically decimated, and in order to go for a space station, then it is just bad planning—particularly at a time when the United States of America is in a position of having to stop the hemorrhage of tax increases, \$1 billion a day. Tell the American public out there. The media are not doing their job. They have no idea. The candidates can run and get elected, saying, “I am for cutting spending, I am for cutting spending, I am for cutting spending.”

Then they come up here with that silly nonsense of wanting to abolish the Department of Commerce. Who do you think I am on the telephone with now? The National Oceanic and Atmospheric Administration. I am trying to find out whether that hurricane now bearing down on South Carolina is going to hit my house again like Hugo did down in Charleston. What are we going to do with the patent office? We can go down the list of the various endeavors at that department. Our export endeavor was ridiculed. They ridiculed Secretary Brown, who was doing what every Governor worth his salt did. He got offices in London, in Tokyo, talking to industry, and that is what the Secretary should be doing.

That is the effort they want to get rid of, the Department of Commerce, and departments for energy, education, and housing, and then they come around here and put \$93.9 billion in a program that is going to really hurt the basic space program, where we are going to have to really cut back on the valued astronauts, the human side, to pay for this hardware. We are just going to make it truly unattractive for them. Their sacrifice is great enough. They practically have to separate themselves from their families and everything else. Their diligence, and time and time again, their discipline and everything else is the hardest work in the world. There is not enough pay. But then they say, like we have at NIH—if you cut the research, the smart graduates see that of all the particular research grants that were presented this year, we were able to actually fund less than 20 percent of those who passed muster competitively. We are not funding. So the smart researchers, scientists, and graduates say, well, there

is no future there. I don't want to work my way into trying to get a space station, saying, “Wait a minute. There is no future there.”

So I have voted to support the basic space program. I have never taken the floor because I did not want to, as chairman of that particular program, indicate opposition to space. I worked with the distinguished Senator from Ohio when President Reagan was in office to save the space program. I will work again to save the space program. Mr. President, that is why I am here this afternoon to save the space program. In this budget climate, we cannot keep both the basic space program and the space station.

I yield the floor.

#### SPACE STATION FUNDING

Mr. KERRY. Mr. President, I join with the distinguished Senator from Arkansas as a cosponsor of his amendment and urge my colleagues to support this effort to terminate funding for the National Aeronautics and Space Administration Space Station program, which the General Accounting Office estimates will cost American taxpayers \$94 billion.

Every day, the working families of Massachusetts have to make tough choices about what they can afford, how to pay the rent, and whether they can send their kids to college.

The Federal budget deficit, while reduced by two-thirds due to President Clinton's leadership and the courage of the Democratic-controlled Congress in 1993, is still too high and must be eliminated. It is a drain on our economy and, increasingly, the debt service we pay is robbing us of the ability to make badly needed investments in our future. I have been working in the U.S. Senate to make the tough choices necessary to balance the budget.

When measured against this imperative, I believe the space station's potential benefits—which I recognize—do not stand the test. I believe we must terminate funding for this program.

We cannot spend nearly \$100 billion of the taxpayers money to fund the space station and then say that we do not have enough money to put cops on the beat, clean our environment, and ensure that our children get the best education possible.

The Senator from Arkansas, joined by several others of us, has made a valiant effort to halt this project again and again over the past several years. I am hopeful that this year the time has come when the Senate will exercise fiscal responsibility over our Federal budget, like any family in Massachusetts would over its own family budget, by terminating the space station immediately in order to reduce the deficit.

In 1984, NASA justified the space station based on eight potential uses. Now only one of these assignments remains: the space station will be used as a research laboratory. However, the costs

of performing scientific research in space simply outweigh the potential benefits. It will cost over \$12,000 to ship 1 pound of payload to the space station.

Many of my colleagues support the space station because it creates jobs. But the project's costs for developing jobs are exorbitant—those jobs will cost approximately \$161,000 each. If invested here on terra firma, that amount of money would fund three or four or even more jobs.

As a member of the Senate Commerce Committee, I have fought, along with the distinguished Senator from South Carolina [Mr. HOLLINGS] and other Senators, to secure funding for many important scientific programs. Many of these programs have been shortchanged in order to help pay for the costs associated with the development of the space station. Allowing this extraordinary large science program to receive funding at the expense of these other so-called small science programs—which I believe will produce more products and more valuable products—is unacceptable. These small programs are creating thousands of high wage technology jobs at a fraction of the cost associated with the space station.

In the space program itself, the enormous level of funding consumed by the space station is crowding out much smaller programs for satellites and unmanned space probes, which most experts consider more cost-effective than manned missions.

These activities are aimed at expanding our understanding of the Sun, the solar system, and the universe beyond. The specific programs in this category include the “new millennium,” a program to build robotic spacecraft one-tenth the size and cost of satellites; the Cassini mission to Saturn, scheduled for launch in 1997; continuation of the Discovery missions, each of which costs less than \$150 million, can be launched within 3 years of the start of its development, and is used by NASA to find ways to develop smaller, cheaper, faster, better planetary spacecraft; and the Mars surveyor program which funds a series of small missions to resume the detailed exploration of Mars after the loss of the Mars Observer mission in 1993.

Funding for projects in this area will be approximately \$1.86 billion in fiscal year 1997 which represents a 9-percent reduction from last year. The academic research establishment is concerned that the space station appears to be draining funds from these other space projects.

Also included among the programs placed at risk by the space station is the mission to planet Earth, NASA's satellite program to explore global climate change by means of a series of Earth observing satellites launched over a 15-year period, beginning in 1998—a program endorsed by the National Academy of Sciences.

Given the structure of congressional appropriations bills, the enormous