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Lofgren, Zoe Rush Ryan (OH) Lowey Lynch Salazar Mahoney (FL) Sánchez, Linda Maloney (NY) Sanchez, Loretta Markey Marshall Sarbanes Matheson Saxton Matsui Schakowsky McCarthy (NY) Schiff McCollum (MN) Schwartz McCrery Scott (GA) McDermott Scott (VA) McGovern Serrano McNerney Sestak McNulty Shavs Shea-Porter Meehan Meek (FL) Sherman Meeks (NY) Sires Michaud Skelton Miller (NC) Slaughter Miller, George Mitchell Mollohan Moore (KS) Moore (WI)

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Aderholt Crenshaw Culberson Akin Alexander Davis (KY) Bachmann Davis, David Bachus Davis, Lincoln Baker Davis, Tom Barrett (SC) Deal (GA) Bartlett (MD) Donnelly Barton (TX) Doolittle Berry Drake Bilbray Dreier Bilirakis Duncan Bishop (UT) Ehlers Blackburn Ellsworth Blunt Emerson Boehner Everett Bonner Fallin Boozman Feenev Boren Flake Boustany Forbes Brady (TX) Fortenberry Brown (SC) Fossella Brown-Waite. Foxx Ginny Franks (AZ) Buchanan Gallegly Garrett (NJ) Burgess Burton (IN) Gillmor Buyer Gohmert Calvert Goode Goodlatte Camp (MI) Campbell (CA) Gordon Cannon Granger Hall (TX) Cantor Capito Hastings (WA) Carney Hayes Carter Heller Chabot Hensarling Coble Herger Cole (OK) Hobson

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Cubin Hastert Ortiz Davis, Jo Ann Hunter Paul Johnson, E. B. Engel Radanovich Fattah Lampson Tancredo McMorris Tanner Rodgers

ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE The SPEAKER pro tempore (during the vote). Members are advised 2 minutes remain to vote.

□ 1346

So the bill was passed.

The result of the vote was announced as above recorded.

A motion to reconsider was laid on the table.

Stated for:

Mr. FATTAH. Mr. Speaker, had I been present for the vote on H.R. 1592 I would have voted "yea."

GENERAL LEAVE

Mr. WU. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks and include extraneous material on the bill. H.R. 1868, as amended.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Oregon?

There was no objection.

TECHNOLOGY INNOVATION AND MANUFACTURING STIMULATION ACT OF 2007

The SPEAKER pro tempore. Pursuant to House Resolution 350 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the state of the Union for the consideration of the bill, H.R. 1868.

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IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the state of the Union for the consideration of the bill (H.R. 1868) to authorize appropriations for the National Institute of Standards and Technology for fiscal years 2008, 2009, and 2010, and for other purposes, with Mr. SNYDER in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. Pursuant to the rule, the bill is considered read the first time.

The gentleman from Oregon (Mr. WU) and the gentleman from Michigan (Mr. EHLERS) each will control 30 minutes.

The Chair recognizes the gentleman from Oregon.

Mr. WU. Mr. Chairman, I yield myself such time as I may consume.

(Mr. WU asked and was given permission to revise and extend his remarks.)

Mr. WU. Mr. Chairman, I rise in strong support of H.R. 1868, the Tech-Innovation Manufacturing nology Stimulation Act of 2007. This bill authorizes programs at the National Institute of Standards and Technology, or NIST, for fiscal years 2008 through 2010, and strengthens American innovation

For most Americans, NIST is not a household word. But since its creation more than 100 years ago, NIST has made major contributions to public safety, industrial competitiveness and economic growth. Beginning in the 1900s, when it set standards for fire hydrants that have saved countless lives, to the 1950s, when it developed the world's fastest computer, helping usher information the age, t.o groundbreaking work on the technical aspects of the collapse of the World Trade Center on 9/11, NIST has served the public interest in ways that far exceed its public fame.

Today, NIST's mission focuses on promoting innovation and industrial competitiveness by advancing measurement, science, standards and technology. This mission has never been more urgent. The recent National Academy of Sciences report coauthored by Norm Augustine, "Rising Above the Gathering Storm," warns that we face major challenges in the global marketplace and recommends that we "ensure that the United States is the premier place in the world in which to innovate."

H.R. 1868 helps implement that recommendation by putting the NIST budget on a 10-year path to doubling as an investment in the future of American innovation. The bill increases the NIST research budget, funds key areas such as biologics, health care IT and nanotechnology. It funds the construction of a high performance laboratory at the Boulder, Colorado, campus, and upgrades the Center for Neutron Research in Gaithersburg, Maryland. This enables world class engineers and their scientists to have world class facilities for their work.

H.R. 1868 also addresses problems in the American manufacturing center, which has lost almost 3 million jobs 2001. It expands the Manufacsince turing Extension Partnership, or MEP, a proven and highly successful publicprivate partnership that provides technical assistance to small and mediumsize manufacturers to improve productivity and to remain competitive in a global marketplace.

It also establishes a competitive and collaborative grant system for MEP centers, industry groups, and nonindustry partners, to undertake manufacturing technology research. Manufacturing is a major source of high skill, high-paying jobs, and this bill will go far to reinvigorate our manufacturing sector.

One of the biggest stumbling blocks to innovation is the technology so-called "Valley of Death," the gap between angel funding and measurable venture capital, the lack of adequate private venture capital for early stage, high-risk, high-reward technology development. Almost 20 years ago, Congress created the Advance Technology Program, or ATP, to address this gap.

Today, the "Valley of Death" remains, but the global innovative environment has changed. H.R. 1868 responds to this by replacing ATP with the Technology Innovation Program, or TIP, which would provide limited, cost-shared grants to small and medium-size firms and joint venture to pursue high risk, high-reward technologies, with potential for broad public benefit.

TIP also acknowledges the vital role that universities play in the innovation cycle by allowing them to fully participate in TIP. H.R. 1868 is a bipartisan bill and incorporates good ideas from both sides of the aisle. It has been endorsed by TechNet, SEMI, the American Small Manufacturers Coalition, the Association of American Universities, the National Association of State Universities and Land-Grant Colleges, the Alliance for Science & Technology Research in America, whose members include the National Association of Manufacturers, the Business Software Alliance and the American Chemical Society. It also enjoys the support of dozens of other organizations, companies, and individuals.

I urge my colleagues to support this important legislation.

Mr. Chairman, I reserve the balance of my time.

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume.

I rise today in support of H.R. 1868, the Technology Innovation Manufacturing and Stimulation Act of 2007.

I certainly want to thank the Chair of the subcommittee for working very, very closely with us in producing this fine bill.

This bill provides a 3-year authorization for the National Institute of Standards and Technology, familiarly called NIST. Since 1901, NIST scientists and engineers have worked directly with American industries to address their needs for measurement methods, tools, data and technology, the building blocks that allow industry to grow and prosper.

NIST is one of three agencies targeted by the President's American Competitiveness Initiative. The ACI aims to double the Federal investment in physical science and research over the next 10 years to ensure that America remains technologically competitive in the global context marketplace.

Yesterday this body passed an authorization bill for one of the other ACI agencies, the National Science Foundation. I am very pleased that today we are supporting a second ACI agency by authorizing NIST labs at a rate that would double the budget over the next 10 years.

H.R. 1868 is a bipartisan bill that incorporates recommendations from the administration for some of NIST's programs. However, earlier this week, the administration sent up a critical statement about H.R. 1868, and I want to clarify some misunderstanding that may have arisen from that statement.

H.R. 1868 does not underfund the NIST labs, contrary to the statement and the administration's comments. H.R. 1868 provides a 10 percent increase above fiscal year 2007 for the NIST labs and sets the NIST lab budget on a path to double over the next 10 years. This is entirely consistent with the President's overall stated goal for the American Competitiveness Initiative.

H.R. 1868 does not fund or subsidize management consulting services. H.R. 1868 fully funds the highly successful manufacturing extension partnership, better known as the MEP program.

MEP helps businesses improve manufacturing processes, reduce waste and train workers to use new equipment, which keeps high-paying manufacturing jobs here in the United States. This House has already twice passed this MEP authorization in both the 108th and 109th Congress.

Another comment, MEP receives one-third of its funding from the Federal Government, one-third from the States, one-third from fees charged to participating small manufacturers. MEP has over 350 manufacturing extension offices located in all 50 States and Puerto Rico.

H.R. 1868 creates the Technology Innovation Program based on recommendations from the administration. This bill is very clear that only small and medium-size companies can apply for Federal funding.

Universities partnering with this small company can apply for funding, actually expanding the role of university participation, not limiting it as the administration's letter suggests.

The program's sole goal is to accelerate the development and application of challenging high-risk, high-reward technologies in areas of critical national needs, thus, targeting major societal needs that the administration's letter asserts are not part of the bill.

H.R. 1868 authorizes an important investment in our Nation's future economic competitiveness. Mr. Chairman, I want to thank Chairman GORDON and Technology and Innovation Subcommittee Chairman Wu for working with us on this important piece of legislation.

I also want to acknowledge the hard work of the gentleman from Georgia (Dr. GINGREY) to improve this legislation

I also want to make an additional point. At times, some have considered

this as being improper legislation. In particular, the President's statement indicates that is the beginning of an industrial policy.

That is simply not true. For those who are critical of this particular proposal, I want to ask them, first of all, do they oppose the current agricultural extension program, which has been in effect for nearly a century, which has been of inestimable value to our farming communities and to our farmers.

No one would think of ending the cooperative extension service in the agriculture department. It has been extremely valuable to this country. I have been in this body for 14 years. I have never heard anyone offer an amendment to defund the cooperative extension program, even though it costs \$400 million a year and benefits less than 2 percent of the workforce in this country.

At the same time, I have met a number of people, and apparently including some in the administration, who want to kill the MEP program, which is only \$100 million a year and benefits industries that employ 14 percent of the workers in this Nation.

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Now, how can it make sense to want to keep a \$400 million program that maintains a workforce of less than 2 million, and kill a program that costs one-fourth as much and helps about eight times as many workers? It doesn't make sense. So that argument is simply out the window.

If we do like the Cooperative Extension Service, we should approve the manufacturing extension partnership, which is of exactly the same nature and is designed to help small- to medium-sized manufacturers develop more jobs in our economy.

Madam Chair, I reserve the balance of my time.

Mr. WU. First, I would like to thank the gentleman from Michigan for his hard work on this legislation. I would further like to thank the gentleman for responding to the factually erroneous statements in the statement of administrative position, and I deeply appreciate the correction for the record.

Madam Chair, I recognize my good friend from New Jersey (Mr. PASCRELL) for $3\frac{1}{2}$ minutes.

Mr. PASCRELL. Madam Chair, I rise in strong support of H.R. 1868, the Technology Innovation and Manufacturing Stimulation Act of 2007, and I wish to congratulate the sponsor of this fine legislation, the chairman of Subcommittee on Technology Innovation, Congressman DAVID WU, and his ranking member, who understandably is not here today, Mr. GINGREY.

I especially am supportive of the provisions of the bill that reauthorize and strengthen the Manufacturing Extension Program. This is very critical. I hope people were listening to Mr. EHLERS, who very cogently spoke and defined what this legislation is all about.

Madam Chair, I represent a district with a long and proud history of manufacturing that goes all the way back to Alexander Hamilton and the birth of the American industry in Paterson, New Jersey. Sadly, we have seen the steady decline of our manufacturing base in America as the state of our competitiveness has fallen behind foreign nations.

The MEP program, the Manufacturing Extension Program, is one of the most successful programs funded by the Federal Government today, and it has provided hope to our Nation's manufacturers. It is a nationwide network of not-for-profit centers in nearly 350 locations, serving all 50 States and Puerto Rico, whose sole purpose is to provide small- and medium-sized manufacturers with the services they need for success.

The president of the New Jersey Manufacturing Extension Program, Bob Loderstedt, captures this program best when he said, "We have a public sector mission accomplished with a private sector mind-set."

I am proud to say that this legislation today will increase funding by 8 percent per year and double the funding over 10 years, so that more small manufacturers will be able to better compete in the global marketplace.

The MEP is certainly no Federal handout. Indeed, it is a public-private partnership for strong manufacturing growth, and these statistics bear this out: In fiscal year 2004 alone, MEP activities directly resulted in almost \$2 billion in new sales and more than 12,000 jobs. MEP's ability to analyze the weaknesses of each manufacturer resulted in \$721 million in cost savings. It also led to \$941 million worth of investment and modernization to meet the future needs of manufacturers.

I have seen firsthand the benefits of the New Jersey MEP as provided for manufacturers, and similar throughout the entire Nation. I believe that this is a very wise investment for us, and we can secure our Nation's manufacturing base. I urge my colleagues from both sides of the aisle to vote in favor of this vital legislation.

In conclusion, Madam Chair, let me say this. I think this is the beginning of finally having a manufacturing policy in this country. That is why we have seen the demise of manufacturing. Alexander Hamilton was right, we have a multifaceted economy; and we must understand, that won the battle and the debate with Thomas Jefferson. We cannot be one economy here. This is a multifaceted economy, and this is good for manufacturing, this is good for America, this is good for our small businesses.

Mr. EHLERS. Madam Chair, I reserve the balance of my time.

Mr. WU. Madam Chair, I yield 2½ minutes to the gentleman from Connecticut (Mr. MURPHY).

Mr. MURPHY of Connecticut. Madam Chair, my thanks to my friend, Mr. Wu, for leading this debate today. I rise today in strong support of H.R. 1868, the Technology Innovation and Manufacturing Stimulation Act.

The time has come for our country as a whole to stop ceding progress in science and technology to our competitors overseas. As one of the younger Members of this Chamber, I know that it is this generation's responsibility to keep our country competitive with countries like Japan, China, and India, whose young scientists and engineers are making new technological discoveries every day.

H.R. 1868 is part of the Speaker's Innovation Agenda to address how the United States should create a new generation of innovative thinkers and an educated, skilled workforce in science, math, engineering, and information technology. This bill makes a sustained commitment to Federal research and development, and will promote private sector innovation and provide small businesses with the tools to encourage entrepreneurial innovation and job creation throughout the country.

The Innovation Agenda is of particular importance to me as the Representative to Connecticut's Fifth District. We used to be the vanguard of manufacturing in the Fifth District; it is the home of Stanley Tool, of Scoville Brass, Torrington Ball Bearing Company, the fashioner of ball bearings where my grandfather and great-grandfather worked.

The days of those large manufacturing plants, at least in the Fifth Congressional District, are days of the past. However, my district now stands at the precipice of a new manufacturing era.

As I travel around my district, I am struck by how many small, high-tech manufacturers are setting up shop in this corner of the world. For example, in Torrington, high-tech companies are sprouting up on the grounds of the former Torrington Ball Bearing plant. In Danbury, in the shadow of a deserted hat manufacturing plant, a company that specializes in homeland security devices is growing. And in Waterbury, at an old brass factory, Luvata is making wire for an international consortium creating the world's first nuclear fusion device.

These small manufacturers are struggling every day with rising electricity costs and a lack of qualified workers to fill their growing job demands. This is why the Manufacturing Extension Partnership program, a national network of local centers that are set up to help these small manufacturers, are so critical to my district and districts like mine. This program is an effective public-private partnership that helps to leverage State and Federal dollars into private investment funds for these smaller manufacturers.

The importance of small manufacturers to America cannot be overstated. It is these small manufacturing plants where the most innovative work is being done. That is why I am so proud

of where the Fifth District stands as it is ready to lead in this new era.

Lastly, I just would like to voice my support for the Baldrige National Quality Program, named for former Commerce Secretary Malcolm Baldrige. The awards given by the President to businesses that live by Mr. Baldrige's strong belief and quality of performance standards, his widow, Midge Baldrige of Woodbury, Connecticut, and a friend. It is an honor to represent her.

I thank the gentleman for the time, I thank his efforts on this measure, and I urge passage this afternoon here in the House.

Mr. EHLERS. Madam Chair, I yield myself such time as I may consume.

Madam Chair, I reiterate my strong support of H.R. 1868, the Technology Innovation and Manufacturing Stimulation Act.

This bill is a key part of the President's American competitive initiative, and I am pleased it moved through the Science and Technology Committee in a bipartisan manner, and also moved through speedily.

I thank the staff for their hard work on this bill, including Jenny Healy from Dr. GINGREY'S office and Julia Jester from my office. I urge my colleagues to support H.R. 1868.

Madam Chair, I yield back the balance of my time.

Mr. WU. Madam Chair, I also urge support for H.R. 1868. As I am frequently fond of saying, if you don't set standards for things, things don't match up. If you can't measure things, it is not real from a technologic or economic perspective.

The underlying legislation is crucial to America's competitiveness and our place in the world market.

Mr. MATHESON. Madam Chairman, I would like to compliment my friend, Chairman Wu. He has been a tireless advocate for America's manufacturers and businesses and this bill will be a great benefit to our Nation's workforce. I appreciate working with the Chairman to include language in H.R. 1868 for a pilot program that, among other things, better enables the transfer of technology based on the technological needs of manufacturers and available technologies from institutions of higher education, laboratories, and other technology producing entities.

The Manufacturing Extension Partnership Competitive Grant Program described in Section 203(c) of H.R. 1868 is intended to, in addition to traditional manufacturing extension activities, emphasize the need to develop MEP projects that define the technological needs of small-to-medium sized manufacturers and to similarly define the capabilities of new technology and innovations available from institutions of higher education, laboratories, and other technology producing entities. When properly defined and characterized, manufacturers and innovators will have the ability, through computer technology or other means. to match needs with capabilities. I believe that the development and deployment of this matching capability by this Competitive Grant Program will permit access to new and maturing technologies for the 350,000 small-to-medium-sized manufacturers on a broad basis. which has not been possible to date.

Mr. WU. Madam Chairman, I am aware of Representative MATHESON's concerns about technology infusion to small manufacturers. There is study by the National Academy of Public Administration that established the critical need for small manufacturers to have better access to changing technology, production techniques, and business management practices. This study also recommended the improving technology transfer and infusion to small and medium-sized manufacturers. The Committee supports the rapid integration of new technologies and innovations into the manufacturing industry. This integration will help small-to-medium sized manufacturers stay competitive in the global economy while promoting American innovation and preserving American jobs. Language in the bill will facilitate these goals.

Mr. CONYERS. Madam Chairman, I rise in strong support of H.R. 1868, The Technology Innovation and Manufacturing Stimulation Act of 2007. H.R. 1868 authorizes appropriations for scientific and technical research at the National Institute of Standards and Technology (NIST) for fiscal years 2008, 2009, and 2010, strengthens and improves the Manufacturing Extension Partnership (MEP) initiative, and establishes the Technology Innovation Program (TIP) to assist U.S. businesses and institutions of higher education to accelerate development and application of challenging, high-risk technologies that promise widespread economic benefits.

H.R. 1868 authorizes \$365 million for MEP, a highly successful program that helps small and medium domestic manufacturers compete more effectively in the international market-place. The goal of MEP is not only to maintain current manufacturing jobs, but also to nurture growth in the manufacturing sector to create additional jobs for American workers. The bill provides for an 8 percent increase per year in MEP appropriations, which would double program funding in 10 years.

The Technology Innovation and Manufacturing Stimulation Act of 2007 also amends the National Institute of Standards and Technology Act to establish an MEP board. The current national MEP board is established by the Secretary of Commerce, and has been woefully neglected for 3 years, not meeting at all in 2005 and 2006. NIST recently reconstituted the board, but most members are now from academia, not industry. H.R. 1868 would establish the MEP advisory board in statute, rather than at the discretion of the Secretary of Commerce, and would require majority representation from industry.

My district and others across the country will benefit from funding research at National Institutes of Standards and Technology, strengthening the Manufacturing Extension Partnership, and establishing the Technology Innovation Program, and I am pleased to be able to support it.

Mr. HOLT. Madam Chairman, I rise today in support of the Technology Innovation and Manufacturing Stimulation Act, H.R. 1868. This important legislation is part of an ambitious initiative that will fulfill the Innovation Agenda.

I am proud of my efforts to help craft the Innovation Agenda, which will help provide for future prosperity through wise investments. H.R. 1868 is an integral part of this effort and will help meet the Agenda's call to double funding over the next 10 years for the National

Science Foundation, the National Institute of Standards and Technology (NIST), and the Department of Energy's Office of Science. NIST exists to improve our Nation's economic security and quality of life through the improvement of technology and related sciences and standards. This legislation puts us well on the path to doubling our investment in NIST by setting the appropriate authorization levels through 2010. This will mean actual authorizations of \$470.9 million in FY 2008 and \$537.6 million in FY 2010. These increases are necessary investments in revitalizing NIST's staffing, activity, and physical infrastructure, particularly at a time when we face unprecedented levels of international competition.

In this bill, the Technology Innovation Program (TIP) is created. TIP gives businesses and universities grants that encourage highrisk investments in technology, in cases where such investments have potential widespread economic benefits. This is a sound use of tax-payer money, as projected economic payoff to society is a necessary precondition for issuance of a grant. This program helps to solve the failure of market forces to encourage full investment in research and development. This failure of market forces is rooted in the fact that only one third of the financial reward of research and development investment is felt by investors, with the rest being felt by society as a whole.

H.R. 1868 also improves the competitiveness of the American manufacturing industry by creating postdoctoral fellowships for related research, and by creating a manufacturing research pilot grants program for interdisciplinary collaborations between businesses, State governments, nonprofits, and universities.

By strengthening our existing investment in our national technology and manufacturing capacity and through the creation of new related programs, this bill is a crucial element of the Innovation Agenda to maintain American economic security and global leadership. I encourage my colleagues to support this resolution.

Mr. UDALL of Colorado. Madam Chairman, I am pleased to support H.R. 1868, the Technology Innovation and Manufacturing Stimulation Act of 2007.

I am a cosponsor of this important legislation, which reauthorizes the National Institute of Standards and Technology (NIST). NIST has not been completely reauthorized since 1992, yet it is the lead federal agency in much cutting-edge technology, such as semiconductor research and nanotechnology.

NIST is particularly important to me because one of its key laboratories is located in Boulder, Colorado, in my district. The Boulder labs employ more than 350 people and serve as a science and engineering center for significant research across the nation.

A critical component of this legislation is that it includes funding for construction at these laboratories. NIST's Boulder facilities have contributed to great scientific advances, but they are now over 50 years old and have not been well maintained. Many environmental factors such as the humidity and vibrations from traffic can affect the quality of research performed at NIST. In Fiscal Year 2007, NIST-Boulder will begin an extension of Building 1 to make room for a Precision Metrology lab. This new facility will allow for incredibly precise control of temperature, relative humidity, air filtration and vibration to advance research on critical technologies, such as atomic clocks

telecommunications, and nanomaterials. To complete this extension, NIST will need further funding in Fiscal Year 2008 and Fiscal Year 2009. H.R. 1868 authorizes this critical funding.

The legislation also includes a needed funding increase for overall laboratory research at NIST. As part of the American Competitiveness initiative, NIST will use these funds to expand upon its world-class research, ensuring that the United States will continue to be globally competitive in many industries.

I am also Pleased to see that the legislation reauthorizes and gradually increases funding for the Manufacturing Extension Partnership (MEP) program. The MEP program has a network of centers across the nation to help small and medium-sized manufacturers develop and commercialize their research. Minimal Federal investment has yielded substantial benefits to manufacturers across the country.

In Colorado, the Colorado Ássociation for Manufacturing and Technology (CAMT) hosts the Colorado MEP (CMEP) program and has helped Colorado's more than 6,000 manufacturers save millions of dollars. Over the last 6 years, CMEP has decreased costs for Colorado manufacturers by almost \$17 million and increased sales by more than \$4 million—so I believe that this is a program that we must continue to support.

This legislation also replaces the Advanced Technology Program (ATP) with the Technology Innovation Program (TIP). The ATP has been a valuable resource to small manufacturers by funding technology development. The TIP will build upon and improve this program to help small U.S. manufacturers remain competitive in the increasingly competitive global market.

I would like to thank Technology and Innovation Subcommittee Chairman Wu and Ranking Member GINGREY, as well as Science and Technology Chairman GORDON, for introducing this critical legislation and working to bring it to the floor today.

In conclusion, I encourage all of my colleagues to support H.R. 1868.

Mr. WU. Madam Chair, I yield back the balance of my time.

The Acting CHAIRMAN (Mrs. TAUSCHER). All time for general debate has expired.

Pursuant to the rule, the amendment in the nature of a substitute printed in the bill shall be considered as an original bill for the purpose of amendment under the 5-minute rule and shall be considered read.

The text of the amendment in the nature of a substitute is as follows:

H.R. 1868

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
(a) SHORT TITLE.—This Act may be cited as the "Technology Innovation and Manufacturing Stimulation Act of 2007".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title: table of contents.

$TITLE\ I-AUTHORIZATION\ OF$ APPROPRIATIONS

Sec. 101. Scientific and technical research and services.

Sec. 102. Industrial technology services.

 $TITLE\ II-INNOVATION\ AND\ TECHNOLOGY\\ POLICY\ REFORMS$

Sec. 201. Institute-wide planning report.

- Sec. 202. Report by Visiting Committee.
- Sec. 203. Manufacturing extension partnership.
- Sec. 204. Technology Innovation Program.
- Sec. 205. Research fellowships.
- Sec. 206. Collaborative manufacturing research pilot grants.
- Sec. 207. Manufacturing fellowship program.
- Sec. 208. Meetings of Visiting Committee on Advanced Technology.

TITLE III—MISCELLANEOUS

- Sec. 301. Post-doctoral fellows.
- Sec. 302. Financial agreements clarification.
- Sec. 303. Working capital fund transfers.
- Sec. 304. Retention of depreciation surcharge.
- Sec. 305. Non-Energy Inventions Program.
- Sec. 306. Redefinition of the metric system.
- Sec. 307. Repeal of redundant and obsolete authority.
- Sec. 308. Clarification of standard time and time zones.
- Sec. 309. Procurement of temporary and intermittent services.
- Sec. 310. Malcolm Baldrige awards.

TITLE I—AUTHORIZATION OF APPROPRIATIONS

SEC. 101. SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES.

- (a) LABORATORY ACTIVITIES.—There are authorized to be appropriated to the Secretary of Commerce for the scientific and technical research and services laboratory activities of the National Institute of Standards and Technology—
 - (1) \$470,879,000 for fiscal year 2008;
 - (2) \$497,750,000 for fiscal year 2009; and
- (3) \$537,569,000 for fiscal year 2010.
- (b) MALCOLM BALDRIGE NATIONAL QUALITY AWARD PROGRAM.—There are authorized to be appropriated to the Secretary of Commerce for the Malcolm Baldrige National Quality Award program under section 17 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711a)—
 - (1) \$7,860,000 for fiscal year 2008;
 - (2) \$8,096,000 for fiscal year 2009; and
 - (3) \$8,339,000 for fiscal year 2010.
- (c) CONSTRUCTION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary of Commerce for construction and maintenance of facilities of the National Institute of Standards and Technology—
 - (1) \$93,865,000 for fiscal year 2008;
 - (2) \$86,371,000 for fiscal year 2009; and
 - (3) \$49,719,000 for fiscal year 2010.

SEC. 102. INDUSTRIAL TECHNOLOGY SERVICES.

There are authorized to be appropriated to the Secretary of Commerce for Industrial Technology Services activities of the National Institute of Standards and Technology—

- (1) \$222,968,000 for fiscal year 2008, of which—(A) \$110,000,000 shall be for the Technology Innovation Program under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), of which at least \$45,000,000 shall be for new awards; and
- (B) \$112,968,000 shall be for the Manufacturing Extension Partnership program under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l), of which not more than \$1,000,000 shall be for the competitive grant program under section 25(f) of such Act;
- (2) \$263,505,000 for fiscal year 2009, of which—(A) \$141,500,000 shall be for the Technology Innovation Program under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), of which at least \$45,000,000 shall be for new awards; and
- (B) \$122,005,000 shall be for the Manufacturing Extension Partnership Program under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l), of which not more than \$4,000,000 shall be for the competitive grant program under section 25(f) of such Act; and
 - (3) \$282,266,000 for fiscal year 2010, of which—

(A) \$150,500,000 shall be for the Technology Innovation Program under section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n), of which at least \$45,000,000 shall be for new awards; and

(B) \$131,766,000 shall be for the Manufacturing Extension Partnership Program under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l), of which not more than \$4,000,000 shall be for the competitive grant program under section 25(f) of such Act.

TITLE II—INNOVATION AND TECHNOLOGY POLICY REFORMS

SEC. 201. INSTITUTE-WIDE PLANNING REPORT.

Section 23 of the National Institute of Standards and Technology Act (15 U.S.C. 278i) is amended by adding at the end the following new subsections:

"(c) Concurrent with the submission to Congress of the President's annual budget request in the first year after the date of enactment of the Technology Innovation and Manufacturing Stimulation Act of 2007, the Director shall transmit to the Congress a 3-year programmatic planning document for the Institute, including programs under the Scientific and Technical Research and Services, Industrial Technology Services, and Construction of Research Facilities functions.

"(d) Concurrent with the submission to the Congress of the President's annual budget request in each year after the date of enactment of the Technology Innovation and Manufacturing Stimulation Act of 2007, the Director shall transmit to the Congress an update to the 3-year programmatic planning document transmitted under subsection (c), revised to cover the first 3 fiscal years after the date of that update"

SEC. 202. REPORT BY VISITING COMMITTEE.

Section 10(h)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278(h)(1)) is amended—

- (1) by striking "on or before January 31 in each year" and inserting "within 30 days after the submission to Congress of the President's annual budget request in each year"; and
- (2) by adding to the end the following: "Such report also shall comment on the programmatic planning document and updates thereto transmitted to the Congress by the Director under section 23(c) and (d).".

SEC. 203. MANUFACTURING EXTENSION PART-NERSHIP.

- (a) MEP ADVISORY BOARD.—Section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) is amended by adding at the end the following new subsection:
- "(e) MEP ADVISORY BOARD.—(1) There is established within the Institute a Manufacturing Extension Partnership Advisory Board (in this Act referred to as the 'MEP Advisory Board'). The MEP Advisory Board shall consist of 10 members broadly representative of stakeholders, to be appointed by the Director. At least 2 members shall be employed by or on an advisory board for the Centers, and at least 5 other members shall be from United States small businesses in the manufacturing sector. No member shall be an employee of the Federal Government.
- "(2)(A) Except as provided in subparagraph (B) or (C), the term of office of each member of the MEP Advisory Board shall be 3 years.
- "(B) The original members of the MEP Advisory Board shall be appointed to 3 classes. One class of 3 members shall have an initial term of 1 year, one class of 3 members shall have an initial term of 2 years, and one class of 4 members shall have an initial term of 3 years.
- "(C) Any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term.
- "(D) Any person who has completed two consecutive full terms of service on the MEP Advisory Board shall thereafter be ineligible for ap-

pointment during the one-year period following the expiration of the second such term.

"(3) The MEP Advisory Board shall meet no less than 2 times annually, and provide to the Director—

"(A) advice on Manufacturing Extension Partnership programs, plans, and policies;

"(B) assessments of the soundness of Manufacturing Extension Partnership plans and strategies; and

"(C) assessments of current performance against Manufacturing Extension Partnership program plans.

"(4) In discharging its duties under this subsection, the MEP Advisory Board shall function solely in an advisory capacity, in accordance with the Federal Advisory Committee Act.

"(5) The MEP Advisory Board shall transmit an annual report to the Secretary for transmittal to the Congress within 30 days after the submission to the Congress of the President's annual budget request in each year. Such report shall address the status of the Manufacturing Extension Partnership program and comment on the relevant sections of the programmatic planning document and updates thereto transmitted to the Congress by the Director under section 23(c) and (d)."

(b) ACCEPTANCE OF FUNDS.—Section 25(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278k(d)) is amended to read as follows:

"(d) ACCEPTANCE OF FUNDS.—In addition to such sums as may be appropriated to the Secretary and Director to operate the Centers program, the Secretary and Director also may accept funds from other Federal departments and agencies and under section 2(c)(7) from the private sector for the purpose of strengthening United States manufacturing. Such funds, if allocated to a Center or Centers, shall not be considered in the calculation of the Federal share of capital and annual operating and maintenance costs under subsection (c)."

(c) MANUFACTURING EXTENSION CENTER COM-PETITIVE GRANT PROGRAM.—Section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k), as amended by subsection (a) of this section, is further amended by adding at the end the following new subsection:

"(f) COMPETITIVE GRANT PROGRAM.—

- "(1) ESTABLISHMENT.—The Director shall establish, within the Manufacturing Extension Partnership program under this section and section 26 of this Act, a program of competitive awards among participants described in paragraph (2) for the purposes described in paragraph (3).
- "(2) PARTICIPANTS.—Participants receiving awards under this subsection shall be the Centers, or a consortium of such Centers.
- "(3) PURPOSE.—The purpose of the program under this subsection is to develop projects to solve new or emerging manufacturing problems as determined by the Director, in consultation with the Director of the Manufacturing Extension Partnership program, the Manufacturing Extension Partnership Advisory Board, and small and medium-sized manufacturers. One or more themes for the competition may be identified, which may vary from year to year, depending on the needs of manufacturers and the success of previous competitions. These themes shall be related to projects associated with manufacturing extension activities, including supply chain integration and quality management, and including the transfer of technology based on the technological needs of manufacturers and available technologies from institutions of higher education, laboratories, and other technology producing entities, or extend beyond these traditional areas.
- "(4) APPLICATIONS.—Applications for awards under this subsection shall be submitted in such manner, at such time, and containing such information as the Director shall require, in consultation with the Manufacturing Extension Partnership Advisory Board.

- "(5) SELECTION.—Awards under this subsection shall be peer reviewed and competitively awarded. The Director shall select proposals to receive awards—
- "(A) that utilize innovative or collaborative approaches to solving the problem described in the competition;
- "(B) that will improve the competitiveness of industries in the region in which the Center or Centers are located; and
- "(C) that will contribute to the long-term economic stability of that region.
- "(6) Program contribution.—Recipients of awards under this subsection shall not be required to provide a matching contribution.".

SEC. 204. TECHNOLOGY INNOVATION PROGRAM.

Section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n) is amended to read as follows:

"TECHNOLOGY INNOVATION PROGRAM

"Sec. 28. (a) ESTABLISHMENT.—There is established in the Institute a Technology Innovation Program for the purpose of assisting United States businesses and institutions of higher education or other organizations, such as national laboratories and nonprofit research institutes, to accelerate the development and application of challenging, high-risk technologies that promise widespread economic benefits for the Nation.

"(b) GRANTS.-

- "(1) In GENERAL.—The Director shall make grants under this section to eligible companies for research and development on high-risk, high-payoff emerging and enabling technologies that offer significant potential benefits to the United States economy and a wide breadth of potential application, and form an important technical basis for future innovations. Such grants shall be made to eligible companies that are—
- "(A) small or medium-sized businesses that are substantially involved in the research and development, including having a leadership role in programmatically steering the project and defining the research agenda; or

"(B) joint ventures.

- "(2) SINGLE COMPANY GRANTS.—No grant made under paragraph (1)(A) shall exceed \$3,000,000 over 3 years. The Federal share of a project funded by such a grant shall not be more than 50 percent of total project costs. An award under paragraph (1)(A) may be extended beyond 3 years only if the Director transmits to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a full and complete explanation of such award, including reasons for exceeding 3 years. Federal funds granted under paragraph (1)(A) may be used only for direct costs and not for indirect costs, profits, or management fees of a contractor.
- "(3) JOINT VENTURE GRANTS.—No grant made under paragraph (1)(B) shall exceed \$9,000,000 over 5 years. The Federal share of a project funded by such a grant shall not be more than 50 percent of total project costs.
- "(c) AWARD CRITERIA.—The Director shall award grants under this section only to an eligible company—
- "(1) whose proposal has scientific and technological merit;
- "(2) whose application establishes that the proposed technology has strong potential to generate substantial benefits to the Nation that extend significantly beyond the direct return to the applicant;
- "(3) whose application establishes that the research has strong potential for advancing the state-of-the-art and contributing significantly to the United States scientific and technical knowledge base:
- "(4) whose application establishes that the research is aimed at overcoming a scientific or technological barrier;
- "(5) who has provided a technical plan that clearly identifies the core innovation, the tech-

nical approach, major technical hurdles, and the attendant risks, and that clearly establishes the feasibility of the technology through adequately detailed plans linked to major technical barriers:

"(6) whose application establishes that the team proposed to carry out the work has a high level of scientific and technical expertise to conduct research and development, has a high level of commitment to the project, and has access to appropriate research facilities;

(7) whose proposal explains why Technology Innovation Program support is necessary;

"(8) whose application includes a plan for advancing the technology into commercial use;

"(9) whose application assesses the project's organizational structure and management plan.

"(d) EXTERNAL REVIEW OF PROPOSALS.—In order to analyze the need for or the value of any proposal made by a joint venture or company requesting the Director's assistance under this section, or to monitor the progress of any project which receives funds under this section, the Director shall consult with industry or other expert sources that do not have a proprietary or financial interest in the proposal or project.

"(e) Intellectual Property Rights Owner-Ship —

"(1) IN GENERAL.—Title to any intellectual property developed by a joint venture from assistance provided under this section may vest in any participant in the joint venture, as agreed by the members of the joint venture, notwithstanding section 202(a) and (b) of title 35, United States Code. The United States may reserve a nonexclusive, nontransferable, irrevocable paid-up license, to have practiced for or on behalf of the United States in connection with any such intellectual property, but shall not in the exercise of such license publicly disclose proprietary information related to the license. Title to any such intellectual property shall not be transferred or passed, except to a participant in the joint venture, until the expiration of the first patent obtained in connection with such intellectual property.

"(2) LICENSING.—Nothing in this subsection shall be construed to prohibit the licensing to any company of intellectual property rights arising from assistance provided under this section.

"(3) DEFINITION.—For purposes of this subsection, the term 'intellectual property' means an invention patentable under title 35, United States Code, or any patent on such an invention, or any work for which copyright protection is available under title 17, United States Code

"(f) PROGRAM OPERATION.—Not later than 9 months after the date of enactment of the Technology Innovation and Manufacturing Stimulation Act of 2007, the Director shall issue regulations—

"(1) establishing criteria for the selection of recipients of assistance under this section;

- "(2) establishing procedures regarding financial reporting and auditing to ensure that contracts and awards are used for the purposes specified in this section, are in accordance with sound accounting practices, and are not funding existing or planned research programs that would be conducted in the same time period in the absence of financial assistance under this section; and
- "(3) providing for appropriate dissemination of Technology Innovation Program research results.
- "(g) CONTINUATION OF ATP GRANTS.—The Director shall, through the Technology Innovation Program, continue to provide support originally awarded under the Advanced Technology Program, in accordance with the terms of the original award.
- "(h) COORDINATION WITH OTHER FEDERAL TECHNOLOGY PROGRAMS.—In carrying out this section, the Director shall, as appropriate, coordinate with other senior Federal officials to

ensure cooperation and coordination in Federal technology programs and to avoid unnecessary duplication of efforts.

"(i) ACCEPTANCE OF FUNDS FROM OTHER FED-ERAL AGENCIES.—In addition to amounts appropriated to carry out this section, the Secretary and the Director may accept funds from other Federal agencies to support awards under the Technology Innovation Program. Any award under this section which is supported with funds from other Federal agencies shall be selected and carried out according to the provisions of this section.

"(j) TIP ADVISORY BOARD.—

"(1) ESTABLISHMENT.—There is established within the Institute a Technology Innovation Program Advisory Board. The TIP Advisory Board shall consist of 10 members appointed by the Director, at least 7 of which shall be from United States industry, chosen to reflect the wide diversity of technical disciplines and industrial sectors represented in Technology Innovation Program projects. No member shall be an employee of the Federal Government.

"(2) TERMS OF OFFICE.—(A) Except as provided in subparagraph (B) or (C), the term of office of each member of the TIP Advisory Board shall be 3 years.

"(B) The original members of the TIP Advisory Board shall be appointed to 3 classes. One class of 3 members shall have an initial term of 1 year, one class of 3 members shall have an initial term of 2 years, and one class of 4 members shall have an initial term of 3 years.

"(C) Any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term.

"(D) Any person who has completed two consecutive full terms of service on the TIP Advisory Board shall thereafter be ineligible for appointment during the one-year period following the expiration of the second such term.

"(3) PURPOSE.—The TIP Advisory Board shall meet no less than 2 times annually, and provide to the Director—

"(A) advice on programs, plans, and policies of the Technology Innovation Program;

"(B) reviews of the Technology Innovation Program's efforts to assess its economic impact;

"(C) reports on the general health of the program and its effectiveness in achieving its legislatively mandated mission;

"(D) guidance on areas of technology that are appropriate for Technology Innovation Program funding; and

"(E) recommendations as to whether, in order to better assess whether specific innovations to be pursued are being adequately supported by the private sector, the Director could benefit from advice and information from additional industry and other expert sources without a proprietary or financial interest in proposals being

"(4) ADVISORY CAPACITY.—In discharging its duties under this subsection, the TIP Advisory Board shall function solely in an advisory capacity, in accordance with the Federal Advisory Committee Act.

"(5) ANNUAL REPORT.—The TIP Advisory Board shall transmit an annual report to the Secretary for transmittal to the Congress within 30 days after the submission to Congress of the President's annual budget request in each year. Such report shall address the status of the Technology Innovation Program and comment on the relevant sections of the programmatic planning document and updates thereto transmitted to the Congress by the Director under section 23(c) and (d).

- "(k) Definitions.—For purposes of this section—
- "(1) the term 'eligible company' means a company that is incorporated in the United States and does a majority of its business in the United States, and that either—
- "(A) is majority owned by citizens of the United States; or

- "(B) is owned by a parent company incorporated in another country and the Director finds that—
- "(i) the company's participation in the Technology Innovation Program would be in the economic interest of the United States, as evidenced by—
- "(I) investments in the United States in research and manufacturing (including the manufacture of major components or subassemblies in the United States);
- "(II) significant contributions to employment in the United States; and
- "(III) agreement with respect to any technology arising from assistance provided under this section to promote the manufacture within the United States of products resulting from that technology (taking into account the goals of promoting the competitiveness of United States industry); and
- "(ii) the company is incorporated in a country which—
- "(I) affords to United States-owned companies opportunities, comparable to those afforded to any other company, to participate in any joint venture similar to those receiving funding under this section:
- "(II) affords to United States-owned companies local investment opportunities comparable to those afforded any other company; and
- "(III) affords adequate and effective protection for the intellectual property rights of United States-owned companies;
- "(2) the term 'institution of higher education' has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001):
- ``(3) the term 'joint venture' means a joint venture that—
 - "(A) includes either—
- "(i) at least 2 separately owned for-profit companies that are both substantially involved in the project and both of which are contributing to the cost-sharing required under this section, with the lead entity of the joint venture being one of those companies that is a small or medium-sized business; or
- "(ii) at least one small or medium-sized business and one institution of higher education or other organization, such as a national laboratory or nonprofit research institute, that are both substantially involved in the project and both of which are contributing to the cost-sharing required under this section, with the lead entity of the joint venture being either that small or medium-sized business or that institution of higher education; and
- "(B) may include additional for-profit companies, institutions of higher education, and other organizations, such as national laboratories and nonprofit research institutes, that may or may not contribute non-Federal funds to the project; and
- "(4) the term 'TIP Advisory Board' means the advisory board established under subsection (j).".

SEC. 205. RESEARCH FELLOWSHIPS.

Section 18 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-l) is amended by striking "up to 1 per centum of the" and inserting "up to 1.5 percent of the".

SEC. 206. COLLABORATIVE MANUFACTURING RE-SEARCH PILOT GRANTS.

The National Institute of Standards and Technology Act is amended—

- (1) by redesignating the first section 32 (15 U.S.C. 271 note) as section 34 and moving it to the end of the Act; and
- (2) by inserting before the section moved by paragraph (1) the following new section:

"SEC. 33. COLLABORATIVE MANUFACTURING RE-SEARCH PILOT GRANTS.

"(a) AUTHORITY.-

"(1) ESTABLISHMENT.—The Director shall establish a pilot program of awards to partnerships among participants described in paragraph (2) for the purposes described in para-

- graph (3). Awards shall be made on a peer-reviewed, competitive basis.
- "(2) PARTICIPANTS.—Such partnerships shall include at least—
- "(A) 1 manufacturing industry partner; and
- "(B) 1 nonindustry partner.
- "(3) PURPOSE.—The purpose of the program under this section is to foster cost-shared collaborations among firms, educational institutions, research institutions, State agencies, and nonprofit organizations to encourage the development of innovative, multidisciplinary manufacturing technologies. Partnerships receiving awards under this section shall conduct applied research to develop new manufacturing processes, techniques, or materials that would contribute to improved performance, productivity, and competitiveness of United States manufacturing, and build lasting alliances among collaborators.
- "(b) PROGRAM CONTRIBUTION.—Awards under this section shall provide for not more than onethird of the costs of a partnership. Not more than an additional one-third of such costs may be obtained directly or indirectly from other Federal sources.
- "(c) APPLICATIONS.—Applications for awards under this section shall be submitted in such manner, at such time, and containing such information as the Director shall require. Such applications shall describe at a minimum—
- "(1) how each partner will participate in developing and carrying out the research agenda of the partnership;
- "(2) the research that the grant would fund;
- "(3) how the research to be funded with the award would contribute to improved performance, productivity, and competitiveness of the United States manufacturing industry.
- "(d) SELECTION CRITERIA.—In selecting applications for awards under this section, the Director shall consider at a minimum—
- "(1) the degree to which projects will have a broad impact on manufacturing;
- "(2) the novelty and scientific and technical merit of the proposed projects; and
- "(3) the demonstrated capabilities of the applicants to successfully carry out the proposed research.
- "(e) DISTRIBUTION.—In selecting applications under this section the Director shall ensure, to the extent practicable, a distribution of overall awards among a variety of manufacturing industry sectors and a range of firm sizes.
- "(f) DURATION.—In carrying out this section, the Director shall run a single pilot competition to solicit and make awards. Each award shall be for a 3-year period.".

SEC. 207. MANUFACTURING FELLOWSHIP PROGRAM.

Section 18 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-1) is amended—

- (1) by inserting "(a) IN GENERAL.—" before "The Director is authorized"; and
- (2) by adding at the end the following new subsection:
- "(b) Manufacturing Fellowship Pro-Gram.—
- "(1) ESTABLISHMENT.—To promote the development of a robust research community working at the leading edge of manufacturing sciences, the Director shall establish a program to award.—
- "(A) postdoctoral research fellowships at the Institute for research activities related to manufacturing sciences: and
- "(B) senior research fellowships to established researchers in industry or at institutions of higher education who wish to pursue studies related to the manufacturing sciences at the Institute.
- "(2) APPLICATIONS.—To be eligible for an award under this subsection, an individual shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require.

"(3) STIPEND LEVELS.—Under this subsection, the Director shall provide stipends for postdoctoral research fellowships at a level consistent with the National Institute of Standards and Technology Postdoctoral Research Fellowship Program, and senior research fellowships at levels consistent with support for a faculty member in a sabbatical position."

SEC. 208. MEETINGS OF VISITING COMMITTEE ON ADVANCED TECHNOLOGY.

Section 10(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278(d)) is amended by striking "quarterly" and inserting "twice each year".

TITLE III—MISCELLANEOUS

SEC. 301. POST-DOCTORAL FELLOWS.

Section 19 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-2) is amended by striking "nor more than 60 new fellows" and inserting "nor more than 120 new fellows".

SEC. 302. FINANCIAL AGREEMENTS CLARIFICA-TION.

Section 2(b)(4) of the National Institute of Standards and Technology Act (15 U.S.C. 272(b)(4)) is amended by inserting "and grants and cooperative agreements," after "arrangements.".

SEC. 303. WORKING CAPITAL FUND TRANSFERS.

Section 12 of the National Institute of Standards and Technology Act (15 U.S.C. 278b) is amended by adding at the end the following:

"(g) AMOUNT AND SOURCE OF TRANSFERS.— Not more than one-quarter of one percent of the amounts appropriated to the Institute for any fiscal year may be transferred to the fund, in addition to any other transfer authority. In addition, funds provided to the Institute from other Federal agencies for the purpose of production of Standard Reference Materials may be transferred to the fund."

SEC. 304. RETENTION OF DEPRECIATION SUR-CHARGE.

Section 14 of the National Institute of Standards and Technology Act (15 U.S.C. 278d) is amended—

- (1) by inserting "(a) IN GENERAL.—" before "Within"; and
 - (2) by adding at the end the following:
- "(b) RETENTION OF FEES.—The Director is authorized to retain all building use and depreciation surcharge fees collected pursuant to OMB Circular A-25. Such fees shall be collected and credited to the Construction of Research Facilities Appropriation Account for use in maintenance and repair of the Institute's existing facilities."

SEC. 305. NON-ENERGY INVENTIONS PROGRAM.

Section 27 of the National Institute of Standards and Technology Act (15 U.S.C. 278m) is repealed.

SEC. 306. REDEFINITION OF THE METRIC SYSTEM.

Section 3570 of the Revised Statues of the United States (derived from section 2 of the Act of July 28, 1866, entitled "An Act to authorize the Use of the Metric System of Weights and Measures" (15 U.S.C. 205; 14 Stat. 339)) is amended to read as follows:

"SEC. 3570. METRIC SYSTEM DEFINED.

"The metric system of measurement shall be defined as the International System of Units as established in 1960, and subsequently maintained, by the General Conference of Weights and Measures, and as interpreted or modified for the United States by the Secretary of Commerce."

SEC. 307. REPEAL OF REDUNDANT AND OBSO-LETE AUTHORITY.

The Act of July 21, 1950, entitled "An Act To redefine the units and establish the standards of electrical and photometric measurements" (15 U.S.C. 223 and 224) is repealed.

SEC. 308. CLARIFICATION OF STANDARD TIME AND TIME ZONES.

(a) Section 1 of the Act of March 19, 1918, (commonly known as the "Calder Act") (15 U.S.C. 261) is amended—

(1) by striking the second sentence and the extra period after it and inserting "Except as provided in section 3(a) of the Uniform Time Act of 1966 (15 U.S.C. 260a), the standard time of the first zone shall be Coordinated Universal Time retarded by 4 hours; that of the second zone retarded by 5 hours; that of the third zone retarded by 6 hours; that of the four zone retarded by 7 hours; that of the fifth zone retarded by 8 hours; that of the sixth zone retarded by 9 hours; that of the seventh zone retarded by 10 hours; that of the eighth zone retarded by 11 hours; and that of the ninth zone shall be Coordinated Universal Time advanced by 10 hours."; and
(2) by adding at the end the following: "In

this section, the term 'Coordinated Universal Time' means the time scale maintained through the General Conference of Weights and Measures and interpreted or modified for the United States by the Secretary of Commerce in coordination with the Secretary of the Navy.'

(b) Section 3 of the Act of March 19, 1918, (commonly known as the "Calder Act") (15 U.S.C. 264) is amended by striking "third zone" and inserting "fourth zone".

SEC. 309. PROCUREMENT OF TEMPORARY AND INTERMITTENT SERVICES.

(a) IN GENERAL.—The Director of the National Institute of Standards and Technology may procure the temporary or intermittent services of experts or consultants (or organizations thereof) in accordance with section 3109(b) of title 5, United States Code to assist on urgent or shortterm research projects.

(b) EXTENT OF AUTHORITY.—A procurement under this section may not exceed 1 year in duration, and the Director shall procure no more than 200 experts and consultants per year.

(c) SUNSET.—This section shall cease to be ef-

fective after September 30, 2010.
(d) REPORT TO CONGRESS.—Not later than 2 years after the date of enactment of this Act, the Comptroller General shall report to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce Science and Transportation of the Senate on whether additional safeguards would be needed with respect to the use of authorities granted under this section if such authorities were to be made permanent.

SEC. 310. MALCOLM BALDRIGE AWARDS.

Section 17(c)(3) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3711a(c)(3)) is amended to read as follows:

"(3) In any year, not more than 18 awards may be made under this section to recipients who have not previously received an award under this section, and no award shall be made within any category described in paragraph (1) if there are no qualifying enterprises in that

The Acting CHAIRMAN. No amendment to the committee amendment is in order except those printed in House Report 110-118. Each amendment may be offered only in the order printed in the report, by a Member designated in the report, shall be considered read, shall be debatable for the time specified in the report, equally divided and controlled by the proponent and opponent, shall not be subject to amendment, and shall not be subject to a demand for division of the question.

AMENDMENT NO. 1 OFFERED BY MR. WU

The Acting CHAIRMAN. It is now in order to consider amendment No. 1 printed in House Report 110-118.

Mr. WU. Madam Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as fol-

Amendment No. 1 offered by Mr. Wu:

In section 204, in the proposed section 28(a), insert "research and" after "to accelerate the".

In section 204, in the proposed section 28(a), strike "technologies" and insert high-reward technologies in areas of critical national need"

In section 204, in the proposed section 28(b)(1), strike "this section to eligible companies" and insert "this section"

In section 204, in the proposed section 28(b)(1), strike "high-payoff" and insert "high-reward"

In section 204, in the proposed section 28(b)(1), strike "offer significant potential benefits to the United States economy and" and insert "address critical national needs

In section 204, in the proposed section 28(b)(1), strike "eligible companies that are".

In section 204, in the proposed section 28(b)(1)(A), insert "eligible companies that are" before "small or"

In section 204, in the proposed section 28(h), insert "STATE AND" after "COORDINA-TION WITH OTHER".

In section 204, in the proposed section 28(h), insert "State and" after "with other senior"

In section 204, in the proposed section 28(h), insert "State and" after "coordination in'

In section 204, in the proposed section 28(k), insert the following new paragraph after paragraph (1) (and redesignate subsequent paragraphs accordingly):

"(2) the term 'high-risk, high-reward research' means research that-

"(A) has the potential for yielding results with far-ranging or wide-ranging implica-

"(B) addresses critical national needs related to technology and measurement standards; and

"(C) is too novel or spans too diverse a range of disciplines to fare well in the traditional peer review process.

The Acting CHAIRMAN. Pursuant to House Resolution 350, the gentleman from Oregon (Mr. WU) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentleman from Oregon.

Mr. WU. Madam Chair, I am pleased to be offering this amendment with Dr. GINGREY, the ranking member of the Technology and Innovation Subcommittee. This amendment was developed as a result of recommendations of the Director of the National Institute of Standards and Technology.

The amendment ensures that the Technology Innovation Program, TIP, will focus on high-reward technologies in areas of critical national need. In addition, it provides additional guidance that the program must coordinate with similar State organizations and programs. Many States have developed innovation agendas to stimulate job growth, and it makes sense that we should ensure that this program coordinates with these existing programs.

Finally, the amendment includes a definition of high-risk, high-reward research. Dr. GINGREY and I worked closely in developing this amendment, and I would urge its adoption.

Madam Chair, I reserve the balance of my time.

Mr. EHLERS. Madam Chair, I rise in support of the amendment.

The Acting CHAIRMAN. Without objection, the gentleman from Michigan is recognized for 5 minutes.

There was no objection.

Mr. EHLERS. Madam Chair, I yield myself such time as I might consume.

This is a good amendment and I support it. In response to concerns from the administration, as explained earlier, it clarifies that the Technology Innovation Program will only support projects that address critical national needs.

It also expands the definition of highrisk research to ensure that the TIP program will only support projects that are too novel or diverse to fare well in the traditional peer review or venture capital process.

I urge my colleagues to support the Wu-Gingrey amendment. And I also want to just comment, Mr. GINGREY certainly wished to be here. I am filling in his role only because he had to travel home for a funeral, and he may reappear yet before the end of this particular bill.

Madam Chair, I reserve the balance of my time.

Mr. WU. Madam Chair, I regret that Dr. GINGREY is not able to be with us today because of a funeral at home, and I would like to just reiterate my appreciation for his hard work on this amendment and my support for this amendment.

□ 1415

Madam Chair, I yield back the balance of my time.

The Acting CHAIRMAN. The question is on the amendment offered by the gentleman from Oregon (Mr. WU).

The amendment was agreed to.

The Acting CHAIRMAN. It is now in order to consider amendment No. 2 printed in House Report 110-118.

AMENDMENT NO. 3 OFFERED BY MR. MANZULLO

The Acting CHAIRMAN. It is now in order to consider amendment No. 3 printed in House Report 110-118.

Mr. MANZULLO. Madam Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 3 offered by Mr. MAN-ZULLO:

At the end of title II, insert the following new section (and amend the table of contents accordingly):

SEC. 209. MANUFACTURING RESEARCH DATA-BASE.

(a) ESTABLISHMENT.—The National Institute of Standards and Technology shall provide for the establishment of a manufacturing research database to enable private sector individuals and Federal officials to access a broad range of information on manufacturing research carried out with funding support from the Federal Government.

(b) CONTENTS.—The database established under subsection (a) shall contain-

(1) all publicly available information maintained by a Federal agency relating to manufacturing research projects funded in whole or in part by the Federal Government; and

(2) information about all Federal programs that may be of interest to manufacturers.

(c) ACCESSIBILITY.—Information contained in the database shall be accessible in a manner to enable users of the database to easily retrieve information of specific interest to them.

(d) FEES.—The National Institute of Standards and Technology may authorize charging a nominal fee for using the database to access information described in subsection (b)(1) as necessary to recover the costs of maintaining the database.

(e) AUTHORIZATION OF APPROPRIATIONS.—

(e) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the National Institute of Standards and Technology \$2,000,000 for carrying out this section.

The Acting CHAIRMAN. Pursuant to House Resolution 350, the gentleman from Illinois (Mr. Manzullo) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentleman from Illinois.

Mr. MANZULLO. Madam Chair, I will not use the 5 minutes, and submit my full remarks in the RECORD.

This amendment is very simple. It authorizes \$2 million for NIST to develop a software package so that manufacturers have basic information about all the Federal programs available to assist them, particularly in the area of research and development. It will provide a link so that manufacturers would know the latest status of all Federal R&D projects relating to manufacturing.

I first realized the need for this software after speaking at a speaking engagement in Nashville, Tennessee, I was walking on the showroom floor and found a major manufacturer from Kansas City with a display that was very familiar to me. The display had a miniature spur gear mounted near the nose of Lincoln on a Lincoln penny. The EIGERlab in Rockford, Illinois has this exact same way of displaying their miniature spur gear. I asked the employees of the major manufacturer if they had heard of the micro machining work done at the EIGERlab. The Kansas City manufacturer had done its work by using an EDM. The EIGERlab had done its work using a milling process. Neither of these parties had known of each other. It dawned on me that I was the only person that knew these two places were making the exact same product, although by different methods, and both were being funded by the Defense Department.

The story illustrates the need for software that allows users to monitor and track where and to whom research money has been granted relating to manufacturing and the status and purpose of the research. My vision for the system would be that the final product would be easily accessible on NIST's Web site. NIST would also be authorized by my amendment to charge a nominal fee for the use of the service. if they so choose, to establish and maintain the Web site. If a fee is imposed, I would encourage that the fee be as small as possible to reflect the actual cost

I urge my colleagues to support this amendment.

Madam Chairman, I am proud to represent a district that has a county with the second highest concentration of manufacturing as a percentage its share of the local economy in the entire Nation. Only one other county in America with a population of 250,000 or less has more manufacturing than the county that surrounds the second largest city in Illinois—Rockford. I have made it my life mission to get to know all about manufacturing. I have visited literally hundreds of factories and small shops all around the world to enhance my education about this vital sector of our economy.

I crafted this amendment because I have been frustrated during my time in Congress that no one has a complete picture of who is doing what in the Federal government concerning manufacturing. No one has a complete list of the federal programs available to help manufacturers, not even the Manufacturing Czar at Commerce. Right now, the Government Accountability Office (GAO) is finalizing a report at my request to document all of the programs that deal with manufacturing. Thus far, they have informed me that there are over 280 programs spread throughout the Federal agencies that focus in some aspect on manufacturing.

This problem is compounded further by a lack of transparency among Federal agencies in terms of funding that is approved for certain projects. Plus, manufacturers who would like to avail themselves of various Federal programs do not know where to turn for answers. You would think that somewhere a matrix exists that details what firms are receiving Federal R&D money and how it is being used, but I can tell you that it does not. Let me share with you one clear example.

After a speaking engagement in Tennessee, was walking the showroom floor and found a major manufacturer out of Kansas City, Missouri with a display that was very familiar to me. The display had a miniature spur gear mounted near the nose of Lincoln on a penny. The penny was enclosed in a plastic box with a magnified top so that you can see the gear. The EIGERlab in Rockford. Illinois has this exact same way of displaying their miniature spur gear. I asked the employees of this major manufacturer if they had heard of the EIGERlab and the work they are doing on micromachining. They had not. It dawned on me that I was the only person that knew these two places were making the exact same product and both were being funded by the Defense Department.

This story illustrates well the need for software that allows users to monitor and track where and to whom research money has been granted related to manufacturing, and the status and purpose of the research. This software would allow users to input the material type or process being used and it would scan for all federal dollars being put towards the searched criteria. The purpose of this amendment is to cut down on the possible duplication of research going on even within the same agency.

My amendment would authorize a \$2 million dollar set aside for software to develop this system so that manufacturers would have basic information about all the federal programs available to assist them and also to provide a link so that they would be able to know the latest status on all of the federal R&D projects related to manufacturing. NIST could either develop this software system themselves or contract it out to someone else.

My vision for this system would be that the final product would be easily accessible on NIST's web site. NIST would also be authorized by my amendment to charge a nominal fee for the use of this service if they so choose to help establish and maintain the web site just as the Department of Commerce does with other services such as in-depth market research for exporters. The fee could be a yearly subscription for frequent users or a per visit charge. If a fee is imposed, I would encourage that the fee be as small as possible to reflect actual cost.

This is a very important amendment and I urge my colleagues to support it. If this interactive software can be established, this will be a huge accomplishment, particularly for small manufacturers

Madam Chairman, I reserve the balance of my time.

Mr. WU. Madam Chair, I claim the time in opposition to the amendment, although it is not my intent to oppose the amendment.

The Acting CHAIRMAN. Without objection, the gentleman from Oregon is recognized for 5 minutes.

There was no objection.

Mr. WU. The gentleman from Illinois' amendment will provide useful information to our manufacturing sector, and its inclusion will strengthen a bill already focused on competitiveness in manufacturing.

Madam Chairman, I reserve the balance of my time.

Mr. MANZULLO. Madam Chairman, I yield 2 minutes to the gentleman from Michigan (Mr. EHLERS).

Mr. EHLERS. Madam Chairwoman, there's no need to repeat the contents of the amendment. I believe it is a good amendment. I believe it is a needed amendment, and I particularly like that it will be self-funding, although there is a small amount of money needed to start it off, but from that point it should be self-funded, should NIST decide to do that. So I urge support for the amendment.

Mr. MANZULLO. Madam Chairman, I yield back the balance of my time.

Mr. WU. Madam Chairman, I yield back the balance of my time.

The Acting CHAIRMAN. The question is on the amendment offered by the gentleman from Illinois (Mr. MANZULLO).

The amendment was agreed to.

The Acting CHAIRMAN. It is now in order to consider amendment No. 4 printed in House Report 110–118.

Mr. WYNN. Madam Chairman, I have an amendment at the desk.

The Acting CHAIRMAN. The time when the gentleman's amendment was in order has passed. Amendment No. 4 is now in order.

PARLIAMENTARY INQUIRY

Mr. WYNN. Madam Chairman, I have a parliamentary inquiry.

The Acting CHAIRMAN. The gentleman will state his parliamentary inquiry.

Mr. WYNN. Would it be permissible to have my amendment considered at the end of the amendments?

The Acting CHAIRMAN. The Committee of the Whole is not able to

change the order of the amendments PERMISSION established by House Resolution 350.

AMENDMEN

Mr. WYNN. I thank the Chair.

AMENDMENT NO. 4 OFFERED BY MRS. BOYDA OF KANSAS

The Acting CHAIRMAN. It is now in order to consider amendment No. 4 printed in House Report 110-118.

Mrs. BOYDA of Kansas. Madam Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 4 offered by Mrs. BOYDA of Kansas:

In section 204, in the proposed section 28(c)(2), insert ", to include the replacement of petroleum-based materials," after "benefits to the Nation".

The Acting CHAIRMAN. Pursuant to House Resolution 350, the gentlewoman from Kansas (Mrs. BOYDA) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentlewoman from Kansas.

Mrs. BOYDA of Kansas. Madam Chairman, I appreciate the Chairman's willingness to highlight the potential cost savings to the Nation through the research and commercialization of plastics technology utilizing renewable energy sources for common plastics applications. I hope that the Director of the National Institute of Technology will give attention to the collaborative efforts between universities and small and medium-sized businesses in the development of economical methods of manufacturing common plastic items from renewable energy sources.

I yield to the gentleman from Oregon.

Mr. WU. Madam Chairman, I want to assure the gentlelady from Kansas that we will be happy to work with her to address her concerns as this bill moves through the legislative process.

Mrs. BOYDA of Kansas. I ask unanimous consent to withdraw the amendment.

The Acting CHAIRMAN. Without objection, the amendment is withdrawn.

There was no objection.

The Acting CHAIRMAN. It is now in order to consider amendment No. 5 printed in House Report 110–118.

Mr. WU. Madam Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly, the Committee rose; and the Speaker pro tempore (Mr. Scott of Virginia) having assumed the chair, Mrs. TAUSCHER, Acting Chairman of the Committee of the Whole House on the state of the Union, reported that that Committee, having had under consideration the bill (H.R. 1868) to authorize appropriations for the National Institute of Standards and Technology for fiscal years 2008, 2009, and 2010, and for other purposes, had come to no resolution thereon.

PERMISSION TO CONSIDER AMENDMENT OUT OF ORDER DURING FURTHER CONSIDER-ATION OF H.R. 1868, TECHNOLOGY INNOVATION AND MANUFACTURING STIMULATION ACT OF 2007

Mr. WYNN. Mr. Speaker, I ask unanimous consent that during further consideration of H.R. 1868 in the Committee of the Whole, pursuant to H. Res. 350, that amendment No. 2 may be offered out of order.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Maryland?

There was no objection.

TECHNOLOGY INNOVATION AND MANUFACTURING STIMULATION ACT OF 2007

The SPEAKER pro tempore. Pursuant to House Resolution 350 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the state of the Union for the further consideration of the bill, H.R. 1868.

□ 1426

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the state of the Union for the further consideration of the bill (H.R. 1868) to authorize appropriations for the National Institute of Standards and Technology for fiscal years 2008, 2009, and 2010, and for other purposes, with Mrs. Tauscher (Acting Chairman) in the chair.

The Clerk read the title of the bill.

The Acting CHAIRMAN. When the Committee of the Whole rose earlier today, amendment No. 3 offered by the gentleman from Illinois (Mr. MANZULLO) had been disposed of.

AMENDMENT NO. 2 OFFERED BY MR. WYNN

The Acting CHAIRMAN. It is now in order to consider amendment No. 2 printed in House Report 110–118.

Mr. WYNN. Madam Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 2 offered by Mr. WYNN:

In section 204, in the proposed section 28(b)(1), insert "(including any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use)" after "enabling technologies".

The Acting CHAIRMAN. Pursuant to House Resolution 350, the gentleman from Maryland (Mr. WYNN) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentleman from Maryland.

Mr. WYNN. Madam Chair, the amendment that I am proposing will make sure that the biotechnology research and innovation are included under TIP's funding objectives by expanding the definition of enabling technologies in section 204 of the bill to

include "any technological application that uses biological systems, living organisms or derivatives thereof to make or modify products or processes for specific use."

Biotechnology is an emerging segment of the technology sector often overlooked as an excellent source of manufacturing jobs and research and development. The biotechnology industry is a driving force in the Maryland economy and a rising sector of the American economy.

In the United States, the biotechnology industry has created more than 200 new therapies and vaccines, including products to treat cancer, diabetes, HIV/AIDS and anti-autoimmune disorders.

The industry continues to develop innovative therapies over 400 products are currently in clinical trials targeting over 200 diseases. The biotechnology industry is comprised of mostly small start-ups that don't have an existing stream of revenue and are years away from product commercialization. It takes at least 8 years, and then up to \$1.2 billion to get a biotechnology therapy approved.

It is these small companies, many of which will never see a product come to market or turn a product that are undertaking the bulk of early development gambles and working toward innovative cures. In fact, small biotech companies account for two-thirds of the industry's pipeline.

In 2005, there were 1,400 biotech companies in the United States, but only 329 were publicly traded. The majority of the Biotechnology Industry Organization's (BIO) members are small companies that have fewer than 50 employ-

The U.S. is the leader in biotechnology. The number of products in the late stage pipeline in the U.S. has double the number of products in the E.U. This is largely due to the fact that per capita biotech R&D in the U.S. is 574 percent higher than in the E.U.

\square 1430

My State of Maryland is a leader among States in biotechnology research and innovation, and Maryland-based businesses will benefit greatly from the funding awarded under this bill. But not only Maryland; other small startup companies in the biotech industry will benefit by inclusion of this bill.

I believe it is a simple, straightforward amendment that just expands and clarifies the fact that biotechnology companies should be included, and I ask support for the amendment.

Mr. WU. Madam Chairman, will the gentleman yield?

Mr. WYNN. I would be happy to yield.

Mr. WU. Madam Chairman, on the Science and Technology Committee we are keenly aware of the importance of the biotechnology industry to our economy. We also know that the