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H. R. 3773

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ACTION: AMENDED AND PASSED UNDER SUSPENSION OF THE RULES

The Clerk read as follows:

H.R. 3773

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

SECTION 1. SHORT TITLE.

This Act may be cited as the "Federal Technology Transfer Act of 1985".

SEC. 2. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 12 through 15 as sections 15 through 18, and by inserting immediately after section 11 the following new section:

"SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

"(a) GENERAL AUTHORITY.—Each Federal agency may permit the director of any of its Government-operated Federal laboratories—

"(1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations including corporations, partnerships, and limited partnerships; industrial development organizations; public and private foundations; nonprofit organizations including universities; licensees of Federal inventions; or other persons; and

"(2) to negotiate licensing agreements under section 207 of title 35, United States Code, or under other authorities.

"(b) ENUMERATED AUTHORITY.—Under agreements described in subsection (a)(1), a Government-operated Federal laboratory shall have the authority (subject to subsection (c) of this section)—

"(1) to grant or agree to grant in advance, to a collaborating party, patent licenses or assignments, or options thereto, in any invention made by a Federal employee, or made jointly by a Federal employee and an employee of the collaborating party, under the agreement, retaining such rights as the Federal laboratory deems appropriate; and

"(2) to waive in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made by a collaborating party or employee of a collaborating party under the agreement.

"(c) AGENCY PLAN.—(1)(A) Within 180 days after the election by any Federal agency to implement subsection (a), revised regulations or instructions for that agency's cooperative research and development program shall be drafted or modified. The revised regulations or instructions need not apply to cooperative agreements entered into prior to the effective date of such regulations or instructions. Such revised regulations or instructions shall—

"(i) if they give the head of the agency or his designee an opportunity to disapprove or require the modification of any such agreement, provide a 30-day period beginning on the date the agreement is presented to him or her by the head of the laboratory concerned within which such action must be taken;

"(ii) give special consideration to small business firms, and consortia involving small business firms;

"(iii) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such invention will be manufactured substantially in the United States;

"(iv) establish employee standards of conduct for resolving potential conflicts of interest, including but not limited to cases

FEDERAL TECHNOLOGY
TRANSFER ACT OF 1985

Mr. FUQUA. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 3773) to amend the Stevenson-Wydler Technology Innovation Act of 1980 to promote technology transfer by authorizing Government-operated laboratories to enter into cooperative research agreements and by establishing a Federal Laboratory Consortium for Technology Transfer within the National Science Foundation, and for other purposes, as amended.

where present or former employees or their partners negotiate licenses or assignments of titles to inventions or negotiate cooperative research and development agreements with Federal agencies (including the agency with which the employee involved is or was formerly employed); and

"(v) contain other elements deemed appropriate by the agency.

"(B) In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented under this section, the head of the agency or such designee shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

"(C) If, in implementing subparagraph (A)(iv), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.

"(2) Each agency shall maintain a record of all agreements entered into under this section.

"(d) DEFINITION.—As used in this section, the term 'cooperative research and development agreement' means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the laboratory or laboratories will provide personnel, services, facilities, equipment, or other resources (but not funds to non-Federal parties) and the non-Federal party or parties will provide funds, personnel, services, facilities, equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the agency; except that such term does not include a procurement contract as that term is used in section 6303 of title 31, United States Code, or a cooperative agreement as that term is used in section 6305 of such title.

"(e) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency."

SEC. 3. ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.

Section 11 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710) is amended—

(1) by redesignating subsection (e) as subsection (f); and

(2) by inserting after subsection (d) the following new subsection:

"(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is hereby established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the 'Consortium') which shall be within the National Science Foundation and which, in cooperation with Federal laboratories and the private sector, shall—

"(A) develop and administer techniques, training courses, and materials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations, except that such techniques, courses, and materials may be administered only with the consent of the Federal laboratory concerned;

"(B) furnish advice and assistance requested by Federal agencies and laboratories for use in their technology transfer programs (including the planning of seminars for small business and other industry);

"(C) provide a clearinghouse for requests for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations including universities, Federal agencies and laboratories, and other persons, and—

"(i) to the extent that such requests can be responded to with published information available to the National Technical Information Service, refer such requests to that Service; and

"(ii) otherwise refer these requests to the appropriate Federal laboratories and agencies;

"(D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;

"(E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the National Aeronautics and Space Administration, and other Federal agencies, as necessary;

"(F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems;

"(G) with the consent of any Federal laboratory, assist such laboratory to establish technical volunteer service programs for the purpose of providing technical assistance to communities related to such laboratory;

"(H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations; and

"(I) establish advisory committees in each Federal laboratory consortium region composed of representatives from State and local governments, large and small business, universities, and other appropriate persons to advise on the effectiveness of the program (and the members of any such advisory committee shall serve at no expense to the government).

"(2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall include a senior staff member of each Federal laboratory which is a member of the Consortium and a representative appointed from each Federal agency with one or more member laboratories.

"(3) The representatives to the Consortium shall elect a Chairman of the Consortium.

"(4) The Director of the National Science Foundation shall provide the Consortium on a reimbursable basis with administrative services, such as office space, personnel, and support services of the Foundation, as requested by the Consortium and approved by such Director.

"(5) Not later than one year after the date of the enactment of this subsection, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (6), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made.

"(6)(A) Subject to subparagraph (B), an amount equal to 0.005 percent of that portion of the research and development budget of each Federal agency that is to be utilized by the laboratories of such agency for a fiscal year referred to in subparagraph (B)(i) shall be transferred by such agency to the National Science Foundation at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Foundation to the Consortium for the

purpose of carrying out activities of the Consortium under this subsection.

"(B) A transfer may be made by any Federal agency under subparagraph (A), for any fiscal year, only if—

"(i) the amount so transferred by that agency (as determined under such subparagraph) would exceed \$10,000; and

"(ii) such transfer is made with respect to the fiscal year 1987, 1988, 1989, 1990, or 1991.

"(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, are authorized to provide such additional support for operations of the Consortium as they deem appropriate."

SEC. 4. UTILIZATION OF FEDERAL TECHNOLOGY.

(a) RESPONSIBILITY FOR TECHNOLOGY TRANSFER.—Section 11(a) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710(a)) is amended—

(1) by inserting "(1)" after "POLICY.—"; and

(2) by adding at the end thereof the following new paragraphs:

"(2) Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.

"(3) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory."

(b) RESEARCH AND TECHNOLOGY APPLICATIONS OFFICES.—(1) Section 11(b) of such Act (15 U.S.C. 3710(b)) is amended—

(A) by striking out "a total annual budget exceeding \$20,000,000 shall provide at least one professional individual full-time" and inserting in lieu thereof "200 or more full-time scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions";

(B) by inserting immediately before the next to last sentence the following new sentence: "Furthermore, individuals filling positions in an Office of Research and Technology Applications shall be included in the overall laboratory/agency management development program so as to ensure that highly competent technical managers are full participants in the technology transfer process.";

(C) by striking out "requirements set forth in (1) and/or (2) of this subsection" in the next to last sentence and inserting in lieu thereof "requirement set forth in clause (2) of the preceding sentence"; and

(D) by striking out "either requirement (1) or (2)" in the last sentence and inserting in lieu thereof "such requirement".

(2) Section 11(c) of such Act (15 U.S.C. 3710(c)) is amended—

(A) by striking out paragraph (1) and inserting in lieu thereof the following:

"(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications;"

(B) by inserting "all" before "federally owned" in paragraph (2);

(C) by striking out "the Center for the Utilization of Federal Technology" in paragraph (3) and inserting in lieu thereof "the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer"; and

(D) by striking out "in response to requests from State and local government officials" in paragraph (4) and inserting in lieu thereof "to State and local government officials".

(c) DISSEMINATION OF TECHNICAL INFORMATION.—Section 11(d) of such Act (15 U.S.C. 3710(d)) is amended—

(1) by striking out “(d)” and all that follows down through “shall—” and inserting in lieu thereof the following:

“(d) DISSEMINATION OF TECHNICAL INFORMATION.—The National Technical Information Service shall—”;

(2) by striking out paragraph (2);

(3) by striking out “existing” in paragraph (3), and redesignating such paragraph as paragraph (2);

(4) by striking out paragraph (4) and inserting in lieu thereof the following:

“(3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests need a response involving more than the published information available to the Service.”;

(5) by redesignating paragraphs (5) and (6) as paragraphs (4) and (5), respectively; and

(6) by striking out “(c)(4)” in subsection (4) as so redesignated and inserting in lieu thereof “(c)(3)”.

(d) AGENCY REPORTING.—Section 11(f) of such Act (15 U.S.C. 3710(e)) (as redesignated by section 3(1) of this Act) is amended—

(1) by striking out “prepare biennially a report summarizing the activities” in the first sentence and inserting in lieu thereof “report annually to the Congress, as part of the agency’s annual budget submission, on the activities”; and

(2) by striking out the second sentence.

(e) FUNCTIONS OF THE SECRETARY.—Section 11 of such Act (as amended by the preceding provisions of this Act) is further amended by adding at the end thereof the following new subsection:

“(g) FUNCTIONS OF THE SECRETARY.—The Secretary, in consultation with other Federal agencies, may—

“(1) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;

“(2) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and

“(3) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development program and projects.”.

SEC. 5. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

The Stevenson-Wylder Technology Innovation Act of 1980 (as amended by the preceding provisions of this Act) is further amended by inserting after section 12 the following new section:

“SEC. 13. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

“The head of each Federal agency that is making expenditures at a rate of more than \$50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

“(1) inventions, innovations, or other outstanding scientific or technological contributions of value to the United States due to commercial applications or due to contribu-

tions to missions of the Federal agency or the Federal government, or

“(2) exemplary activities that promote the domestic transfer of science and technology developed within the Federal Government and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.”.

SEC. 6. DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

The Stevenson-Wylder Technology Innovation Act of 1980 (as amended by the preceding provisions of this Act) is further amended by inserting after section 13 the following new section:

“SEC. 14. DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

“(a) IN GENERAL.—(1) Except as provided in paragraph (2), any royalties or other income received by a Federal agency from the licensing or assignment of inventions under agreements entered into under section 12, and from inventions of Government-operated Federal laboratories licensed under section 207 of title 35, United States Code, or under any other provision of law shall be retained by the agency involved in the production of the income. Such funds shall be transferred by the agency to its Government-operated laboratories, with the major share of the royalties or other income from any invention going to the laboratory where the invention occurred; and the funds so transferred to any such laboratory may be used or obligated by that laboratory during the fiscal year in which they are received or during the succeeding fiscal year—

“(A) for payment of expenses incidental to the administration and licensing of inventions by that laboratory or by the agency with respect to inventions which occurred at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for invention management and licensing services;

“(B) to reward scientific, engineering, and technical employees of that laboratory as part of the agency’s reward program established pursuant to the preceding section of this Act; provided that any payment made under this paragraph shall be in addition to the regular pay of the employee involved and to any other awards made to that employee, and shall not affect the entitlement of the employee to any regular pay, annuity, or award to which he is otherwise entitled or for which he is otherwise eligible or limit the amount thereof;

“(C) to further scientific exchange among the government-operated laboratories of the agency; or

“(D) for scientific research and development, for education and training of employees of that consistent with the research and development mission and objectives of the agency, and for other activities that increase the licensing potential for transfer of the technology of the Government-operated laboratories of the agency.

Any of such funds not so used or obligated by the end of the fiscal year succeeding the fiscal year in which they are received shall be paid into the Treasury of the United States.

“(2) If the royalties received by an agency in any fiscal year exceed 5 percent of the budget of the Government-operated laboratories of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated for the purposes described in subparagraphs (A) through (C) of paragraph (1) during that fiscal year or the succeeding fiscal year. Any funds not so used or obligated shall be paid into the Treasury of the United States.

“(b) CERTAIN ASSIGNMENTS.—In the event that the invention involved was one assigned to the Federal agency—

“(1) by a contractor, grantee, or party to a cooperative agreement with the agency, or

“(2) by an employee of the agency who was not working in a Government-operated laboratory at the time the invention was made,

the agency unit that funded or employed the entity that made such assignment shall be considered to be a Government-operated laboratory for purposes of this section.

“(c) REPORTS.—In making their annual budget submissions Federal agencies shall submit, to the appropriate authorization and appropriation committees of both Houses of the Congress, summaries of the amount of royalties or other income received and expenditures made (including inventor awards) under this section.”.

SEC. 7. MISCELLANEOUS AND CONFORMING AMENDMENTS.

(a) REPEAL OF NATIONAL INDUSTRIAL TECHNOLOGY BOARD.—Section 10 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3709) is repealed.

(b) CHANGES IN TERMINOLOGY OR ADMINISTRATIVE STRUCTURE.—(1) Section 3(2) of the Stevenson-Wylder Technology Innovation Act of 1980 is amended by striking out “centers for industrial technology” and inserting in lieu thereof “cooperative research centers”.

(2) Section 4 of such Act is amended—

(A) by striking out “Industrial Technology” in paragraph (1) and inserting in lieu thereof “Productivity, Technology, and Innovation”;

(B) by striking out “Director” means the Director of the Office of Industrial Technology” in paragraph (3) and inserting in lieu thereof “Assistant Secretary” means the Assistant Secretary for Productivity, Technology, and Innovation”;

(C) by striking out “Centers for Industrial Technology” in paragraph (4) and inserting in lieu thereof “Cooperative Research Centers”;

(D) by striking out paragraph (6), and redesignating paragraphs (7) and (8) as paragraphs (6) and (7), respectively; and

(E) by striking out “owned and funded” in paragraph (6) as so redesignated and inserting in lieu thereof “owned, leased, or otherwise used by a Federal agency and funded”.

(3) Section 5(a) of such Act is amended by striking out “Industrial Technology” and inserting in lieu thereof “Productivity, Technology, and Innovation”.

(4) Section 5(b) of such Act is amended by striking out “DIRECTOR” and inserting in lieu thereof “ASSISTANT SECRETARY”, and by striking out “a Director of the Office” and all that follows and inserting in lieu thereof “an Assistant Secretary for Productivity, Technology, and Innovation”.

(5) Section 5(c) of such Act is amended by striking out “the Director” each place it appears and inserting in lieu thereof “the Assistant Secretary”.

(6) The heading of section 6 of such Act is amended to read as follows:

“SEC. 6. COOPERATIVE RESEARCH CENTERS.”

(7) Section 6(a) of such Act is amended by striking out “Centers for Industrial Technology” and inserting in lieu thereof “Cooperative Research Centers”.

(8) Section 6(b)(1) of such Act is amended by striking out “basic and applied”.

(9) Section 6(e) of such Act is amended to read as follows:

“(e) RESEARCH AND DEVELOPMENT UTILIZATION.—In the promotion of technology from research and development efforts by Centers under this section, chapter 18 of title

35, United States Code, shall apply to the extent not inconsistent with this section."

(10) Section 6(f) of such Act is repealed.

(11) The heading of section 8 of such Act is amended by striking out "CENTERS FOR INDUSTRIAL TECHNOLOGY" and inserting in lieu thereof "COOPERATIVE RESEARCH CENTERS".

(12) Section 8(a) of such Act is amended by striking out "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(c) RELATED CONFORMING AMENDMENT.—Section 210 of title 35, United States Code, is amended by adding at the end thereof the following new subsection:

"(e) The provisions of the Stevenson-Wydler Technology Innovation Act of 1980, as amended by the Federal Technology Transfer Act of 1985, shall take precedence over the provisions of this chapter to the extent that they permit or require a disposition of rights in subject inventions which is inconsistent with such chapter."

(d) ADDITIONAL DEFINITIONS.—Section 4 of such Act (as amended by subsection (b)(2) of this section) is further amended by adding at the end thereof the following new paragraphs:

"(8) 'Federal agency' means any executive agency as defined in section 105 of title 5, United States Code, and the military departments as defined in section 102 of such title.

"(9) 'Invention' means any invention or discovery which is or may be patentable or otherwise protected under title 35, United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

"(10) 'Made' when used in conjunction with any invention means the conception or first actual reduction to practice of such invention.

"(11) 'Small business firm' means a small business concern as defined in section 2 of Public Law 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration."

(e) REDESIGNATION OF SECTIONS TO REFLECT CHANGES MADE BY PRECEDING PROVISIONS.—(1) Such Act (as amended by the preceding provisions of this Act) is further amended by redesignating sections 11 through 18 as sections 10 through 17, respectively.

(2)(A) Section 5(d) of such Act is amended by inserting "(as then in effect)" after "sections 5, 6, 8, 11, 12, and 13 of this Act".

(B) Section 8(a) of such Act is amended by striking out the last sentence.

(C) Section 9(d) of such Act is amended by striking out "or 13" and inserting in lieu thereof "or 12".

(3) Section 13(a)(1) of such Act (as redesignated by paragraph (1) of this subsection) is amended by striking out "section 12" in the matter preceding subparagraph (A) and inserting in lieu thereof "section 11".

The SPEAKER pro tempore. Is a second demanded?

Mr. LUJAN. Mr. Speaker, I demand a second.

The SPEAKER pro tempore. Without objection, a second will be considered as ordered.

There was no objection.

The SPEAKER pro tempore. The gentleman from Florida [Mr. FUQUA] will be recognized for 20 minutes and the gentleman from New Mexico [Mr. LUJAN] will be recognized for 20 minutes.

The Chair recognizes the gentleman from Florida [Mr. FUQUA].

Mr. FUQUA. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of the committee amendments to the Stevenson-Wydler Act of 1980.

It is now 5 years since the Congress with overwhelming bipartisan support sent the Stevenson-Wydler Act to the President for his signature. That act helped usher in a new era of cooperation in research between the public and private sectors. We in the Congress had recognized the need to take advantage of the unique contributions universities and Federal laboratories could make to the effort to stimulate our economy if encouraged to cooperate with private industry.

The stated purpose of this act was "to improve the economic, environmental, and social well-being of the United States by: First, establishing organizations in the executive branch to study and stimulate technology; second, promoting technology development through the establishment of centers for industrial technology; third, stimulating improved utilization of federally funded technology developments by State and local governments and the private sector; fourth, providing encouragement for the development of technology through the recognition of individuals and companies which have made outstanding contributions in technology; and fifth, encouraging exchange of scientific and technical personnel among industry, and Federal laboratories."

These ideas that were new then, are now almost universally accepted. The act's passage provided the spark for much of its intent to be carried forward by States and local governments as well as the Federal agencies originally given the responsibility.

Five years of experience under the Stevenson-Wydler Act have pointed up a variety of changes that should be made in the act. In addition, several very sound ideas to supplement the Stevenson-Wydler Act were proposed in H.R. 695 by Congressman MICHEL and H.R. 1572 by Congressman LUNDINE.

The Science Committee held hearings on the Stevenson-Wydler Act, including H.R. 695 and H.R. 1572, last May. Rather than to focus exclusively on one bill, the committee chose to review the entire act and then draft a set of Stevenson-Wydler Act amendments to bring that act up to date and to incorporate the best ideas of both H.R. 695 and H.R. 1572.

Mr. LUJAN, Mr. MICHEL, Mr. LUNDINE, and the entire membership of the subcommittee which first considered the Stevenson-Wydler amendments joined me in introducing that clean bill, which we are considering today. H.R. 3773 contains a package of amendments which conform to the original Stevenson-Wydler Act to the ways technology transfer is conducted today. Furthermore, it provides important new initiatives in the areas of cooperative research and development

and rewarding of Federal inventors. Finally, it puts the Federal laboratory consortium, which is a real key to better technology transfer, on a firmer legislative and financial footing. I urge my colleagues to lend their support to what I view as an important piece of legislation.

Mr. LUJAN. Mr. Speaker, I yield such time as he may consume to our minority leader, the gentleman from Illinois [Mr. MICHEL].

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

Mr. MICHEL. Mr. Speaker, I wish to express my sincere thanks and appreciation to the gentleman from New Mexico [Mr. LUJAN] for yielding time to me at the very outset of the debate on this legislation.

As one of the authors of H.R. 3773, the Federal Technology Transfer Act of 1985, I rise in support of the bill and strongly urge its adoption.

H.R. 3773 represents a compromise between H.R. 695, which I introduced on January 24, and H.R. 1572 introduced by Congressman STAN LUNDINE on March 19. On the Senate side, Senator DOLE has introduced a bill identical to H.R. 695, and I understand that the Senate Commerce Committee may shortly report a variation of that bill.

In a nutshell, the Federal Technology Transfer Act is designed to increase research cooperation between Federal laboratories and private entities, and would help clear the way for greater commercial use of the ideas and inventions resulting from such research.

At present, we have some 380 Federal laboratories, in such diverse fields as health, space, energy, agriculture, and defense. They spend upward of \$17 billion a year, and employ one-sixth of the Nation's research workers.

Yet, despite this major effort, the National Governors' Association concludes in a recent report that—

These National Laboratories are far from having begun to realize their full potential as catalysts for close industry-university research cooperation or as collaborators in joint university/industry research.

I guess one of my pet peeves over the years is that we tend to fund so much in the way of research at the Federal level which seemingly just ends up on some shelf gathering dust. I can recall as a member of the Appropriations Committee asking the question time and again: "What has resulted from your research and what uses are we putting it to?" We frequently received rather elaborate answers to the first part of that question, but relatively little in the way of response when it came to practical application.

This is particularly damaging when it comes to our competitive position in the world market. We all know what our trade deficit is. We all know how our position as world leader in the areas of technology, innovation, engineering, and manufacturing has been eroding. While there are many reasons

for this, certainly one of the significant ones is the failure of our industry to consistently translate new technology into competitive products.

But while many companies may not be fully taking advantage of our Nation's research, foreign nations have no qualms in this regard. Much of the research which is not being used domestically is in fact being used abroad. Foreign countries have access to any research that is not patented or licensed for use in this country, and many foreign governments, particularly the Japanese, are taking full advantage of this.

This was brought home graphically to us in my own district, where they tell me that Japanese representatives are frequently seen prowling the halls of the Agriculture Research Lab in Peoria looking for ideas. In fact, one of the scientists in that lab was awarded a medal by the Japanese Government for helping to solve some of their agriculture problems.

Now, I have no problem with us being a friendly neighbor, but when other nations use our research to better compete against us by developing products which they in turn often import back into the United States, I think that is going too far. It is time we take steps to turn this situation around, and that is what this bill is designed to do.

In the 96th Congress, we passed legislation—Public Law 96-517—which eased the patent and licensing requirements with respect to federally funded research in universities. The result has been an increased collaboration between universities and industry at an unprecedented rate. When universities have undertaken to market their federally funded inventions, they frequently find that industry is willing to provide additional funding to further the development of such inventions or to branch out into related areas.

There is no reason why we should have a different standard for federally funded research in universities that we do research in Federal laboratories. Both are similar in nature and both ought to be treated basically the same. That's what H.R. 3773 seeks to accomplish.

The Federal Laboratory Review Panel of the White House Science Council has recommended greater collaboration between Federal laboratories and industry. But if industry is to become involved and provide resources and capital, it must be able to protect its investment through patent and licensing rights. Without this protection, such investment and ultimate commercialization of a research product will not take place.

I become particularly aware of this problem, and undertook the introduction of this bill as a result of a collaborative effort that is being undertaken in my hometown of Peoria.

The Peoria Economic Development Council is presently organizing an agriculture research and development con-

sortium which would pull together a number of corporations involved in agriculture research along with the Department of Agriculture Regional Research Laboratory in Peoria and several universities for the purpose of undertaking combined research endeavors. It is also expected that venture capital will be provided to turn the research findings into usable commercial products. The potential for jobs and new business investment is considerable.

I should also mention that the Illinois Legislature has enacted legislation which provides \$50 million in low-interest bond funds for agriculture research and development. This indicates the importance which the entire State of Illinois places on cooperative research endeavors. For this State program to become effective, Congress must enact H.R. 3773.

In a nutshell, H.R. 3773 does the following:

First, it authorizes agencies to permit their laboratories to enter into cooperative research and development arrangements with private entities. This includes accepting funds or services from, or provide services to, collaborating parties.

Second, it provides legal authority to laboratories to grant collaborating parties the rights to inventions made during such arrangements, and authorizes an agency to allow its laboratories to negotiate patent licenses.

Third, it provides creativity incentives to Government employees by requiring the creation of a cash awards program to reward employees for useful and commercialized inventions.

Fourth, it establishes a Federal laboratory consortium for technology transfer for the purpose of making both Federal scientists and businesses aware of the commercial potential of Federal research.

This bill will help us become more competitive in the world market, increase the use of federally funded research, and assist in the creation of additional jobs in this country.

In closing, I would be remiss if I did not commend the chairman of the full committee, Mr. FUQUA, and the subcommittee chairman, Mr. WALGREN, as well as ranking members MANNY LUJAN and SHERRY BOEHLERT for their assistance and cooperation in moving this legislation through the committee and onto the floor. I also thank the gentleman from New York [MR. LUNDINE] as well as the committee staff for their cooperation and efforts in developing the compromises necessary to help move this legislation along.

I urge adoption of the bill.

□ 1440

Mr. FUQUA. Mr. Speaker, I yield 3 minutes to the gentleman from Pennsylvania [Mr. WALGREN].

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

Mr. WALGREN. Mr. Speaker, I thank the chairman, the gentleman from Florida [Mr. FUQUA].

Mr. Speaker, I would like to say that this is a good bill we have here today and one that reflects the contributions of both the chairman of the full committee, the gentleman from Florida [Mr. FUQUA]; and the ranking Members from the other side on the Science and Technology Committee, the gentleman from New York [Mr. BOEHLERT] and the gentleman from New Mexico [Mr. LUJAN]; and the contributions from our side, the interest of the gentleman from New York [Mr. LUNDINE] in particular sections of this bill. Obviously, when the minority leader speaks for a bill like this, came before our committee and testified for it, it is a bill that has wide attention, and its presence here today I think indicates how important it is to have the attention of the leadership.

This bill is another step in our attempt to make the Federal scientific establishment contribute more to how our society is able to function.

We have in this committee brought forward legislation on patent access by those involved with Federal research. We have extended the ways that private sector parties can cooperate on research without being subject to the antitrust laws. We are now building on the Stevenson-Wydler Act of 1980, which attempted to encourage technology transfer from the Federal laboratories.

This is a big enterprise that we are involved in. In many ways, this area is a lesson in what we should, I think, be able to appreciate of the Federal Government. We often kick the tires, and that is our role here ever since Mark Twain set that as a precedent. But the truth of the matter is that the Federal Government expends about \$50 billion on research and development, and that is about one-half of the total in the whole society.

We have about \$18 billion in the Federal laboratories. We have in those laboratories about one out of every six scientists in the United States. So when we do anything that encourages something to happen to that size of resources that our society commits, it is important that it be the right thing, and I think this legislation is certainly the right thing.

The bill does several things in particular. First, it specifically authorizes federally operated laboratories to enter into cooperative research and development arrangements with private sector entities, particularly the kind the gentleman from Illinois [Mr. MICHEL] was interested in, and that is a very key thing, because we know that technology transfer does not happen unless people work side by side. This is a way to bring scientists together in the laboratory itself so that ideas can ferment and the transfer take place.

The legislation also gives a home and limited funding to the Federal Laboratory Consortium, at present a voluntary group of technology transfer officers in all the Federal laboratories who were largely encouraged by the original Stevenson-Wydler Act, but who do need some limited funding in order to function in any kind of a nationwide capacity, and this bill provides a very small set-aside of Federal research funds in order to enable a network of communications to take place between transfer agents and gives them a home within the National Science Foundation.

The bill also directs that royalties which might be retained by the agencies for the kinds of developments that are made within the agency be directed in cash awards to those scientists that have participated in their development.

It is a good bill, one that can certainly enhance the technology transfer of this very large scientific enterprise that the Federal Government funds, and I urge support for the bill.

Mr. LUJAN. Mr. Speaker, I yield myself as much time as I may consume.

Mr. Speaker, I rise in support of the bill. As a member of the Science and Technology Committee, I am a strong believer in the importance of ensuring that the technology and know-how resulting from Federal research effort is transferred to the private sector. The Federal Government funds about half of the total R&D in the United States. The civilian R&D agencies receive over \$20 billion each year, if we ignore the tremendous amount of research activity done by the defense agencies. The payoff for this comes when U.S. industry can turn this basic research into new products and technologies. In the past, U.S. leadership in the world arena has been a function of U.S. leadership and technology—this will be even more true in the future.

Recently, the President's Task Force on Industrial Competitiveness concluded that maintaining our technological leadership is critical to maintaining our economic leadership. The Federal Laboratory Review Panel's report, known as the Packard report, recommended increased interaction between the Federal laboratories and industry. Last year, Joint Economic Committees of Congress reviewed entrepreneurship and innovation, and made a series of recommendations to improve technology transfer from the Federal laboratories. In addition to these three reports, even the Grace Commission pointed out the need for this legislation.

Since the State of New Mexico has two DOE laboratories as well as an Air Force laboratory, I am well aware of the valuable research that is performed at Government laboratories. This bill has a strong bipartisan background. It originated from two bills introduced last spring that had both Democrats and Republican sponsors. I

particularly want to commend Mr. MICHEL who introduced one of these bills for his outstanding leadership. I believe the bill we have brought to the floor today represents a strong consensus of all the parties involved. I also want to commend the governor from New York [Mr. LUNDINE], a member of our Committee. I urge my colleagues to lend their support to this legislation.

Mr. FUQUA. Mr. Speaker, I yield 3 minutes to the distinguished gentleman from New York [Mr. LUNDINE], who is the author of one of the bills incorporated into this legislation.

Mr. LUNDINE. Mr. Speaker, I am very pleased to rise in support of H.R. 3773, the Technology Transfer Act of 1985. This legislation is designed to promote technology transfer from the Federal laboratories and represents a compromise between H.R. 695, introduced by Congressman MICHEL, and H.R. 1572, which I introduced last March. It also reflects careful consideration by the Science and Technology Committee and comments received from key agencies and technology transfer professionals.

It is clear if the United States is to regain its premier position in the international marketplace, we will have to do a better job of translating new technology into competitive products. One way the Federal Government can contribute to this process is by promoting more effective utilization of technology produced by Federal laboratories. The Federal Government funds approximately half of this country's total research and development and much of this work is performed in Government-owned laboratories. The President's Commission on Industrial Competitiveness agreed and recommended that the Federal Government manage its research and development with more concern for commercial application and competitiveness.

In my view, the Technology Transfer Act takes a step in this direction by promoting more effective utilization of the technology produced by Federal laboratories and encouraging cooperative research agreements between Government-operated labs and industry. The scientific and engineering expertise, the technology base, and the facilities and equipment within these laboratories are valuable national resources. This legislation allows these resources to be more readily shared with private companies wishing to develop new products and with local governments in need of technical solutions to their problems.

First, under this proposal, Federal agencies may permit directors of their Government-operated labs to enter into cooperative R&D agreements with universities, industry, industrial development organizations, units of State and local government and others. Interest in cooperative research is increasing especially from State and local technology transfer or-

ganizations. These relationships should be encouraged and easier access to Federal technology permitted.

H.R. 3773 would allow Federal scientists and engineers to work side by side with their university or industrial counterparts on projects that are co-funded by their institutions. I believe that research in the Federal laboratories can be better attuned to industrial needs without compromising the laboratories' missions and that the benefits that accrue to industry from the Federal share of the funding are in the national interest.

These cooperative R&D agreements would be subject to a few conditions. In negotiating agreements, preference must be given to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement will be manufactured substantially in the United States. I feel that taxpayer-supported Federal technology should be used to create jobs and income at home, not abroad. A small business preference is also included.

In addition, Federal laboratories would have the authority to negotiate patent rights and licensing agreements with the collaborating party in an agreement.

Second, to further promote technology transfer from the Federal laboratories, the proposal formally establishes the Federal Laboratory Consortium for Technology Transfer. The consortium is currently an ad hoc organization of representatives from over 300 Federal laboratories representing 11 Federal agencies. It has been the principal body during the last decade for networking between Federal laboratories and for facilitating technology transfer from the Federal sector. The effectiveness of the Federal Laboratory Consortium has been limited only by the resources available to it as an ad hoc organization.

H.R. 3773 recognizes the important contributions being made by the Federal Laboratory Consortium and the need to enhance the consortium's capabilities. This is accomplished by providing a temporary source of funding for the FLC and a home within NSF, not by altering the present nature of the consortium as an organization of tech transfer officials from throughout the Government.

Finally, the proposal will provide incentives for Federal laboratories and their employees. Agencies would be permitted to retain royalties or other income received from the licensing or assignment of inventions under agreements. These funds are to be used by Federal laboratories for a wide range of activities including the payment of cash awards to inventors.

The legislation also requires Federal agencies with laboratories to have cash awards programs for rewarding

scientific and technical personnel for inventions. If this authority is used effectively, incentive awards programs will encourage creativity and innovation among scientists, engineers, and technical personnel of the Federal Government. They will also boost employee morale and productivity by making individuals aware that their contributions to technology transfer are important.

The scientific and engineering expertise, the technology base, and the facilities and equipment within our Federal laboratories are valuable national resources. Our proposal allows these resources to be more readily shared with business wishing to develop new products, with local governments in need of technical solutions to their problems and, with universities interested in enhancing their research capabilities.

Staying competitive in the future is going to be a long distance race—U.S. industry must be conditioned for endurance and constantly working toward improving its capacity to run, and win. I believe that this measure will improve our capacity to run, by promoting the transfer of technology with commercial application and I strongly urge its adoption by the House.

Mr. LUJAN. Mr. Speaker, I yield 3 minutes to the gentleman from New York [Mr. BOEHLERT], the ranking member on the subcommittee.

Mr. BOEHLERT. Mr. Speaker, this bill addresses one of the fundamental problems confronting our Nation—the growing threat of foreign economic competition.

Our record trade deficits have sent many Members of Congress casting about for remedies, including new programs, new economic structures and new trade laws. Many of these proposals have merit; indeed, I've made a few myself and I'm proud of them.

But before we embark on any new, untried effort, we ought to be sure we're using our existing capabilities to the limit. That's exactly what H.R. 3773 does; it makes sure we're getting all we can out of our Federal laboratories.

Many Members may be unfamiliar with our enormous, vital network of Federal labs. There are about 400 of them, spending upward of \$17 billion a year to keep our Nation at the forefront of scientific research.

But until recently, we did little to harness this vast enterprise for economic growth. Our international competitors were not so negligent. Many of the foreign products that are swamping our markets are the fruits of fundamental research that was conducted in the United States.

H.R. 3773 encourages cooperation between Federal laboratories, universities and private industry to ensure that the United States economy reaps the benefits of Federal research.

In today's economy, knowledge truly is power—if that knowledge is applied.

If we do not fully take advantage of Federal research, other nations will take advantage of our mistake.

I applaud my leader, Congressman MICHEL, and my colleague from New York, a member of our committee, Congressman LUNDINE, for working together to draft this bipartisan measure. I am pleased and proud to be a co-author. And I wish to commend the bipartisanship so evident from our committee leaders, Chairman FURQUA and the gentleman from New Mexico [Mr. LUJAN].

I urge my colleagues to support this bill.

Mr. WALGREN. Mr. Speaker, I yield 2 minutes to the gentleman from Oklahoma [Mr. WATKINS].

Mr. WATKINS. Mr. Speaker, I stand in support of this legislation. Also, I want to thank the gentleman from Pennsylvania for yielding me this time.

Mr. Speaker, as the gentleman knows, and also Chairman FURQUA and the gentleman from New Mexico [Mr. LUJAN], I served on this committee for 4 years while I was in Congress. I had the opportunity to author chapter 11 of the Stevenson-Wydler Act about 5 years ago which basically provided the set-aside of some dollars that go to research to be utilized for technology transfer.

□ 1455

I think Members may recall that I attempted to get 5 percent of the research dollars set aside for technology transfer. We failed there, but finally we got one-half of one percent.

So out in the Federal laboratories today, of various sizes, they are supposed to be designated someone to be the technology transfer agent. Mr. Speaker, there is only one problem that exists. Many of the individuals who are designated to be the technology transfer people for these labs do not understand what they are supposed to do. They have not been communicated with, they have not been trained, and as a result, many of them are not doing the job that is necessary.

There are a few good examples, I think, of people knowing that technology transfer is all about.

In order to remedy this, I have worked with the Commerce appropriation subcommittee and I have worked on trying to get a few dollars set aside for a non-profit corporation that is in technology transfer to work with some of the Federal laboratories, because I think they need to have the experience of practitioners who have been working with technology transfer.

As the gentleman from New York just stated, we have a wealth of information that has been shelved from the research laboratories. We spend about \$45 billion a year on research, but very little of that has been out there for the people of America, to try to get the research applied through technology transfer.

I think we are missing a bet if we do not make sure that we get from our research the information to solve technology problems. The only way a technology problem can be solved is through a new product or a new process. I think our Federal laboratories have the keys that will unlock many of the problems that exist out there, and I would like to urge my colleagues here in the House to vote for this particular bill, and also state that I hope what I have done in trying to get a few dollars to get a nonprofit, private corporation to work out to get technology transferred and to help train some of the people in the Federal laboratories so they know what they are doing will also blend in and help accomplish this purpose.

Mr. LUNGREN. Mr. Speaker, I would like to take this opportunity to commend the Committee on Science and Technology for this important expansion of the Stevenson Wydler Technology Innovation Act. As a member of the Joint Economic Committee, I was privileged last year to be able to conduct hearings in Silicon Valley, California, and route 128 in Massachusetts concerning the U.S. climate for entrepreneurship and innovation.

The consensus of our hearings was that the Stevenson-Wydler Act has made a contribution to the promotion of technology transfer but that more can and should be done. The central question concerning America today is how to encourage technological innovation so our economy can compete in an increasingly global market. The use of the resources and experience of the Federal laboratory system is one way to foster such innovation. The improved flow of technology from Government research can be an important component of national innovation policy. It is imperative for Government to develop improved mechanisms to allow for the identification of technology and experience within Federal laboratories and find ways of making this information known to the business community. Commercialization is a vital element of the innovation process whereby an idea is transformed into a marketable good or service. Although the Federal Government has a direct involvement in basic research, commercialization is the responsibility of the private sector. Thus technology transfer becomes a vital link between public and private sector roles in the innovation process.

Our hearings revealed that the primary deficiency of the present system of technology transfer is attributable to the lack of explicit incentives at the Federal laboratory level to network with private businesses, universities, and State and local governments. In addition, it became apparent that there is some ambiguity in the perception of Federal laboratories concerning whether they have authority to enter into transfer agreements with the private sector.

In our report published by the Joint Economic Committee we recommended the need to identify the Federal laboratory consortium as the primary coordinating organization for the promotion of technology

transfer and to provide a statutory base for the consortium.

In this regard H.R. 3773 addresses many of the concerns raised in our hearings in that it authorizes Government operated laboratories to enter into cooperative R&D agreements for commercialization, and by offering Federal employees and agencies financial incentives for technological innovation. It also clarifies the law by explicitly establishing in the statute the National Laboratory Consortium for Technology Transfer. I therefore urge my colleagues to join me in supporting this very important enhancement of the innovation process.

Mr. RITTER. Mr. Speaker, as vice-chairman of the 140-member Republican Task Force on High Technology Initiatives, and as a former university Professor and research administrator who experienced first hand public and private sponsored research, I would like to share some views with you. Our Nation's industrial competitiveness and ability to create new jobs depends on the evolution and application of new technology.

A strong technological base is important to strengthen our economy and enhance opportunity. We need to remember that while there are additional steps that we can take to improve our position in world markets, we have done many things right. Our European trading partners have acknowledged the impressive gains in new job creation in the United States. They have expressed surprise in the positive results that have stemmed from lesser amounts of government intervention and greater dependence on private investment in the economy. In fact, many are now moving to reduce government intervention in their own economies. We seem to be moving in the right direction but certain steps are necessary to keep jobs we have and create new jobs.

However, the question remains, "How can we better transfer technology developed from billions of dollars invested in Federal programs which will provide more benefits to the products, markets and competitive position of U.S. firms in the private sector?"

H.R. 3773 is a positive step to increase the effectiveness of America's science and technology base in meeting our industrial competitors in both the domestic and overseas markets.

This bill will, on a permanent basis, establish an effective Federal laboratory consortium for technology transfer, greatly improving the original Stevenson-Wydler Act. It establishes incentives for national laboratories to apply R&D results in the marketplace by authorizing government laboratories to enter into cooperative R&D agreements with private industry, universities, nonprofit organizations, and other parties. Under these agreements the Federal laboratories could provide personnel, facilities, or equipment if non-Federal parties are willing to supply funds and other resources. It also directs Federal research agencies to provide cash bonuses to employees who develop promising new technologies, using royalties the agencies receive when their innovations are patented.

Through the adaption of amendments which I proposed in the Science and Technology Committee, this already excellent bill was enhanced in two ways: First, by ensuring that the Office of Research and Technology Application [ORTA's] responsible for technology transfer in the Federal/national labs are staffed with highly competent technical managers; and second, by establishing regional advisory committees, one-half of which will be composed of industry and small business representatives, to further strengthen the transition of technology needed by America's industrial infrastructure.

As business in this country works to remain competitive with increasingly efficient foreign companies, legislation such as H.R. 3773 will help to insure that our industry retains its technological advantage thereby keeping America strong.

Mr. WALGREN. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

Mr. LUJAN. Mr. Speaker, I have no further requests for time, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Florida [Mr. FUQUA] that the House suspend the rules and pass the bill, H.R. 3773, as amended.

The question was taken.

Mr. LUJAN. Mr. Speaker, I object to the vote on the ground that a quorum is not present and make the point of order that a quorum is not present.

The SPEAKER pro tempore. Pursuant to clause 5 of rule I, and the Chair's prior announcement, further proceedings on this motion will be postponed.

The point of order is considered withdrawn.

FEDERAL TECHNOLOGY
TRANSFER ACT OF 1985

The SPEAKER pro tempore. The pending business is the question of suspending the rules and passing the bill, H.R. 3773, as amended.

The Clerk read the title of the bill.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Florida [Mr. FUQUA] that the House suspend the rules and pass the bill, H.R. 3773, as amended.

The question was taken.

Mr. LUJAN. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The vote was taken by electronic device, and there were—yeas 386, nays 0, not voting 48, as follows:

[Roll No. 439]

YEAS—386

Ackerman	Beilenson	Bruce
Addabbo	Bennett	Bryant
Akaka	Bentley	Burton (CA)
Alexander	Bereuter	Bustamante
Anderson	Berman	Callahan
Andrews	Bevill	Campbell
Annunzio	Biaggi	Carper
Anthony	Billrakis	Carr
Applegate	Billey	Chapman
Archer	Boehlert	Chappell
Army	Boggs	Cheney
Atkins	Boland	Clay
AuCoin	Bonior (MI)	Clinger
Badham	Borski	Coats
Barnard	Boulter	Cobey
Barnes	Boxer	Coble
Bartlett	Brooks	Coelho
Bateman	Broomfield	Coleman (MO)
Bates	Brown (CA)	Coleman (TX)
Bedell	Brown (CO)	Combest

Conte	Howard	Owens	Valentine	Weber	Wolpe
Cooper	Hoyer	Oxley	Vander Jagt	Weiss	Wortley
Coughlin	Hubbard	Packard	Vento	Wheat	Wright
Courter	Huckaby	Panetta	Visclosky	Whitehurst	Wyden
Coyne	Hughes	Parris	Volkmer	Whitley	Wylie
Craig	Hunter	Pashayan	Vucanovich	Whittaker	Yates
Crane	Hutto	Pease	Walgren	Williams	Yatron
Crockett	Hyde	Penny	Walker	Wilson	Young (AK)
Daniel	Jeffords	Pepper	Watkins	Wirth	Young (FL)
Darden	Jenkins	Perkins	Waxman	Wise	Young (MO)
Daschle	Johnson	Petri	Weaver	Wolf	
Daub	Jones (NC)	Pickle			
Davis	Jones (TN)	Porter			
de la Garza	Kanjorski	Pursell	Aspin	Dickinson	Monson
DeLay	Kaptur	Quillen	Barton	Dowdy	Morrison (CT)
Dellums	Kasich	Rahall	Boner (TN)	Fowler	Myers
Derrick	Kastenmeier	Ray	Bonker	Garcla	Neal
DeWine	Kemp	Regula	Bosco	Hillis	Nelson
Dicks	Kennelly	Reid	Boucher	Ireland	Price
Dingell	Kildee	Richardson	Breaux	Jacobs	Rangel
DiGuardi	Kleczka	Ridge	Broyhill	Jones (OK)	Ritter
Dixon	Kolbe	Rinaldo	Burton (IN)	Kindness	Rowland (CT)
Donnelly	Kolter	Roberts	Byron	Kramer	Schulze
Dorgan (ND)	Kostmayer	Robinson	Carney	Livingston	Stark
Dorman (CA)	LaFalce	Rodino	Chandler	McCloskey	Taylor
Downey	Lagomarsino	Roe	Chapple	McKinney	Torricelli
Dreier	Lantos	Roemer	Collins	Mica	Towns
Duncan	Latta	Rogers	Conyers	Miller (OH)	Whitten
Durbin	Leach (IA)	Rose	Dannemeyer	Miller (WA)	Zschau
Dwyer	Leath (TX)	Rostenkowski			
Dymally	Lehman (CA)	Roth			
Dyson	Lehman (FL)	Roukema			
Early	Leland	Rowland (GA)			
Eckart (OH)	Lent	Roybal			
Eckert (NY)	Levin (MI)	Rudd			
Edgar	Levine (CA)	Russo			
Edwards (CA)	Lewis (CA)	Sabo			
Edwards (OK)	Lewis (FL)	Savage			
Emerson	Lightfoot	Saxton			
English	Lipinski	Schaefer			
Erdreich	Lloyd	Scheuer			
Evans (IA)	Loeffler	Schneider			
Evans (IL)	Long	Schroeder			
Fascell	Lott	Schuette			
Fawell	Lowery (CA)	Schumer			
Fazio	Lowry (WA)	Seiberling			
Feighan	Lujan	Sensenbrenner			
Fiedler	Luken	Sharp			
Fields	Lundine	Shaw			
Fish	Lungren	Shelby			
Flippo	Mack	Shumway			
Florio	MacKay	Shuster			
Foglietta	Madigan	Sikorski			
Foley	Manton	Siljander			
Ford (MI)	Markey	Sisisky			
Ford (TN)	Marlenee	Skeen			
Frank	Martin (IL)	Skelton			
Franklin	Martin (NY)	Slatery			
Frenzel	Martinez	Slaughter			
Frost	Matsui	Smith (FL)			
Fuqua	Mavroules	Smith (IA)			
Gallo	Mazzoli	Smith (NE)			
Gaydos	McCain	Smith (NJ)			
Gejdenson	McCandless	Smith, Denny			
Gekas	McCollum	(OR)			
Gephardt	McCurdy	Smith, Robert			
Gibbons	McDade	(NH)			
Gilman	McEwen	Smith, Robert			
Gingrich	McGrath	(OR)			
Glickman	McHugh	Snowe			
Gonzalez	McKernan	Snyder			
Goodling	McMillan	Solarz			
Gordon	Meyers	Solomon			
Gradison	Michel	Spence			
Gray (IL)	Mikulski	Spratt			
Gray (PA)	Miller (CA)	St Germain			
Green	Mineta	Staggers			
Gregg	Mitchell	Stallings			
Grotberg	Moakley	Stangeland			
Guarini	Mollinari	Stenholm			
Gunderson	Mollohan	Stokes			
Hall (OH)	Montgomery	Strang			
Hall, Ralph	Moody	Stratton			
Hamilton	Moore	Studds			
Hammerschmidt	Moorhead	Stump			
Hansen	Morrison (WA)	Sundquist			
Hartnett	Mrazek	Sweeney			
Hatcher	Murphy	Swift			
Hawkins	Murtha	Swindall			
Hayes	Natcher	Synar			
Hefner	Nichols	Tallon			
Heftel	Nielson	Tauke			
Hendon	Nowak	Tauzin			
Henry	O'Brien	Thomas (CA)			
Hertel	Oakar	Thomas (GA)			
Hiler	Oberstar	Torres			
Holt	Obey	Traficant			
Hopkins	Olin	Traxler			
Horton	Ortiz	Udall			

NOT VOTING—48

Aspin	Dickinson	Monson
Barton	Dowdy	Morrison (CT)
Boner (TN)	Fowler	Myers
Bonker	Garcla	Neal
Bosco	Hillis	Nelson
Boucher	Ireland	Price
Breaux	Jacobs	Rangel
Broyhill	Jones (OK)	Ritter
Burton (IN)	Kindness	Rowland (CT)
Byron	Kramer	Schulze
Carney	Livingston	Stark
Chandler	McCloskey	Taylor
Chapple	McKinney	Torricelli
Collins	Mica	Towns
Conyers	Miller (OH)	Whitten
Dannemeyer	Miller (WA)	Zschau

So (two-thirds having voted in favor thereof) the rules were suspended and the bill, as amended, was passed.

The result of the vote was announced as above recorded.

A motion to reconsider was laid on the table.