

Remarks to the American Association for the Advancement of Science

February 15, 1991

Thank you very much. Thank you, and please forgive me for keeping you waiting. First, let me pay my respects to Secretary Watkins and to Dr. Bromley and to NASA's very able Administrator, Admiral Truly.

Before talking about the subject at hand, I do want to make a few comments on the statement that came out of Baghdad early this morning. When I first heard that statement, I must say I was happy that Saddam Hussein had seemed to realize that he must now withdraw unconditionally from Kuwait, in keeping with the relevant United Nations resolutions.

Regrettably, the Iraq statement now appears to be a cruel hoax, dashing the hopes of the people in Iraq and, indeed, around the world. It seems that there was an immediate celebratory atmosphere in Baghdad after this statement. And this reflects, I think, the Iraqi people's desire to see the war end, a war the people of Iraq never sought. Not only was the Iraq statement full of unacceptable old conditions, but Saddam Hussein has added several new conditions. And we've been in touch with members of the coalition, and they recognize that there is nothing new here, with the possible exception of recognizing for the first time that Iraq must leave Kuwait.

Let me state once again: They must withdraw without condition. There must be full implementation of all the Security Council resolutions. And there will be no linkage to other problems in the area. And the legitimate rulers of Kuwait must be returned to Kuwait. Until a massive withdrawal begins, with those Iraqi troops visibly leaving Kuwait, the coalition forces acting under United Nations Resolution 678 will continue their efforts to force compliance with all the resolutions of the United Nations.

But there's another way for the bloodshed to stop. And that is for the Iraqi military and the Iraqi people to take matters into their own hands—to force Saddam Hussein, the dictator, to step aside, and to comply with the United Nations resolutions and

then rejoin the family of peace-loving nations.

We have no argument with the people of Iraq. Our differences are with Iraq's brutal dictator. And the war, let me just assure you all, is going on schedule. Of course, all of us want to see the war ended soon and with a limited loss of life. And it can if Saddam Hussein would comply unconditionally with these U.N. resolutions and do now what he should have done long, long ago.

So, I'm sorry that after analysis and reading the statements out of Baghdad in their entirety, there is nothing new here. It is a hoax. There are new demands added. And I feel very sorry for the people in Iraq. And I feel sorry for the families in this country who probably felt as I did this morning when they heard the television that maybe we really had a shot for peace today.

But that's not the case. And we will continue. We will pursue our objectives with honor and decency. And we will not fail.

And now let me just move forward to the business at hand. I want to salute in addition to the three with me here Dr. Atkinson, Dr. Langenberg, Dr. Lederman, Dr. Rowland, and distinguished friends of science gathered here today.

I view it as an honor to be over here with you all today. Since its founding nearly a century and a half ago, this association, your association, has watched over the most far-reaching and most breathtaking transformation that human society has ever known. Science and technology have brought unprecedented prosperity, mobility, health, and security to millions around the world. And today the spirit of innovation is alive and well in America. Of course, times have changed. Some say that if Edison had invented the light bulb today, we'd have scores of studies citing the dangers of electricity. *[Laughter]* And the newspapers would headline the story "Candle Industry Threatened." *[Laughter]*

Well, science and technology have

touched all of our lives, from the way we do our jobs to the kind of medical care we receive. And especially in the last few weeks, anyone who has been near a television has seen the dramatic effect, the evidence rather, of how technology is changing the face of war. Modern weapons are making it possible to face down aggression without the degree of widespread destruction and loss of civilian life of wars past.

And that's why I'm going up today to visit with the workers who make the Patriot missile. Our investment in defense research and development over the past decade is now saving the lives of Americans, of our allies, and even of our adversaries. And I am certain that this struggle will end decisively. And again, let us all pray that it ends quickly.

Next week the administration will release its national energy strategy with new public and private initiatives to increase energy efficiency and conservation, preserve our environment, encourage alternative sources of energy, and reduce our vulnerability to foreign oil supply disruptions.

Now some will say that reducing our energy vulnerability is not enough, that we should take more drastic measures for total energy independence. But then there's reality. We are a long way from achieving total energy independence. We must avoid unwise and extreme measures such as excessive CAFE [Corporate Average Fuel Economy] standards for automobiles that would seriously hurt America's consumers and America's jobs and American industries. Instead, we must pursue an energy strategy that is reasonable, balanced, and comprehensive. And that will keep us on the course toward strong economic growth.

Science and technology will also be a crucial factor for our economic strength. If the past is prolog, our economic future is going to be very, very bright indeed, in spite of today's concerns. Over a third of the economic growth that we've enjoyed since the 1930's, over a third of it, has been the result of new knowledge including science and technology. And beyond advances in prosperity, in security, work on the frontiers of knowledge is one of humanity's greatest adventures.

For all of these reasons, the budget that

I sent to Capitol Hill last week included a 13-percent increase for R&D, for research and development, and that increase is one of the largest in the budget. And it's proof of our determination to make the investments needed to ensure this country's continued leadership. We intend to help scientists spend less time searching for funding and more time making breakthroughs.

And one of our highest priorities is basic research, especially by the individual scientist or a small team. To support their work, our budget calls for \$1 billion increase—\$1 billion in basic research. And funding at the National Science Foundation would go up by 18 percent, which would put the NSF budget back on the track toward the doubling that I've long sought. And increases in basic research at the NIH and again at Jim's Department of Energy, NASA, and the Department of Agriculture will add to the base of knowledge on which the future is being built.

At the same time, this budget makes a strong commitment to the facilities that many individual scientists will need to reach to the future frontiers in their selected fields. And that means nuclear accelerators in physics, telescopes in astronomy, a strong space science program at NASA, and the human genome project in biology—all projects that will have a profound impact on humanity.

Over the next year, the United States will spend over \$1 billion on the U.S. Global Change Program. And part of our efforts take the form of a mission to planet Earth, where satellites will monitor the Earth from space. And our mission from planet Earth will extend human curiosity to frontiers beyond our own planet to the Moon, to the planets, and beyond.

But along with record-level Federal investment in R&D totaling \$76 billion, we are committed to working with American industry to make it easier for companies to capitalize on the discoveries of basic science and to develop new products and new processes. And that's why I'm again calling on the United States Congress to make the research and experimentation tax credit permanent, to make a long-term commitment to our technological future.

We face a crucial challenge in developing the generic technologies that are important to both the public and the private sectors. And that's why the budget supports work in high performance computing and communications, in energy research and development, in aeronautics, in biotechnology—the basis for some of the most promising industries of the 21st century.

Technology may be the key to the future, but people are the key to technology. The national education goals that we established with the Nation's Governors explicitly recognizes this connection. And one of our most ambitious goals is for American students to be first in the world in science and math achievement by the year 2000.

Our budget includes substantial funding increases for math and science education. But those math and science goals will never be achieved if they are seen simply as goals for government alone. All sectors of society must recognize the importance of scientific literacy and strive to achieve it. And that's where the AAAS comes in. Your Project 2061 is working where all lasting change must occur—at the local level, to transform the teaching of math and science.

Last fall, we had 200 of the best mathematics and science teachers in the country here to the White House. And more than a few of those teachers pointed out that kids are natural-born scientists. And they delight in the sheer pleasure of learning new things, making something work, understanding the world. This delight is something most scientists never lose. The Nobel Prize-winning geneticist Barbara McClintock once said of her work: "I did it because it was fun. I couldn't wait to get up in

the morning. I never thought of it as science."

And the sheer adventure of science is one of the main reasons for holding this meeting and for the continued vitality of the AAAS. Sharing science's sense of adventure through education and outreach has never been more important than now. And your work is vitally important. Of all humanity's concerns, the power of knowing is the greatest pursuit, the surest promise for a brighter future, and the greatest covenant that we keep with those kids of the future, those future generations.

So, let us pursue the adventure of science as a sacred trust. And let us keep the fire of the American mind burning brightly for the sake of the future that our children deserve.

Thank you all very, very much for coming here. I hope your meetings are worthwhile and productive. And we're proud of each and every one of you. And at this special time, may God bless the United States.

Note: President Bush spoke at 9:58 a.m. in Room 450 of the Old Executive Office Building. In his remarks, he referred to Secretary of Energy James D. Watkins; D. Allan Bromley, Assistant to the President for Science and Technology; Adm. Richard H. Truly, Administrator of the National Aeronautics and Space Administration; President Saddam Hussein of Iraq; Richard C. Atkinson, chairman of the board, Donald H. Langenberg, president, and Leon M. Lederman, president-elect of the association; and Sherwood Rowland, president of the University of California at Riverside.

Exchange With Reporters in Andover, Massachusetts, on the Iraqi Offer To Withdraw From Kuwait

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Q. Mr. President, is there any indication that Iraqis are turning around and going home?

Q. Do you think this is words only, this Iraqi statement?

The President. What statement? You mean this morning?

Q. Yes.

The President. Oh, there's no evidence of any withdrawal. I mean, as I said down in