H.R. 4664 also includes substantial provisions from the Undergraduate Science, Mathematics, Engineering and Technology Education Improvement Act, H.R. 3130, that authorize several programs at the National Science Foundation to strengthen undergraduate education in these fields of study. Basically, these programs will help increase the numbers of students graduating in science, math and engineering and will help improve the quality of undergraduate science education.

The undergraduate educational programs build on existing NSF programs that have proven their effectiveness, such as Research Experiences for Undergraduates. Similarly, the bill will provide support for the expansion of successful, small-scale undergraduate education reform activities that some colleges and universities have been engaged in.

H.R. 4664 is an important bill that will help ensure the nation maintains a vigorous basic research enterprise, which is an essential component for a strong economy and for national security. And equally important, it will help educate the next generation of scientists and engineers, the essential ingredient in ensuring the nation's technological strength.

Mr. Speaker, I commend this measure to my colleagues and ask for their support for its passage by the House.

H.R. 4664

SPEECH OF

HON. EDDIE BERNICE JOHNSON

OF TEXAS

IN THE HOUSE OF REPRESENTATIVES

Thursday, November 14, 2002

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I want to thank Chairman BOEHLERT, Ranking Member HALL, and Chairman SMITH for working with me in a bipartisan manner on this important piece of legislation that makes a strong statement about our commitment to invest in America's future. I would also like to extend my appreciation to Senator KENNEDY, Senator HOLLINGS, Senator GREGG, and Senator BOND in the other body.

As Ranking Member of the House Science Research Subcommittee, I am pleased to say that this is truly an historic piece of legislation for science policy in the United States. The conference report of H.R. 4664 begins the process of doubling NSF's budget, which was the goal of H.R. 1472, the NSF authorization bill I introduced in April of 2001. I introduced H.R. 1472 because I strongly believe that investing in basic science, math, and engineering research is essential to the future economic prosperity and global competitiveness of our country. Many of today's scientific breakthroughs in medicine, consumer electronics, homeland security and other technical fields are the direct result of investments made in basic research decades ago.

To appreciate the importance of NSF to scientists in America, consider some facts. NSF provides 23 percent of basic research funding at academic institutions and as much as 72 percent and 78 percent of the research in critical areas such as mathematics and science. Yet despite its importance to key sectors of our nation's economy, NSF previously had to decline more than $1 billion worth of high quality research proposals each year due to insufficient funds. With the passage of today's conference report, that situation has begun to change. The increase is applied equally to research and education programs, and specific funding authorizations are made for the focused research initiatives in some of the most promising frontiers of science, such as information technology and nanoscale science and engineering. The bill also makes a number of improvements in the way major research projects are funded, the transparency of the agency, and the coordination with other federal research agencies.

NSF also plays a leading role in educating our youth in the math and sciences and training the scientists and engineers of tomorrow, and the agency is working to ensure that tomorrow's high-tech workers reflect the diversity of America. This legislation includes a number of important initiatives that will improve upon science education in the United States. With Senator KENNEDY's help, H.R. 4664 includes portions of H.R. 1660, the Mathematics and Science Proficiency Partnership Act I introduced in May of 2001 to help secondary schools leverage private sector funds for math, science, and engineering scholarships. The Technology Talent Act of 2002, H.R. 3130, is also included in the NSF reauthorization. This initiative will increase the number of students studying and receiving associate's or bachelor's degrees in established or emerging fields within science, mathematics, engineering, and technology. It also establishes specific grant programs in these fields at Historically Black Colleges and Universities and enables eligible nonprofit organizations to work with NSF and public-private consortia to improve science and math education. My home state of Texas has an excellent track record of these innovative partnerships.

I am also pleased that the conference report of H.R. 4664 includes the text of H.R. 2051, the Regional Plant Genome and Gene Research Expression Act Chairman SMITH and I developed together and that passed the House in May of 2002. The legislation establishes competitive, merit based grants to eligible entities to conduct basic research on crops that can be grown in the developing world. The research supported by these grants will help scientists discover innovative solutions to some of the developing world's most intractable problems, such as hunger, malnutrition, and disease. An important feature of this authorization is that U.S. scientists are required to partner with their colleagues in developing nations, which will help develop the scientific capacity of developing nations and stimulate the free flow of ideas, which is so essential to the progress of science.

If we want future Americans to enjoy the pace of progress that we are blessed with today, it is imperative that we bolster funding for our nation's premier basic research agency, the National Science Foundation. H.R. 4664 is a step in the direction of making that dream possible. The legislation that passed last week provides our nation's premier science research agency with the resources it needs to continue and improve upon its excellent track record and authorizes a number of important science policy initiatives. I urge the President to sign H.R. 4664 into law, and I look forward to working with my colleagues on both sides of the aisle in both chambers to ensure that NSF is fully funded under these new authorization levels.

H.R. 3609

SPEECH OF

HON. DON YOUNG

OF ALASKA

IN THE HOUSE OF REPRESENTATIVES

Thursday, November 14, 2002

Mr. YOUNG of Alaska. Mr. Speaker, with the passage of H.R. 3609 pipeline safety legislation, Congress has completed a critical step in improving the safety and reliability of the nation's interstate natural gas pipeline system. The Office of Pipeline Safety (OPS), within the Department of Transportation has principal responsibility for developing, applying, and enforcing the pipeline safety rules that enhances the safety of the nation's pipelines and protects the public.

OPS is required to enforce these rules without regard to market conditions or commercial considerations. It must diligently seek to promote safety above any competing objectives. Among the most important of existing pipeline safety rules is the requirement that natural gas pipelines not exceed maximum allowable operating pressure, or MAOP. A pipeline's MAOP is established on the basis of engineering principles, testing, historical operations, and experience. Pipeline operators who exceed MAOP violate the Department of Transportation's pipeline safety regulations and may be fined for such violations.

No agency other than OPS should be allowed to re-interpret or water down pipeline safety regulations based on its view of market or commercial concerns. Allowing any other agency to usurp OPS's function will undermine the hard work the Congress has completed to enhance pipeline safety and minimize the risks of pipeline ruptures that may cause serious injury and death.

H.R. 4664

SPEECH OF

HON. JOHN B. LARSON

OF CONNECTICUT

IN THE HOUSE OF REPRESENTATIVES

Thursday, November 14, 2002

Mr. LARSON of Connecticut. Mr. Speaker, I rise today in support of the National Science Foundation Authorization Act, H.R. 4664, passed by the House on November 14, 2002, a bill which doubles funding for one of the most efficient and essential agencies of the Federal government, the National Science Foundation. In particular, I am proud to support this bill because it contains two provisions I authored, both of which will address growing needs in our educational system, our workforce and the economy.

The first provision will have a positive impact on our educational system's ability to integrate cutting edge technology into the classroom instruction of advanced disciplines at the primary and secondary education levels and which will, therefore, improve the educational opportunities of America's students. The second provision will address a growing problem in our nation's workforce: fewer and fewer Americans are seeking degrees in the scientific and technical fields as demand grows and more jobs go unfilled. Both provisions will improve the nation's capacity to maintain an innovative edge in technical fields, which is

the backbone of America's prosperous economic system.

The first provision is simple: it tasks the National Science Foundation to identify the best educational practices to provide educators and policy makers with tools for using existing and evolving Internet technology more effectively as a part of the nation's educational strategy. It does this by tasking NSF to study:

(1) The current status of high-speed, large bandwidth capacity access to all public elementary and secondary schools and libraries in the United States;

(2) How high-speed, large bandwidth capacity access to the Internet to such schools and libraries can be effectively utilized within each school and library;

(3) The effect that specific or regional circumstances may have on the ability of such institutions to acquire high-speed, large bandwidth capacity access to achieve universal connectivity as an effective tool in the education process; and

(4) Present various options and recommendations for the entities responsible for elementary and secondary education to address the challenges and issues identified in the report.

In essence, in order to prepare our public schools for the 21st century, we must reexamine how our children's education is delivered into the classrooms. The provision would provide our schools with the best data available from some of the nation's top researchers to help schools enter the 21st century by assisting them to establish effective educational pipelines—broadband pipelines—through which we can supply the energy necessary to fuel the new digital economy.

The second provision is, essentially, a bill I co-authored and introduced with Science Committee Chairman, Sherwood Boehlert, the Tech Talent Act, H.R. 3130. That bill's main provision, which made it into the NSF Authorization bill, consists of a new effort to addresses the tech worker shortage by establishing a competitive grant program at the National Science Foundation that rewards universities and community colleges that pledge to increase the number of U.S. citizens or permanent residents obtaining degrees in science, math, engineering and technology (SMET) fields.

It is no secret that America has long recognized that its long-term strength and security, and its ability to recover and sustain high levels of economic growth, depends on maintaining its edge in scientific achievement and technological innovation. Biomedical advances have permitted us to live longer, healthier, and more productively. Advances in agricultural technology have permitted us to be able to feed more and healthier people at a cheaper cost. The information revolution can be seen today in the advanced instruments schools are using to instruct our children and in the vast information resources that are opened up as a result of the linkages created by a networked global society. Our children today can grow up to know, see, and read more, be more diverse, and have more options in their lives for learning and growing. Other emerging technologies—such as nanotechnology—have untold potential to make our lives more exciting, secure, prosperous, and challenging.

Many countries also recognize this and they, therefore, focus their industrial, economic, and security policies on the nurturing and diffusion of technological advancement through all levels of society in a deliberate fashion. Countries that follow this path of nurturing innovation focus a lot of their efforts into recruiting and training the very best engineers and scientists, ensuring that a pipeline which pumps talented and imaginative minds and skills is connected to the needs of the country's socio-economic and security enterprise.

Yet here in this country, this pipeline is broken, threatening the competitive edge we enjoy in the business of technological innovation. Fewer and fewer Americans are getting degrees in scientific and technical fields—even as the demand grows. For example, the number of bachelors degrees awarded in math, computer science, and electrical engineering has fallen 35 percent and 39 percent respectively from their peaks in 1987, at a time when total BA degrees have increased. The number of graduate degrees in those fields has either fallen noticeably or stayed flat. And only about half of all engineering doctoral degrees granted in the U.S. are earned by Americans.

The nation has dealt with this crisis in the recent past by expanding the H1B Visa program to let more foreign residents with science and engineering degrees enter the country. But the H1B program was never intended to be more than an interim solution. The long-term solution has to be ensuring that more Americans get into these fields. The Tech Talent provision included in this bill represents a new effort aimed at producing just such people.

It always pays to be mindful of the fact—especially in the wake of the September 11 events—that there is a strong and tight linkage between our national security and the level of science and technology proficiency in America. Our strength and leadership in the world is based on the might of our defense, strength of our economy, and the quality of our education system. Without any one of these three components the global preeminence of the nation suffers.

In the House Science Committee room there is an inscription: Where there is no vision, the people perish. To remain a strong nation, we must ensure that the single most important element that keeps us dynamic, innovative, prosperous, and secure—and therefore might—is there for us: our students, teachers, researchers, engineers, scientists, and technologists. In short, we need more people with vision. The provisions I authored and the underlying legislation will address the deficiencies in our ability to replenish our workforce with visionary individuals and I urge President Bush to sign this legislation.

TRIBUTE TO JERRY ENOMOTO

HON. ROBERT T. MATSUI

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, November 19, 2002

Mr. MATSUI. Mr. Speaker, today I rise to honor a friend with a remarkable career in law enforcement and criminal justice. To say that Jerry Enomoto has been a trailblazer in American law enforcement would only begin to skim the surface of the extraordinary contributions that he has made to our communities over the years. After 45 remarkable years of outstanding public service, Jerry recently retired from the post of United States Marshal for the Eastern District of California. As his friends, family, and colleagues gather to celebrate Jerry's illustrious career, I ask all of my colleagues to join me in saluting this outstanding citizen of Sacramento.

Jerry Enomoto, a second generation Japanese American, was born in San Francisco. His education at the prestigious Lowell High School in San Francisco was abruptly interrupted by the wartime hysteria against Japanese Americans in the 1940s. Undeterred by the experience, Jerry remained dedicated to his studies and graduated as a valedictorian of his high school class while interned at the Tule Lake War Recreation Center. After his release, Jerry started his career in public service by serving a successful stint in the United States Army. Upon completion of his military commitment, Jerry returned to California to pursue a college education. Using his trademark dedication and determination, Jerry would ultimately receive his Bachelors and Masters degrees from the University of California in Berkeley.

Jerry has earned a number of ''firsts'' in his distinguished career. In recognition of his outstanding service to the California Department of Corrections, Jerry was tapped by Governor Reagan to become the first Asian Pacific American to serve as a state prison warden. A few years later, as Director of Corrections, Jerry would become the first Asian Pacific American to manage a state department in California history. Seven years ago, Jerry secured the greatest honor of his unparalleled career when he became the first Asian Pacific American appointed as a United States Marshal.

As United States Marshal for the Eastern District of California, Jerry worked tirelessly to bring together local, state, and federal law enforcement agencies and improve the communities that cover the thirty-four inland county district that stretches from Bakersfield to the Oregon border. Under Jerry's leadership, the Eastern District of California received the Volunteer and Community Services Award from the Attorney General in 2000. Jerry's commitment to improve the lives of his fellow citizens is not exclusive to strictly law enforcement. Jerry remains one of the preeminent civil rights activists in the region. Jerry was twice elected to the distinguished post of National President of the Japanese American Citizen League (JACL). As the National Chair of the Legislative Education Committee of the JACL, Jerry played an instrumental role in the spearheading the successful lobby for the passage of the Civil Liberties Act of 1987, an act which authorized redress for the internment of Japanese American during World War II. For his efforts, Jerry was the recipient of the JACL's highest award, ''Japanese American of the Biennium'' in 1992.

Until today, Jerry and his wife, Dorothy, remain active in community affairs. Whether it is through their participation in the Greater Sacramento Area Hate Crimes Task Force, or their intimate involvement in organizing the annual Dr. Martin Luther King, Jr. dinner, Jerry and Dorothy are still steadfastly committed to make Sacramento a better place for people from all different walks of life.

Mr. Speaker, as Jerry's friends, family, and colleagues gather to celebrate his great career, I am honored to pay tribute to one of Sacramento's most honorable citizens. Jerry's