

achieve this end were oriented particularly towards providing the children of Englewood with the opportunity to realize the American Dream. He rightly recognized that to deny a child an opportunity for a quality education is to deny that child a lifetime of opportunities.

Russell Major believed that every child should be educated in schools that are safe and well-maintained, schools that have access to advanced educational technology, and schools with classes that are small enough to facilitate the best teaching and learning.

On June 12, 1999, the Englewood Board of Education will be renaming the Liberty School after Russell Major. From now on, when the students walk into the Russell Major Liberty School on Tenafly Road, they will be walking into a school whose namesake embodies the values that they are being taught: tolerance, patience, fairness, vigilance, and excellence. These are the values that will help these young people realize the vision that Russell had for them and for all Americans, a vision that was grounded in family, community and education.

It was also a vision that enabled Russell Major to give of his heart, as much as he gave of his mind. And it was a vision that gained him the respect of every person who ever came into contact with him.

Russell Major fought to make the America he envisioned a reality for the people of Englewood and beyond. By renaming the Liberty School in Russell's memory, we are honoring his legacy and challenging future generations to continue his important work.

#### INTRODUCTION OF NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT ACT

**HON. F. JAMES SENSENBRENNER, JR.**

OF WISCONSIN

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, June 9, 1999*

Mr. SENSENBRENNER. Mr. Speaker, I rise today to introduce H.R. 2086 the Networking and Information Technology Research and Development Act of 1999. And I recommend that all my colleagues join with Science Committee Ranking Member GEORGE BROWN, Congressman TOM DAVIS and 23 other Republican and Democrat Members of the Science Committee in cosponsoring this important bipartisan research initiative.

Two decades ago, the changes wrought by information technology were unimaginable. The scope and scale of the changes produced by the explosion in information technology are comparable to those created during the Industrial Revolution of the 17th and 18th centuries. But whereas the Industrial Revolution ushered in the era of the machine—symbolized by the steam engine, the factory, and the captain of industry—the Information Revolution promises to create the era of the mind—symbolized by the silicon chip, the microprocessor, and the high-tech entrepreneur.

Today, the United States is the undisputed global leader in computing and communications, and a healthy information-technology industry is a critical component of U.S. economic and National security. The impact of information technology on the economy is telling. It represents one of the fastest growing

sectors of the U.S. economy, growing at an annual rate of 12 percent between 1993 and 1997. Since 1992, businesses producing computers, semiconductors, software, and communications equipment have accounted for one-third of the economic growth in the U.S.

Fundamental information-technology research has played an essential role in fueling the Information Revolution and creating new industries and millions of new, high-paying jobs. But maintaining the Nation's global leadership in information technology will require keeping open the pipeline of new ideas, technologies, and innovations that flow from fundamental research. Although the private sector provides the lion's share of the research funding, its spending tends to focus on short-term, applied work. The Federal Government, therefore, has a critical role to play in supporting the long-term, basic research the private sector requires but is ill-suited to pursue.

However, as the Congressionally-chartered President's Information Technology Advisory Committee (PITAC) noted in its recent report, the emphasis of Federal information technology research programs in recent years has shifted from long-term, high-risk research to short-term, mission oriented research. This is a trend that began in 1986 but has accelerated over the last six years.

PITAC warned that current Federal support for fundamental research in information technology is inadequate to maintain the Nation's global leadership in this area, and it advocated a five-year initiative that would significantly increase basic-research funding. The Administration's response to the PITAC report is its Information Technology for the 21st Century proposal—IT<sup>2</sup>. I believe this proposal, however well-intentioned, falls short of what PITAC envisioned. It does not, for example, commit the Administration to any funding increases beyond fiscal year 2000. In fact, according to the non-partisan Congressional Budget Office, the Administration's own figures show flat or declining budgets beyond next year for the IT<sup>2</sup> agencies, so any increases in information technology research would have to come out of other important science programs, an untenable situation.

To address the issues raised in the PITAC report, I am introducing the Networking and Information Technology Research and Development Act today. This is a five-year bill that provides justifiable, sustainable, and realistic increase in information technology research. It authorizes for fiscal years 2000 through 2004 nearly \$4.8 billion, almost doubling IT research funding from current level, at the six agencies under the Science Committee's jurisdiction: the National Science Foundation, the National Aeronautics and Space Administration, the Department of Energy, the National Institute of Standards and Technology, the National Oceanographic and Atmospheric Administration, and the Environmental Protection Agency.

This bill will fundamentally alter the way information technology research is supported and conducted. Its centerpiece is the Networking and Information Technology Research and Development program, which:

Limits grants to long-term basic research with priority given to research which helps address issues related to high-end computing, and software and network stability, fragility, security (including privacy) and scalability.

Requires all grants to be peer reviewed by panels that include private sector representatives.

Establishes 20 large grants of up to \$1 million in FY 2000–2001; 30 large grants in FY 2002–2004.

Makes \$40 million available for grants of up to \$5 million for IT Centers (6 or more researchers collaborating on cross-disciplinary research issues) in FY 2000–2001; \$45 million in FY 2002–2003; \$50 million in FY 2004.

Provides \$95 million to create for-credit private sector internship programs at two and four-year colleges and universities for IT students. To participate in the program, a company must commit to provide 50 percent of the cost of the internship program.

Authorizes a total of \$385 million for new computer hardware for terascale computing, which will be allocated in an open competition by NSF. Awardees must agree to integrate with the existing Advanced Partnership for Advanced Computational Infrastructure program and give access to Networking and Information Technology Research and Development Act research grant recipients.

In addition, the bill authorizes \$111 million through fiscal year 2002 for the completion of the Next Generation Internet program.

Another of the bill's provisions requires NSF to report to Congress on the availability of encryption technologies in foreign countries and how they compare with similar technologies subject to export restrictions in the United States. I believe that export controls on encryption are stifling development in this critical area, and I think this study will demonstrate that the current policy on encryption is self-defeating.

I also have included language in the bill to make the research tax credit permanent. For too long, businesses have been unable to plan for long-term research projects because of the annual guessing game surrounding the extension of the credit. To encourage capital formation, the credit must be a fixture in law instead of a perennial budget battle. As you know, there are a number of bills that expand the R&D tax credit, but I believe extending it permanently is a good start. Once that hurdle is cleared, we can then examine ways to improve it.

The Networking and Information Technology Research and Development Act of 1999 has been endorsed by both the Technology Network, a coalition of leading technology executives, and Ken Kennedy, the academic co-chair of the PITAC. It is a strong bipartisan bill, and I encourage all my House colleagues to support the measure.

#### TRIBUTE TO WHITEMAN AIR FORCE BASE

**HON. IKE SKELTON**

OF MISSOURI

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, June 9, 1999*

Mr. SKELTON. Mr. Speaker, let me take this means to pay tribute to the men and women at Whiteman Air Force Base, Missouri, for their outstanding performance in Operation Allied Force.

Whiteman Air Force Base is the home of the 509th Bomb Wing, led by Brigadier General Leroy Barnidge, Jr. The men and women