The only winners are those people who sought to make a political point and stand up and say, we are for the environment. To my way of thinking, that is not good government, and it reflects a disproportionate emphasis on short-term political gain and no consideration for what is in the best interest of the United States.

Mr. DOOLITTLE. I thank the gentleman from Indiana (Mr. MCINTOSH) for his participation tonight.

I encourage everybody to read ''Earth in the Balance: Ecology and the Human Spirit.'' We will be back for the next chapter as we examine further the dangerous and extreme and outrageous and, as my colleague said, goofy views of the Vice President of the United States, Mr. AL GORE.

RESEARCH AND DEVELOPMENT OF THE 21ST CENTURY

The SPEAKER pro tempore. Under the Speaker's announced policy of January 6, 1999, the gentleman from Washington (Mr. SMITH) is recognized for 60 minutes as the designee of the minority leader.

Mr. SMITH of Washington. Mr. Speaker, I do not know that I will take up that entire 60 minutes.

I want to briefly respond actually to some of the comments that we heard in the previous hour, and then talk about the new economy and how we can adopt our government to address the issues that it brings to the fore.

I was interested to hear for an hour, the 2000 campaign is still a ways away, and for any of those who are wondering whether or not it is going to be positive, I guess the gentlemen who preceded me have answered that question in the negative. It is going to be relentlessly negative.

Amongst the charges that we heard tonight, I understand now that Vice President GORE wants to get rid of ambulances and fire trucks. If the other people are to be believed, that is a core of his policy. Those who were not listening to the comments, what they were saying is Mr. GORE has concerns about the internal combustion engine and would like to replace it. They implied that since these engines are now in ambulances and fire trucks, for him to oppose the internal combustion engine must mean he wants to get rid of ambulances and fire trucks.

I think this sort of extreme negative campaigning is bad for our entire system of government. I think my colleagues on the other side of the aisle, many of their issues I actually agree with. I think we can get up and talk about what we stand for and move the country forward, instead of relentlessly trying to pummel whoever emerges as the leader of the party we are opposed to.

I do not think that serves democracy and I am somewhat saddened to see that, as I said, 20-some months before the campaign even starts we are full bore on the ripping apart of the person who we think is going to lead the opposite party. Let us talk about a few positive issues, what we stand for and the direction we want to take the country in.

Towards that end, that is what I want to talk about today. I talk as a member of the New Democratic Caucus. We try to each week as new Democrats to present a message, an issue that we want to talk about, that we think the country needs to address and that our government needs to address.

New Democrats are essentially moderate, pro-business, pro-growth Democrats within our caucus, and the issue that I want to talk about today has to do with the new economy and how our government can institute policies that address the changes that that new economy brings to our country.

First of all I want to talk about what I mean by the new economy. Everyone has heard about the Information Age, about the global economy. It has almost become a cliche to say that we live in a global economy that is based far more on technology, but just because it is a cliche does not make it any less true. It is the dominant feature of the last few years of the 20th century and will be the dominant feature as we move into the 21st century, as our economy changes.

We must adjust to it. We must understand what moves and motivates this new economy and adopt the policies that adjust to those changes to best serve the people of this country.

It is a good news/bad news situation. The good news is it creates so much opportunity, the advances that we have had in the technology from computers to telecommunications to all points in between, to software, have created tremendous amounts of choices and tremendous amounts of opportunities in a wide variety of fields.

It also creates challenges. The central challenge that it creates is adjusting to change. The world simply changes more rapidly today than it did previously. Therefore, we have to be ready to make the adjustments as new technologies come on board, as the world changes.

I am 100 percent confident that we can do this; no question about it. We can benefit from the dramatic increase in productivity, in growth, that high tech industries give us and adjust to the changes, but not if we do not think about the issues in a new light, think about what the Information Age, what the global economy means to the policies that we need to adopt.

To strip this to its core, what I am talking about is people. The reason I care about technology issues is because of the district I represent. The Ninth District of the State of Washington, it is a blue collar district, and one of the most important things that the leaders in our community, whether they be government or business, can do is ensure that a strong economy exists so that the people of districts like mine and throughout the country can get good jobs, make enough money to take care of their family and pursue their dreams and their interests as they see fit.

Maintaining that economy is what is going to bring it home to everybody. Not just the top 5 percent, not just the Bill Gateses of the world, but every single person in the country who needs to have a good job to support their family or just support themselves can benefit from policies that embrace the high tech new economy. It is going to be important to real people from one end of this country to the other.

I think when we talk about the high tech new economy it is important to break it down. There are really five areas of the new economy. First of all we have computers, and in that I include software and hardware. We have the Internet. We have telecommunications; biotech, which is primarily health care products that are developed; and lastly we have all of the products that those first four things help create.

I think there is a mistake sometimes that people make, that technology is just a certain sector of our economy; there are certain, quote, high, unquote companies and then there are low tech companies. Every company is affected by technology. Obviously, some are more affected by it.

Intel, Cisco Systems, Microsoft, these are companies directly in high tech. But even a company, even a retail store that sells clothing apparel is affected by the quality of the software that they have, that can track their inventory and track their customers and find out new opportunities.

One of the examples that I think shows this is a small company that is actually starting up in my district that is trying to develop, coincidentally, back to the internal combustion engine, a new engine that will generate power. I have not figured out a way to make it drive an automobile, but what it can do is it can generate energy and replace some of the old methods of generating that energy.

The advantage of this new engine that is based on the ram jet physics, stuff that I do not even begin to understand except to say that it works and it generates energy much more cleanly and much more efficiently than current methods, the person who was able to generate this product had worked on the technology in the defense sector. He had worked on it with jet airplanes but they had never quite made the connection down to the more civilian use of generating energy.

He was able to generate that because of the rapid advancing in computers and software that enabled him to test theories more rapidly. Stuff that would have taken decades to get through to test, he could literally do in a matter of weeks, and that enabled him to test theories and move forward and get to the point where he actually developed the engine.

In the biotech sphere, I talked to some folks in the biotech industry just

last week, and they said from 1985 to today they have been able, through the use of computers and software, to reduce the time it takes them to analyze data to the point where a project that they did in the mid-1980s took them 5 years to analyze, that data today they could do in an afternoon.

This application spreads all across our economy. So those five sectors need to be encouraged and fostered to grow because they impact all aspects of our business.

As we get into an increasingly competitive global economy, we want our companies in the U.S. to be the ones that advance fastest and furthest and do it first so that we can take the advantage and get the economic benefit of that for our country. Therefore, we need to adopt policies that reflect this. We need to look to the future and say, as the world changes, as technology moves forward, what do we need to do to be ready for it?

Certainly we cannot go with policies that we had 50, 20, even 10 years ago, when technology has changed. Remember 5 years ago the Internet was pretty much a nonfactor. It was an idea. It was out there, certainly, but the explosive growth in the last five years was not foreseen but by the smallest number of people. Now that affects every aspect of our economy. We need to be ready for those sorts of changes.

Towards that end, I have six main policy areas that I want to make people aware of, that we in government need to address to try to adjust to this high tech economy. The first one has to do with export controls, and this is one that actually applies to more than just the high tech economy. It just becomes more of a factor because of the global nature of our economy that the Information Age makes possible.

We have a number of policies in this country that restrict the exportation of our products, specifically restrict the exportation of technology products or create unilateral economic sanctions against the export of all products. This creates a problem for one simple fact, and for one simple reason: Ninety-six percent of the people of this world live someplace other than the United States, yet the United States is currently responsible for 20 percent of the world's consumption.

□ 2045

What that means is that if our companies are going to grow, if markets are going to increase, they are going to have to have access to markets outside of this country. Currently, our policy on unilateral economic sanctions places sanctions on dozens of different countries that limit our ability to export.

Now, the reason we place those economic sanctions is because we disapprove of something that that country has done, and that makes a certain amount of sense, if our action to place those sanctions would change the action by that other country that we disapprove of. But the reality is it does not. All it means is they go someplace else to buy their products. In essence, what we are doing is we are punishing these other countries by telling them that we will not take their money and that is not much of a punishment. It drives them into the arms of our competitors.

We need to rethink our unilateral economic sanctions policy. Multilateral sanctions make sense. If we can get enough people together, enough of our allies together to condemn an action, condemn a country and place sanctions on them, then that can work. But taking the action unilaterally does nothing to advance the policy aims and only hurts us economically.

In the technology realm, we place restrictions on the exportation of encryption technology; that is, technology that is used basically to protect data on a computer, to make sure that people cannot access it who you do not want to access your information. We also place restrictions on the exportation of so-called supercomputers. The problem with that is because computers are leaping ahead so fast and so quickly, a laptop basically could have been, will some day be a supercomputer and is close to getting there under the definition that we have in policy today.

We need to understand that in trying to restrict the exportation of this technology, the world has changed. I think this is one of the key areas that shows how we need to adjust. In the old days, we did not want this technology to get out there because it had national security implications, and it clearly does. If one has good encryption technology, if one has good computing technology, it affects one's ability to have weapons basically to commit harm, to do a variety of things. It has military significance.

But the question is, how do we prevent other people from getting that technology. Can we simply as the United States put our arms around it and say we are not going to let it out and nobody else is going to get it? No. Encryption technology in particular. One can download it off the Internet, dozens of other countries sell it. It is going to get out there. In fact, this is going to hurt our national security. Because if we restrict the exportation of encryption technology in this country, our companies will slowly fall behind. They will not be able to get the customers because they will not be providing the best product. As we fall behind and other countries get further ahead of us in this technology, we lose our ability to be the leaders in the technology.

The encryption companies, software companies in this company who produce encryption technology cooperate with the FBI and the NSA to help them, show them the advances in the technology. That helps us be ready to deal with the national security implications. If we lose that leadership role, countries in other parts of the world are not going to share that information with our National Security Agency or the FBI. We need to be sure that we allow the exportation of that encryption technology so that we can continue to be the leaders in that area.

Another important area is education, and that gets to the change points. In a rapidly changing world, we need to constantly update our skills. We live in a society where all of us are going to need to continually be learning. We need to adjust our education system to understand that. In the good old days when basically all one needed was a high school education and could go out and get a job and probably take care of their family; my father did, he had a high school education, got a job as a ramp serviceman for an airline and ready did not update his skills very much during his 32 years with that airline and was able to take care of his family.

In today's world, we need to update our skills. We need to make sure that our education system is ready for that, and that our education system is also ready to educate our children in technology issues and to enable them to change as rapidly as they need and update their skills.

The Internet is the key to all of this. The way the system basically works, what computers and software enable us to do is they enable us to generate and store a large amount of data, and that is very valuable, as in the engine example I cited earlier. By being able to generate that information, they were able to develop a product. That is the start of it. The Internet basically is the step that enables one to transmit that data.

Back to the example of a retail clothing shop, if it is a chain, if they have 25 or 30 stores spread throughout the country, they can share data. Basically being in any one of those stores is like being in the home office and by being able to share that data enables the company to move forward, or, if they are designing something, they can trade the design back and forth and not have to be in the same place.

What we need to do is we need to encourage the Internet. Overregulating the Internet would be one of the biggest mistakes our government could make. It would put us in a position of restricting its ability to grow, and it is very important that we allow the Internet to grow and prosper and do the things for our economy that it has already started to do.

There is also an issue, and this is primarily in the area of biotech, but also in other areas of patents. We need patent reform so that people have the incentives necessary to develop new products, secure in the knowledge that they will be able to keep the patents on those products and benefit from them. Otherwise, they will not get into the field and try to develop them.

Research and development is also a critical element. We have in this country the research and development tax

credit. Unfortunately, it is only good for one year and every year we have to come back and renew it. Well, we need to make that permanent. The reason is because if one is a company planning for the future and deciding how much to put into research, a lot of these products are not developed in one year, and if one does not know if the resources are going to be able to be there for more than one year, it hampers one's ability to make that investment. We have the opportunity to permanently extend the R&D tax credit this year and give companies that incentive to go out there and continue to develop the new products that they need to develop.

Lastly, and this is tied into the Internet, we have the issue of broad band, basically access to the Internet. The Internet is great, but currently only about 20 percent of households in this country have access to it, and a much smaller number, very minute number, have access to so-called broad band Internet access.

Put simply, broad band means that the Internet moves more quickly for us. Now, if one is just sending e-mail or simply surfing the net, that may not be such a big issue, but if one is trying to send data, if one is developing that new design, if one is in the automobile industry, one develops a new design for an automobile and one wants to send it out to one's top 25 executives throughout the world, to be able to send that much data over the Internet requires a larger pipe. Otherwise, it will take forever to send the data out and to download it to whoever has received it.

The most important thing in this area is we need to build the infrastructure. Think of the Internet today in the same way that the railroad was in the 20th century. In the 20th century, the railroad gave us the ability to connect our country, but first, we had to build the track, and it was very expensive to build that track, so we gave incentives to go out there and build it, and it made a lot of sense because it helped grow our economy rapidly.

We need to do the exact same thing with broad band technology. We need to give companies ever incentive out there to go out there and build the infrastructure. Lay the fiber, lay the cable, put in the phone lines, do whatever is necessary to connect as many people in this country as possible, not just to Internet access, but to fast, broad band Internet access.

Overregulation can kill this. If we regulate companies too much so that they do not have the proper economic incentives to go out there and build the infrastructure, it will not happen. Because yes, there is a pot of gold at the end of the rainbow if you are the company that best develops Internet access, but you have to make a major investment up front to get there and you may not be willing to do that if the environment is too regulated.

Those are just six issues that I think we need to touch on, but the important thing is simply to embrace change, understand the new economy. We cannot fight it. It is not an option. It is here. We need to understand it and try to make sure it works. I think one of the greatest challenges for this country is to make sure that it works for everybody. Because right now, it works fairly well for the top 20 percent, but the potential is there to make it work for everybody, and we need to understand it and go about addressing the issues in a way that make it available to the entire country, because it has the massive potential to keep our economy moving forward, to keep productivity high, and to create good jobs. That is why I think that the new economy and the high tech aspects of that new economy is so critical.

I am pleased to have with me the gentleman from New Jersey (Mr. HOLT), who is going to address these issues as well.

Mr. HOLT. Mr. Speaker, I would like to thank the gentleman from Washington (Mr. SMITH) for highlighting these issues. Of course, the gentleman has made very clear that what we are talking about here is not just a sector of the economy. We are talking about the economic growth for all people. In fact, to borrow from a campaign slogan of a few years ago and modify it, rather than saying it is the economy, stupid, I think we would say, it is the productivity, stupid. In order to have the kind of productivity growth we have had in recent years, it calls for just what the gentleman has been laying out.

The gentleman and some of our colleagues here may have heard a speech by the Chairman of the Fed, Chairman Greenspan a week or so ago marveling at the productivity growth of the United States. We know to have good growth in productivity we need a well-trained workforce and we need new ideas, and we need to have systems for exchanging ideas rapidly. We need the kind of openness that the gentleman from Washington (Mr. SMITH) has been calling for. We need the kind of high technology that is not, as the gentleman says, just one sector of the economy, but that is found throughout the economy and throughout all sectors. And, we need training and education to make it work. The gentleman has laid out the ingredients, no doubt about it.

High technology has fueled so much of our Nation's economic growth in recent years, and whether it is in New Jersey or in Washington or in Michigan or in California; in fact, in all of the States of this country, it explains why our economy is doing so well compared to many other countries around the world. In order to keep it going, we need to maintain an education system that is as good as the technology demands.

There are no unskilled jobs in today's economy in America. The car one drives no doubt has more computing power than an Apollo spacecraft. It demands good education; it demands openness of ideas and exchange of ideas, freedom of exchange; and it also demands an investment in research and development.

The gentleman spoke about the R&D tax credit. It was created nearly two decades ago in 1981. It has been extended nine times, but it has only been extended year by year. An R&D investment decision, a research and development investment decision requires years of advanced planning. If a company cannot count on an R&D tax credit in the future, it is hard to do the necessary planning.

So I wanted to join with my friend here and commend him for highlighting these points and join him in talking about the importance of these issues for all people in America.

Mr. SMITH of Washington. Mr. Speaker, I thank the gentleman. Actually, I should point out that the gentleman from New Jersey is not just a Congressman, he is also a physicist, which means he actually understands the details of a lot of this stuff a lot better than I do, and I am wondering if the gentleman could offer us any perspective, because research in dealing with high technology is something that the gentleman has some background on in his work as a physicist. I wonder if the gentleman could apply that in some of the work that he has done and how important it is and what can be developed, particularly concerning research and development, and how that can be applied.

Mr. HOLT. Mr. Speaker, I spent much of my career in research and development and there is no question, one has to take a long-term perspective. We cannot lose sight of the day-to-day activities, but one has to take a long-term perspective. A permanent extension of the R&D tax credit would be very valuable to industries that engage in research and development.

I should say that as a scientist I do understand, in fact, the jet engine concept that the gentleman was describing earlier. In fact, it is becoming widely used now in so-called cogeneration plants to generate both heat and electricity that can be used for powering say a research campus or a cluster of apartment buildings or a small community, and it came about because of research in an area that was not directly related to energy generation. It was research in aerospace. And as a result, in fact, we were talking about it today in connection with the NASA authorization.

□ 2100

There is a need for investment in research in such things as jet engines. In this case, the benefit came not only in providing better commercial aircraft, better military aircraft, but it also turned out to be a more efficient way of generating electricity. That is providing savings throughout the country, throughout the economy. So research and development does not always pay off the most in the area where you expect it to.

Mr. SMITH of Washington. I think that is a very important point.

When we look at a lot of the products out in the market today, it would be very interesting for everybody in society to sort of track one of those products, how it came into being, the steps that were taken, the investment that was necessary, the people power that was involved, and it makes us understand the importance of research and development.

I think biotech is a great area to look at this. Everyone is aware of the drugs that have come out that have generated tremendous amounts of money, but we also have to look at the process that these companies had to go through to get to that product.

Basically they were working for sometimes as much as 8 or 15 years without ever generating any revenue, without ever getting any return on the product that they were trying to develop. I am not talking about not making a profit, I am talking about not generating any revenue, because their product was not yet developed and being sold.

If you have that type of situation, who is going to spend money for 8 years and not have any revenue? We need incentives, we need incentives for investors and incentives for the companies to make that sort of long-term commitment. It is not just biotech products, but the engine we are talking about was researched for years before someone generated one and they could generate the electricity that they were looking for.

Mr. HOLT. If the gentleman will yield, Mr. Speaker, my district in New Jersey, and as the gentleman knows, New Jersey is indeed a research State, going from Thomas Edison to Albert Einstein to the biotech companies of today, I have two biotech companies in my district, of the many, many dozens around the country, two that have actually started to generate a profit.

They have started to generate a profit after, one is 18 years and the other is about 14 years, and they have some very clever, I think probably very desirable, and ultimately very successful products. But it took a long time and a lot of work to develop those, and there are many, many biotech companies that are not turning a profit, they are living on hope and investment at this point.

Mr. SMITH of Washington. And there are many that never will turn a profit.

Mr. HOLT. But those that do can change our lives.

Mr. SMITH of Washington. Exactly. So we need to set up a system that gives the incentives to invest in these sorts of products. It is not just biotech, it is in every single aspect of the high-tech community, giving the incentive to put the money into research helps us move forward.

Mr. Speaker, I thank the gentleman very much.

Mr. HOLT. I thank the gentleman. It is my pleasure to join him in this special order, and I thank the gentleman for doing it.

Mr. SMITH of Washington. The gentleman is quite welcome. It is nice to have a physicist in Congress to help out with these very difficult issues.

I just want to wrap up this topic by emphasizing how important it is and how it touches our lives. I think one of the biggest challenges we have right now as a society is to make sure that the message gets out that technology is for all of us, that it affects all of us in a variety of different levels.

I think there is a tendency, and in fact, I was never that computer literate until a few years ago, and I always thought, you know, of first computers and then the Internet that that is just not something that I deal with.

Well, it is something that everybody is going to have to deal with, and it is a good thing. It is a positive change in our lives. Yes, it is change and change is difficult, but it will open up windows of opportunity that we could never imagine if we simply understand that change, understand what the information economy has brought to us, and how our society needs to adjust to it.

I think in the long run it is going to give us a better society and a stronger society, but it is not only a matter of embracing it but understanding it, and advancing the policies that are going to make sure that we all benefit from it.

The Internet has the ability to connect people, just for example. I have heard some people say, well, they are worried that the Internet is going to divide our society even more between the haves and have nots, those that have technology, those that do not.

I see the Internet just the opposite. The Internet basically enables anybody, for the ever-decreasing price of a laptop and the ability to hook up a telephone line, to get access to information that was previously the exclusive purview of the few. You would have to go off to institutes of higher learning or know people who were highly educated in order to get access to this information. Now it is right there on our computers, virtually anything we could imagine, for us to access for a very cheap price.

That has the possibility, I think, to really broaden the opportunity of this country, to make it more inclusive and bring more people along on these issues.

Government has a role to play. Sometimes that role is getting out of the way. As I mentioned, do not regulate the Internet, and do not overregulate the telecommunications industry so people do not have the incentives necessary to build that all-important infrastructure.

Ms. SANCHEZ. Mr. Speaker, there is no question that the United States is a leader in the development of new technology. Historically, the R&E tax credit has played a major role in elevating this great Nation to such a significant and influential leadership position.

However, with greater market challenges in the future, we will have to fight hard to maintain the U.S. lead in new technology and innovation.

Simply put, the tax credit is an investment for economic growth and the creation of new jobs.

It strengthens our international position, and often results in an enhanced quality of life for consumers.

Mr. Speaker, the R and E tax credit has been on the books for many years, and there is no doubt that it has proved beneficial to our Nation's technology enterprise.

But, there is also no doubt that its benefits could be even greater if the credit were made permanent and the perennial uncertainty were eliminated.

I urge my colleagues to support this concept of a permanent R&E credit and support the type of research activities that will maintain American technological leadership into the 21st century.

Mr. SMITH of Washington. Mr. Speaker, sometimes it has a more positive role to play, like in education, giving people access to higher education, continuing education, through grants, loans, incentives to companies, whatever. That is an active role the government can play.

So it is a matter of balancing between those two things. Sometimes government needs to get out of the way, sometimes it needs to help, but more than anything, it needs to understand, needs to understand what the new economy is and how to make it best work for all of our citizens.

A DISCUSSION ON MURDER SIMULATION AND ON THE SITUATION IN KOSOVO

The SPEAKER pro tempore. Under the Speaker's announced policy of January 6, 1999, the gentleman from Colorado (Mr. MCINNIS) is recognized for 60 minutes.

Mr. MCINNIS. Mr. Speaker, I want to visit about a couple of subjects tonight. I thought the first half hour we would talk about the murder simulators that are being created or are created and are currently in existence in our country, and then perhaps spend the last half hour, I have invited a colleague of mine to come over and talk with me. He is an expert in foreign relations. We are going to talk a little more about the situation in Kosovo.

First of all this evening, I want to talk about murder simulation, murder simulation.

Last weekend I had the opportunity to have dinner with a good friend of mine, good friends of mine, Dr. Mohamed and Simi Hasan, and their heritage is in Pakistan. I asked them about Pakistan. We got on the subject, obviously, of the shootings in Colorado, at the Columbine High School. I asked them about the situation in Pakistan.

In Pakistan, they told me that there at a very young age young boys are given fully automatic weapons, fully automatic weapons. Those are the types of weapons that have been outlawed in this country, against the law in this country since about 1937.