105TH CONGRESS, 1st Session | HOUSE OF REPRESENTATIVES | REPT. 105–259 Part 1

# SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM REAUTHORIZATION

SEPTEMBER 23, 1997.—Ordered to be printed

Mr. SENSENBRENNER, from the Committee on Science, submitted the following

# R E P O R T

[To accompany H.R. 2429]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science, to whom was referred the bill (H.R. 2429) to reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

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39–006

## I. AMENDMENT

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

**SECTION 1. AMENDMENTS.**

Section 9 of the Small Business Act (15 U.S.C. 638) is amended—

(1) in subsection (b)(7), by inserting ", and the Committee on Science" after "of the Senate";

(2) in subsection (e)(6)(B), by inserting "agency" after "to meet particular";

(3) in subsection (n)(1)(C), by striking "and 1997" and inserting in lieu thereof "through 2000";

(4) in subsection (o)—

(A) by redesignating paragraphs (8) through (11) as paragraphs (10) through (13), respectively; and

(B) by inserting after paragraph (7) the following new paragraphs:

"(8) include, as part of its annual performance plan as required by section 1115(a) and (b) of title 31, United States Code, a section on its STTR program, and shall submit such section to the Committee on Small Business of the Senate, and the Committee on Science and the Committee on Small Business of the House of Representatives;

"(9) collect such data from awardees as is necessary to assess STTR program outputs and outcomes;"; and

(5) by adding at the end the following new subsections:

"(s) OUTREACH PROGRAM.—Within 90 days after the date of the enactment of this subsection, the Administrator shall develop and begin implementation of an outreach program to encourage increased participation in the STTR program of small business concerns, universities, and other research institutions located in States in which the total number of STTR awards for the previous 2 fiscal years is less than 20.

"(t) INCLUSION IN STRATEGIC PLANS.—Program information relating to the SBIR and STTR programs shall be included by Federal agencies in any updates and revisions required under section 306(b) of title 5, United States Code.".

## II. PURPOSE OF THE BILL

The purpose of this bill is to reauthorize and improve the Small Business Technology Transfer program, which expires September 30, 1997.

## III. BACKGROUND AND NEED FOR THE LEGISLATION

The Small Business Innovation Development Act (P.L. 97–219) created the Small Business Innovative Research (SBIR) program in 1982. In 1992, the program was reauthorized by P.L. 102–564 (15 U.S.C. 638). The reauthorization created a 3-year pilot program called the Small Business Technology Transfer (STTR) program.

STTR is intended to facilitate the commercialization of university, non-profit, and contractor operated federal laboratory research and development by small businesses. STTR provides funding for research proposals which are developed and executed cooperatively between small firms and scientists/professors in research institutions. Currently, the Department of Energy (DOE), Department of Defense (DOD), Health and Human Services (HHS), National Aeronautics and Space Administration (NASA), and National Science Foundation (NSF) all contribute to the program. The STTR set-aside was last reauthorized as part of the Omnibus Consolidated Appropriations Act of 1996. That authorization expires on September 30, 1997.

The STTR is funded by a 0.15% set-aside of an agency's extramural research and development budget if that budget exceeds $1 billion. In Fiscal Year 1995, STTR awarded 260 grants totaling $33.7 million, climbing to over $60 million in Fiscal Year 1996.

H.R. 2429 is needed to continue funding the Small Business Technology Transfer program beyond September 30, 1997.

## IV. Summary of Hearings

On September 4, 1997, the Subcommittee on Technology held a hearing on the Small Business Technology Transfer Program (STTR) in order to review the effectiveness of the STTR program in advance of its reauthorization.

The hearing panel consisted of five witnesses: Mr. Daniel Hill, Assistant Administrator for Technology, Small Business Administration; Ms. Susan Kladiva, Acting Associate Director, Energy, Resources and Science issues, General Accounting Office; Dr. Wendy Baldwin, Deputy Director for Extramural Research, National Institutes of Health; Mr. Scott Wallsten, Economist, Department of Economics, Stanford University; and, Ms. Ann Eskesen, President, Innovation Development Institute.

Mr. Daniel Hill testified that the Small Business Administration (SBA) strongly supports extending the STTR program through the year 2000 at its current level. He stated that small business accounts for 54 percent of the American workforce and that small businesses are the leading source of innovations. He also stated that, while small businesses produce twice as many innovations per employee as large firms, they receive a very low percentage of federal research and development funds. He indicated that the STTR, established as a pilot program during the 1992 reauthorization of the Small Business Innovation Research Program (SBIR), has begun to bridge this gap. According to SBA, the program, in only its third year of existence, has received high praise from both the General Accounting Office (GAO), as well as the Department of Defense (DOD) for its success in bringing technology to the market quickly. Mr. Hill testified that both STTR and SBIR programs are vital to the Nation's research agenda and small business community.

Ms. Kladiva's testimony covered the agency-by-agency review of the first year implementation of STTR. She stated that while agency officials offered differing views on the effect of, and the need for, the STTR program, all officials felt the program was not competing for quality proposals with the SBIR program or reducing the quality of the participating agencies R&D programs. Additionally, some agency officials noted potentially beneficial effects, such as greater collaboration between small business and research institutions in the SBIR program. She stated that the similarity of STTR and SBIR raises three questions necessary in evaluating the need for the STTR program. (1) Are the ideas for technology, developed through an STTR grant, originating primarily in research institutions, as envisioned in the rationale for the program, or are they originating in small businesses? The assumption behind the STTR program is that ideas would originate in research institutions. If a high percentage of the ideas are originating with small businesses, this would raise questions about the need for the program. At this

point, however, there is insufficient data to answer this question. (2) Is the mandatory collaboration between the small business and the research institution effective in transferring technology to the marketplace? Information on the actual commercial outcomes from STTR are not available at this point. Generally, 5 to 9 years is needed to turn an initial concept into a marketable product. (3) Can the SBIR program accomplish the same objective without the collaboration required by the STTR program? No definitive conclusion can be drawn at present concerning the need for STTR in forging new collaborations, although many agencies feel that STTR has the potential to increase this collaboration. Ms. Kladiva also discussed GAO's work on small businesses which receive multiple awards. From Fiscal Year 1990 through Fiscal Year 1996, approximately 6,500 companies have received STTR and/or SBIR awards from the five agencies that participate in both programs. Of these companies, 383, or about 6 percent, have received a total of 10 or more STTR and/or SBIR awards. Two companies have received over 300 STTR and/or SBIR awards. A review of the recent SBIR awardees determined that many have not received an award previously. She also noted that all of the companies that have received 3 or more STTR awards have also received 5 or more SBIR awards.

Dr. Wendy Baldwin testified that the National Institute of Health (NIH) is the only principal operating component within the Department of Health and Human Services (HHS) that participates in the STTR program. She further acknowledged that HHS is very pleased with their involvement in the program. Dr. Baldwin fully expects HHS results, with regard to STTR, to mirror those of its SBIR program. A recent report from GAO indicates that HHS has experienced the highest success rate among all federal agencies in commercializing the results of research conducted under SBIR. A further benefit of the two programs at NIH has been in contributing to the development of products and methods useful in other research efforts. These products and processes have succeeded in increasing the productivity of other researchers and decreasing the cost of other areas of research. Dr. Baldwin further testified that the policies of HHS under the STTR program mirror those of the SBIR in several important ways: First, applicant small business concerns are allowed to revise and resubmit Phase I (feasibility studies) and Phase II (research and development) applications twice. Often, although an application may be promising, an applicant fails to provide sufficient details on the research design in a Phase I application or the results of Phase I when applying for the Phase II project. These are weaknesses that can be remedied in a revised application. Second, HHS provides multiple receipt dates for the submission of research grant applications. Rather than limit the small business community to a single opportunity each year, the Department has three receipt dates annually. This means that if a small business concern misses one deadline, it need wait only 4 months, not a year, for the next submission date. Third, as part of HHS's continuing innovations in management, in 1996 the NIH instituted a Fast-Track parallel review option designed to expedite the decision and award of Phase II funding. Under this option, those who satisfy the criteria may concurrently submit Phases I and II of the project, thus passing through the peer review process

at the same time, with the intent of reducing or eliminating the funding gap between phases. NIH's standard non-Fast-Track procedure allows Phase I grantees to submit Phase II applications either during or after the expiration of the Phase I budget period to allow the grantee to minimize the possibility of a funding gap. Dr. Baldwin emphasized that NIH was the first agency to include industry scientists, especially those from the small business community, on its scientific review panels. She feels strongly that their inclusion helps the review panels develop an appreciation for the environment in which small firms must carry out research.

Mr. Scott Wallsten testified that as a Ph.D. candidate at Stanford University he has been studying the SBIR program for several years. Mr. Wallsten feels that his conclusion that SBIR cannot meet its legislative goal of increasing innovation and commercialization is equally applicable to STTR, as it is not only similar to the SBIR in many ways, but also because many firms participate in both programs. Mr. Wallsten believes that the programs current incentives and implementation ensure that funds will go to research that is likely to lead to a commercialized product, but is unlikely to have needed federal funding to do so. He pointed out that a government grant is much cheaper than a loan, so it stands to reason that any rational firm will look to this source of funding first. Mr. Wallsten testified that the SBIR and STTR programs success is defined by whether the projects achieve commercial success. In fact, SBIR guidelines mandate that agencies review proposals largely on their technical merit and potential for commercial success. The easiest way to ensure commercial success is to fund research that would look promising to any investor, instead of criteria designed to select socially beneficial projects from which other investors would shy away. Thus, the two programs cannot achieve their goal of increasing innovation **and** commercialization in small firms at the same time. He asserted that based on GAO evaluations, the quality and commercialization rate of funded projects tends to be high, but SBIR funding was not necessarily responsible for this commercialization. In fact, in his econometric analysis, Mr. Wallsten found that publicly traded firms, by and large, reduced their own R&D expenditures by approximately the amount of the awards they received. He also testified that the increasing number of submissions does not necessarily indicate that the program is becoming more competitive or including more firms. Since only 10 to 25 percent of Phase I proposals are funded, firms have to submit very large numbers of proposals in order to receive multiple awards.

Ms. Eskesen testified that as one of the original people who helped draft and implement the SBIR program in 1982, she possesses the necessary "corporate memory" of the path, intentions and future direction of the SBIR. She directed her testimony to two issues: First, she examined where the SBIR program is at this point in time. Second, she considered where we need to sustain and enhance the program.

On the first point, Ms. Eskesen testified that since its inception, 40,000 projects have been selected for SBIR awards with over 40 percent of those being selected for Phase II awards. These projects have included nearly 9,000 small businesses representing every

State in the union. She placed special emphasis on the diversity and breadth of talent which currently makes up the SBIR program. She believes that SBIR and STTR represents an extraordinary pool of validated competence and talent and there occurs, within the SBIR, every conceivable area of scientific and technological investigation. The success of SBIR has come from its rigid belief that grants for R&D funding do not go to small businesses just because they are small businesses, but rather because they are technically competent. The SBIR is a mechanism through which to give qualified small businesses access to high risk R&D funding. She testified that the health of an industrialized economy is fundamentally grounded in technological innovation which is assisted by the SBIR program.

Ms. Eskesen stated that, with respect to the manner in which SBIR awards are given, Phase I is difficult, but is probably the most important factor in the success of the SBIR program. She also stated that STTR projects undertaken are, and should continue to be, high risk and high quality. Phase I allows all parties to examine the viability of the project, the validity of the proposed approach and the ability to assemble the team to do the job. She testified that Phase I needs to be retained and firms should not be allowed to go directly to Phase II. She also noted that factors which consider geographic distribution, number of previous awards, etc., should not be determinants of eligibility for the program.

To the second point, Ms. Eskesen testified there are areas of concern which need to be examined in order to move forward and continue the effectiveness of this program. To highlight the importance of the STTR program, she stated that in 1996 more scientists and engineers were actually employed by small firms than the combined totals of universities and non-profit research institutions. This is true, she noted, despite the fact that small businesses receive only about 4.5 percent of the federal R&D dollars. The SBIR and STTR programs have both helped to alleviate this gap.

Finally, she testified that she had concerns about the program's overemphasis on commercialization. She believes that this emphasis is a serious detriment to meeting agency needs and allowing support of high risk and long term projects. She believes that many long term research projects that proceeded through Phase I and Phase II in the 1980's would be considered too long term and too risky today. She suggested perhaps including in the reauthorization a provision for program managers at each agency to designate a percentage of their awards each year toward long term, higher risk projects.

## V. Committee Actions

On Thursday, September 11, 1997, the Committee on Science, Subcommittee on Technology convened to mark up H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000. There were no amendments offered. With a quorum present, Mr. Gordon moved that H.R. 2429 be reported. The motion was adopted by a voice vote.

On September 17, 1997, the Committee on Science convened to mark up H.R. 2429. Chairman Sensenbrenner and Ranking Mem-

ber Brown offered an amendment in the nature of a substitute which was adopted by voice vote.

The amendment: (1) adds the Committee on Science to the list of Committees that are to receive the Small Business Administration's annual report on the STTR and SBIR programs; (2) Clarifies that agency program needs are to be met by Phase II STTR awards; (3) Reauthorizes the STTR program at 0.15 percent through Fiscal Year 2000; (4) Reaffirms STTR will be included in each agencies' performance plan as described in 31 U.S.C. 1115(a) and (b), and that STTR and SBIR will be included in each participating agencies' updated strategic plan as described in 5 U.S.C. 306(b); (5) Requires agencies to collect data on the STTR program from awardees that will enable them to assess the program's outputs and outcomes; and, (6) Requires SBA to develop an outreach program to small businesses and universities located in States that have had less than 20 STTR awards in the previous 2 fiscal years. The amendment was adopted by voice vote.

With a quorum present, Mr. Brown moved that H.R. 2429, as amended, be reported. The motion was adopted by voice vote.

## VI. Summary of Major Provisions of the Bill

H.R. 2429:

1. Reauthorizes the Small Business Technology Transfer Act through Fiscal Year 2000.
2. Reaffirms STTR will be included in each agencies' performance plan as described in 31 U.S.C. 1115(a) and (b), and that STTR and SBIR will be included in each participating agencies' updated strategic plan as described in 5 U.S.C. 306(b); Requires agencies to collect data on the STTR program from awardees that will enable them to assess the program's outputs and outcomes.
3. Requires SBA to develop an outreach program to small businesses and universities located in States that have had less than 20 STTR awards in the previous 2 fiscal years.

## VII. Section-by-Section Analysis (By Title and Section) and Committee Views

### Section 1. AMENDMENTS

This section amends section 9 of the Small Business Act (15 U.S.C. 638).

Subsection (b)(7) is amended, adding the Committee on Science to the list of recipients of the Small Business Administration's annual report on the STTR and SBIR programs.

Subsection (e)(6)(B) is amended to clarify that only ideas designed to meet agency program needs are to be awarded a Phase II award under the STTR program.

Subsection (n)(1)(C) is amended to reauthorize STTR through Fiscal Year 2000 at a set-aside level of 0.15%.

Subsection (o) is amended by adding two new paragraphs. The first, paragraph (8), requires participating STTR agencies to submit a section on STTR in their performance plan, including submitting that section to the Committee on Science, among others, as set out in the Government Performance and Results Act (31 U.S.C. 1115(a)

and(b)). The second, paragraph (9), requires agencies to collect data from STTR awardees to evaluate the STTR program outputs and outcomes.

Section 9 is amended by adding a new subsection "(s)" requiring the Small Business Administration to conduct an outreach program for small business concerns and universities in States which receive 20 or less STTR awards in a 2-year period.

Section 9 is amended by adding a new subsection "(t)" that requires the STTR and SBIR programs to be included in each agencies' strategic plan update as is required by the Government Performance and Results Act (5 U.S.C. 306(b)).

*Committee Views*

As a Committee with jurisdiction over STTR and SBIR programs, it is appropriate for the Science Committee to be included on the list of recipients of the Small Business Administration's annual report on the STTR and SBIR programs.

The Committee believes that one important purpose of Phase II STTR grants is to develop ideas that meet the needs of the agencies' programs. The Committee has amended the language in section 9(e)(6)(B) of the Small Business Act to clearly reflect this purpose.

The Committee supports authorizing STTR through Fiscal Year 2000 at a 0.15 percent set-aside. H.R. 2429 will reconcile the STTR time-line with that of SBIR, which is also authorized through Fiscal Year 2000.

The Committee is concerned that there is a lack of statutory guidance as to the purpose of STTR. Goals, and metrics to measure those goals, need to be established for an effective evaluation of the program to take place. H.R. 2429 requires that the participating agencies include the STTR program in their annual performance plans, as is required under the Government Performance and Results Act (31 U.S.C. 1115(a) and (b)). The performance plan among other things, requires performance goals be defined and performance indicators be established to measure the relevant outputs of the program. By requiring agencies to submit their performance plans to Congress, the Committee believes Congress will gain a standard to measure whether federal R&D dollars spent on STTR are warranted.

Further, to make the best possible evaluation of the STTR programs, agencies must collect data from awardees and other affected parties that will assist them in evaluating program effectiveness. Agencies need to be able to provide statistics on how small businesses benefit from the programs and on the effectiveness of the program. Indices such as the extent to which STTR research has led to patents and patent licensing, increased employment, and increased sales of STTR-derived products show the extent of commercialization. The types of data and methods of analysis used by the Department of Commerce's Advanced Technology Program can serve as a guide in this area. Agencies also should document statistically and otherwise the extent to which they use STTR results in carrying out their missions and develop other indicants of the usefulness of STTR work products to agency mission. The production of peer-reviewed articles and the record of citations to those articles

and other indications of quality of research also should be useful in evaluating certain STTR awards. Grantees should be surveyed routinely on improvements that could be made in the program that would increase commercialization of STTR funded innovations.

SBA policy directives for STTR require each agency to submit an annual report on STTR for the fiscal year ending September 30, by December 31 of that same year. The SBA compiles that information and is then mandated to report to Congress on the program and supply information on their efforts to monitor the program. The Committee finds it troubling that no report has yet been issued on either program for Fiscal Year 1996. The Committee hopes this oversight will be remedied shortly.

The Committee has noted a high regional disparity among STTR awards. Although the Committee is not in favor of requiring a mandated set-aside of STTR grants to address the problem, it does recognize that the SBA can perform certain public outreach activities to encourage applications from those small businesses and universities in States which have historically been under-represented in the program. The Committee expects to receive an outreach implementation plan from SBA within 6 months of enactment of this bill and urges SBA to look for ways to partner with existing outreach and resources centers within the States in its efforts to educate the local business and university communities about Section 9 programs. In addition, the Committee notes that numerous individual small businesses have received over 50 STTR and/or SBIR awards. The Committee wonders at what point companies that receive millions of dollars in federal awards, and have the management capabilities to manage multiple research projects, stop becoming small businesses, and if they really are moving the research results towards commercialization.

The Committee feels it necessary to confirm that each participating agency includes the STTR and SBIR program in its strategic plan update. These programs should already be included in each agencies' 1997 strategic plan as mandated by law (5 U.S.C. 306(b)). This has not been the case. The Committee is confident that by including a Results Act requirement in H.R. 2429, each participating agency will become aware that it is responsible for including SBIR and STTR in its future strategic plan updates.

Finally, we feel the nature of small high technology businesses has changed dramatically in the past 15 years, but these programs have not. We would like to see more flexibility built into these programs to reflect these changes and to make it easier for the most innovative of small businesses to participate. We look forward to working with the small business community and the Committee on Small Business over the next year or two to develop the reforms these programs need if they are to optimally meet the needs of small business in the 21st Century.

## VIII. Committee Cost Estimate

Clause 7(a) of Rule XIII of the Rules of the House of Representatives requires each committee report accompanying each bill or joint resolution of a public character to contain: (1) an estimate, made by such Committee, of the costs which would be incurred in carrying out such bill or joint resolution in the fiscal year in which

it is reported, and in each of the 5 fiscal years following such fiscal year (or for the authorized duration of any program authorized by such bill or joint resolution, if less than 5 years); (2) a comparison of the estimate of costs described in subparagraph (1) of this paragraph made by such Committee with an estimate of such costs made by any Government agency and submitted to such Committee; and (3) when practicable, a comparison of the total estimated funding level for the relevant program (or programs) with the appropriate levels under current law. However, clause 7(d) of that Rule provides that this requirement does not apply when a cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 403 of the Congressional Budget Act of 1974 has been timely submitted prior to the filing of the report and included in the report pursuant to clause 2(l)(3)(C) of Rule XI. A cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 403 of the Congressional Budget Act of 1974 has been timely submitted prior to the filing of this report and included in Section IX of this report pursuant to clause 2(l)(3)(C) of Rule XI.

Clause 2(l)(3)(B) of Rule XI of the Rules of the House of Representatives requires each committee report that accompanies a measure providing new budget authority (other than continuing appropriations), new spending authority, or new credit authority, or changes in revenues or tax expenditures to contain a cost estimate, as required by section 308(a)(1) of the Congressional Budget Act of 1974 and, when practicable with respect to estimates of new budget authority, a comparison of the total estimated funding level for the relevant program (or programs) to the appropriate levels under current law. H.R. 2429 does not contain any new budget authority, credit authority, or changes in revenues or tax expenditures. Assuming that the sums authorized under the bill are appropriated, H.R. 2429 does authorize additional discretionary spending, as described in the Congressional Budget Office report on the bill, which is contained in Section IX of this report.

## IX. Congressional Budget Office Cost Estimate

CONGRESSIONAL BUDGET OFFICE
U.S. CONGRESS
WASHINGTON, D.C. 20515

June E. O'Neill
Director

September 19, 1997

Honorable F. James Sensenbrenner, Jr.
Chairman
Committee on Science
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program through fiscal year 2000.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Rachel Forward, who can be reached at 226-2860.

Sincerely,

June E. O'Neill

Enclosure

cc: Honorable George E. Brown, Jr.
Ranking Minority Member

**CONGRESSIONAL BUDGET OFFICE**
**COST ESTIMATE**

September 19, 1997

# H.R. 2429

**A bill to reauthorize the Small Business Technology Transfer Program through fiscal year 2000**

*As ordered reported by the House Committee on Science on September 17, 1997*

## SUMMARY

H.R. 2429 would extend from 1997 to 2000 the expiration date of the Small Business Technology Transfer (STTR) program. Assuming appropriation of the necessary amounts, CBO estimates that enacting H.R. 2429 would result in new discretionary spending by the federal government of about $3.6 million over the 1998-2002 period, with nearly all of those estimated outlays occurring in fiscal years 1998 through 2000. The average estimated cost of about $1.2 million a year for 1998 through 2000 is about the same as is being spent for administering the STTR program in fiscal year 1997.

H.R. 2429 would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply to the bill. H.R. 2429 contains no intergovernmental mandates or private-sector mandates as defined in the Unfunded Mandates Reform Act of 1995 (UMRA) and would not affect the budgets of state, local, or tribal governments.

## ESTIMATED COST TO THE FEDERAL GOVERNMENT

H.R. 2429 would extend the expiration date of the STTR program from 1997 to 2000. The STTR program requires federal agencies with annual appropriations for extramural research of more than $1 billion to set aside 0.15 percent of their extramural research budget for cooperative research between small businesses and a federal laboratory or nonprofit research institution. The Small Business Administration is responsible for policy direction and oversight of the STTR program. The five federal agencies that meet the $1 billion threshold and currently participate in the program are the Department of Defense, the Department of Energy, the Department of Health and Human Services, the National Aeronautics and Space Administration, and the National Science Foundation.

Assuming that the number of agencies qualified to participate in the program does not change, and that their research and development budgets remain at or near current levels, CBO estimates that the total amount allocated to small businesses would be about $70 million annually for the 1998-2000 period.

The costs of the STTR program to the participating agencies consist primarily of salaries and expenses for personnel to evaluate grant applications, associated overhead costs, printing costs, and mailing expenses. The costs associated with administering awards through the STTR program are slightly higher than administering the same awards through regular program channels. Based on information from the affected agencies, CBO estimates that the costs of administering the awards would be about $1 million a year for the next three years, assuming appropriation of the necessary amounts. We estimate that the costs to the Small Business Administration to provide policy direction and oversight would total about $200,000 per year, subject to the availability of appropriated funds.

**PAY-AS-YOU-GO CONSIDERATIONS:** None.

**INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT**

H.R. 2429 contains no intergovernmental or private-sector mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

**ESTIMATE PREPARED BY:** Rachel Forward (226-2860)

**ESTIMATE APPROVED BY:**

Paul N. Van de Water
Assistant Director for Budget Analysis

## X. Compliance With Public Law 104–4

H.R. 2429 contains no unfunded mandates.

## XI. Committee Oversight Findings and Recommendations

Clause 2(l)(3)(A) of Rule XI of the Rules of the House of Representatives requires each committee report to include oversight findings and recommendations required pursuant to clause 2(b)(1) of rule X. The Committee has no oversight findings.

## XII. Oversight Findings and Recommendations by the Committee on Government Reform and Oversight

Clause 2(l)(3)(D) of Rule XI of the Rules of the House of Representatives requires each committee report to contain a summary of the oversight findings and recommendations made by the House Government Reform and Oversight Committee pursuant to clause 4(c)(2) of Rule X, whenever such findings and recommendations have been submitted to the Committee in a timely fashion. The Committee on Science has received no such findings or recommendations from the Committee on Government Reform and Oversight.

## XIII. Constitutional Authority Statement

Clause 2(l)(4) of rule XI of the Rules of the House of Representatives requires each report of a Committee on a bill or joint resolution of a public character to include a statement citing the specific powers granted to the Congress in the Constitution to enact the law proposed by the bill or joint resolution. Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 2479.

## XIV. Federal Advisory Committee Statement

This legislation does not create or authorize the establishment of a new advisory committee.

## XV. Congressional Accountability Act

The Committee finds that H.R. 2429 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

## XVI. Changes in Existing Law Made by the Bill, As Reported

In compliance with clause 3 of Rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no change is proposed is shown in roman):

### SECTION 9 OF THE SMALL BUSINESS ACT

Sec. 9. (a) * * *

(b) It shall be the duty of the Administration, and it is hereby empowered—

(1) * * *

* * * * * * *

(7) to report not less than annually to the Committee on Small Business of the Senate*, and the Committee on Science* and the Committee on Small Business of the House of Representatives on the SBIR and STTR programs of the Federal agencies and the Administration's information and monitoring efforts related to the SBIR and STTR programs.

* * * * * * *

(e) For the purpose of this section—

(1) * * *

* * * * * * *

(6) the term "Small Business Technology Transfer Program" or "STTR" means a pilot program under which a portion of a Federal agency's extramural research or research and development effort is reserved for award to small business concerns for cooperative research and development through a uniform process having—

(A) a first phase, to determine, to the extent possible, the scientific, technical, and commercial merit and feasibility of ideas submitted pursuant to STTR program solicitations;

(B) a second phase, to further develop proposed ideas to meet particular *agency* program needs, in which awards shall be made based on the scientific, technical, and commercial merit and feasibility of the idea, as evidenced by the first phase and by other relevant information; and

* * * * * * *

(n) REQUIRED EXPENDITURES FOR STTR BY FEDERAL AGENCIES.—

(1) REQUIRED EXPENDITURE AMOUNTS.—Each Federal agency which has an extramural budget for research or research and development in excess of $1,000,000,000 in fiscal year 1994, 1995, or 1996, is authorized to expend with small business concerns—

(A) * * *

* * * * * * *

(C) not less than 0.15 percent of such budget in fiscal years 1996 [and 1997] *through 2000*,

specifically in connection with STTR programs which meet the requirements of this section, policy directives, and regulations issued under this section.

* * * * * * *

(o) FEDERAL AGENCY STTR AUTHORITY.—Each Federal agency required to establish an STTR program in accordance with subsection (n) and regulations issued under this Act, shall—

(1) * * *

* * * * * * *

*(8) include, as part of its annual performance plan as required by section 1115(a) and (b) of title 31, United States Code, a section on its STTR program, and shall submit such section to the Committee on Small Business of the Senate, and the Committee on Science and the Committee on Small Business of the House of Representatives;*

*(9) collect such data from awardees as is necessary to assess STTR program outputs and outcomes;*

**[**(8)**]** *(10) submit an annual report on the STTR program to the Administration and the Office of Science and Technology Policy;*

**[**(9)**]** *(11)* develop a model agreement not later than July 31, 1993, to be approved by the Administration, for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development, or commercialization;

**[**(10)**]** *(12)* develop, in consultation with the Office of Federal Procurement Policy and the Office of Government Ethics, procedures to ensure that federally funded research and development centers (as defined in subsection (e)(8)) that participate in STTR agreements—

(A) are free from organizational conflicts of interests relative to the STTR program;

(B) do not use privileged information gained through work performed for an STTR agency or private access to STTR agency personnel in the development of an STTR proposal; and

(C) use outside peer review, as appropriate; and

**[**(11)**]** *(13)* not later than July 31, 1993, develop procedures for assessing the commercial merit and feasibility of STTR proposals, as evidenced by—

(A) the small business concern's record of successfully commercializing STTR or other research;

(B) the existence of second phase funding commitments from private sector or non-STTR funding sources;

(C) the existence of third phase follow-on commitments for the subject of the research; and

(D) the presence of other indicators of the commercial potential of the idea.

* * * * * * *

*(s) OUTREACH PROGRAM.—Within 90 days after the date of the enactment of this subsection, the Administrator shall develop and begin implementation of an outreach program to encourage increased participation in the STTR program of small business concerns, universities, and other research institutions located in States in which the total number of STTR awards for the previous 2 fiscal years is less than 20.*

*(t) INCLUSION IN STRATEGIC PLANS.—Program information relating to the SBIR and STTR programs shall be included by Federal agencies in any updates and revisions required under section 306(b) of title 5, United States Code.*

## XVII. Committee Recommendations

On September 17, 1997, a quorum being present, the Committee favorably reported H.R. 2429, as amended, a bill to Reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000, by a voice vote, and recommends its enactment.

XX. PROCEEDINGS OF SUBCOMMITTEE MARKUP

# SUBCOMMITTEE MARKUP OF H.R. 2429: A BILL TO REAUTHORIZE THE SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM

**THURSDAY, SEPTEMBER 11, 1997**

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
SUBCOMMITTEE ON TECHNOLOGY,
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 2:53 p.m., in room 2318, Rayburn House Office Building, Hon. Constance A. Morella, Chairwoman of the Subcommittee, presiding.

Mrs. MORELLA. I'm going to call to order the Subcommittee on Technology of the Science Committee, and today the Subcommittee on Technology will consider H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program which expires on September 30 of this year.

STTR was enacted in 1992 as a 3-year pilot program to increase the participation of small high-tech companies in federal R&D. STTR provides for collaboration between the small business entity and the non-profit research institution, such as a university.

Any federal agency with an extramural R&D budget exceeding $1 billion is required to set aside 0.15 percent of that budget for awards in the STTR program. Currently, there are five federal agencies participating in STTR. They're the National Aeronautics and Space Administration, Department of Defense, National Institutes of Health, Department of Energy, and the National Science Foundation. These agencies combined for over $60 million in awards in Fiscal Year 1996.

STTR is a three-phase program. Phase I is a 1-year award of up to $100,000 and is designed to determine the feasibility of the technology. Phase II awards are used to develop the most promising technologies. Phase II awards are up to 2 years and generally do not exceed $500,000. Phase III is a commercialization of the Phase II product or service, and federal agencies may fund Phase III, but no STTR dollars can be used.

H.R. 2429 will authorize STTR through Fiscal Year 2000—the same year its parent program, the Small Business Innovation Research program, expires. The bill maintains the existing STTR set-aside from agency extramural R&D budgets at 0.15 percent.

This bill was jointly introduced by a bipartisan group of members from the Science Committee and the Small Business Committee, including Subcommittee Ranking Member, Mr. Gordon. I believe

the bill is non-controversial. I encourage all our Subcommittee members to join me in favorably reporting H.R. 2429 out of the Technology Subcommittee, and I will now defer to Mr. Gordon if he has any opening comments.

Mr. GORDON. Thank you. I'll be very brief in my remarks this afternoon.

From last week's hearing on the STTR program, we heard strong bipartisan support for this small business, university, government partnership. This program has been very successful at linking the research capabilities of universities and national laboratories with the business sense and drive of our Nation's small business community, and I urge my colleagues to support this program.

Finally, I would like to note that this will be the last meeting of the Technology Subcommittee this session. I want to commend Chairwoman Morella and my colleagues for the outstanding hearings and legislative record we established this session. We've conducted our hearings and moved legislation in a completely bipartisan fashion. I want to thank everyone for their hard work, and I look forward to our working together in the upcoming session.

Mrs. MORELLA. I thank the distinguished Ranking Member for his comments and for the wonderful work that he's done in collaboration with the Technology Subcommittee.

We are going to have some other hearings, but no other markups that I anticipate at this point during this time. And so I'd like to now ask if any other member desires to make any opening statement? Mr. Bartlett?

Mr. BARTLETT. Thank you very much. I am in support of 2429, the STTR program, but I'd like to put that support in context. I'm not sure that the Federal Government should be in the venture capital business, but if we're in the venture capital business, then we certainly ought to be supporting STTR; it's a good program. Thank you very much.

Mrs. MORELLA. Thank you, Mr. Bartlett.

Do I see any other requests for any opening comments?

[No response.]

Not hearing any other opening comments, we're now going to consider H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000, and ask for the first reading of the bill.

The CLERK. "H.R. 2429, a bill to reauthorize the Small Business Technology Transfer program through Fiscal Year 2000."

Mrs. MORELLA. I ask unanimous consent that the bill be considered as read and open to amendment at any point.

[The text of the bill and supporting materials follow:]

I

105TH CONGRESS
1ST SESSION

# H. R. 2429

To reauthorize the Small Business Technology Transfer Program through fiscal year 2000.

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IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 8, 1997

Mr. SENSENBRENNER (for himself, Mr. TALENT, Mr. BROWN of California, Mr. LAFALCE, Mrs. MORELLA, Mr. GORDON, Mr. BARTLETT of Maryland, Mr. POSHARD, and Mr. DAVIS of Virginia) introduced the following bill; which was referred to the Committee on Small Business, and in addition to the Committee on Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

# A BILL

To reauthorize the Small Business Technology Transfer Program through fiscal year 2000.

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

**SECTION 1. AMENDMENT.**

Section 9(n)(1)(C) of the Small Business Act (15 U.S.C. 638(n)(1)(C)) is amended by striking "and 1997" and inserting in lieu thereof "through 2000".

September 8, 1997

**Summary and Section By Section of**
**H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program.**

| | |
|---|---|
| **Sponsor:** | Mr. Sensenbrenner |
| **Purpose:** | The Small Business Technology Transfer program expires September 30, 1997. This bill will reauthorize the program through Fiscal Year 2000. |
| **Section Analysis:** | *Section 1. Amendment*—Reauthorizes the Small Business Technology Transfer program at the existing set-aside rate of 0.15 percent through fiscal year 2000. |

F. JAMES SENSENBRENNER, Jr., Wisconsin, CHAIRMAN

SHERWOOD L. BOEHLERT, New York
HARRIS W. FAWELL, Illinois
CONSTANCE A. MORELLA, Maryland
CURT WELDON, Pennsylvania
DANA ROHRABACHER, California
STEVEN SCHIFF, New Mexico
JOE BARTON, Texas
KEN CALVERT, California
ROSCOE G. BARTLETT, Maryland
VERNON J. EHLERS, Michigan
DAVE WELDON, Florida
MATT SALMON, Arizona
THOMAS M. DAVIS, Virginia
GIL GUTKNECHT, Minnesota
MARK FOLEY, Florida
THOMAS W. EWING, Illinois
CHARLES W. "CHIP" PICKERING, Mississippi
CHRIS CANNON, Utah
KEVIN BRADY, Texas
MERRILL COOK, Utah
PHIL ENGLISH, Pennsylvania
GEORGE R. NETHERCUTT, Jr., Washington
TOM A. COBURN, Oklahoma
PETE SESSIONS, Texas

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON SCIENCE

SUITE 2320 RAYBURN HOUSE OFFICE BUILDING
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GEORGE E. BROWN, Jr., California
Ranking Minority Member

RALPH M. HALL, Texas
BART GORDON, Tennessee
JAMES A. TRAFICANT, Jr., Ohio
TIM ROEMER, Indiana
ROBERT E. (BUD) CRAMER, Jr., Alabama
JAMES A. BARCIA, Michigan
PAUL MCHALE, Pennsylvania
EDDIE BERNICE JOHNSON, Texas
ALCEE L. HASTINGS, Florida
LYNN N. RIVERS, Michigan
ZOE LOFGREN, California
MICHAEL F. DOYLE, Pennsylvania
SHEILA JACKSON LEE, Texas
BILL LUTHER, Minnesota
WALTER H. CAPPS, California
DEBBIE STABENOW, Michigan
BOB ETHERIDGE, North Carolina
NICK LAMPSON, Texas
DARLENE HOOLEY, Oregon
ELLEN O. TAUSCHER, California

September 11, 1997

MEMORANDUM

TO: CHAIRMAN F. JAMES SENSENBRENNER, JR.
FROM: CHAIRWOMAN CONSTANCE A. MORELLA
SUBJECT: SUBCOMMITTEE ON TECHNOLOGY MARKUP ON H.R. 2429

This afternoon the Subcommittee on Technology completed its markup of H.R. 2429, a bill to reauthorize the Small Business Technology Transfer program (STTR) through FY 2000, and ordered it reported to the Committee on Science. There were no amendments offered and H.R. 2429 passed by a voice vote.

STTR is within the jurisdiction of the Science Committee and the Small Business Committee. The program was created as a pilot program during the 1992 reauthorization of the Small Business Innovation Research (SBIR) program.

STTR requires any agency with an extramural R&D budget in excess of $1 billion to set-aside 0.15 percent of that budget for technology transfer from government to small business. This set-aside provides funding for ideas that are cooperatively researched and developed by a small business firm and a non-profit research institution, such as a university.

Five agencies currently participate in the STTR program. They are the National Aeronautics and Space Administration, Department of Defense, National Institutes of Health, Department of Energy, and the National Science Foundation. In FY 1995, the STTR program issued a total of 260 awards, totaling over $33 million dollars.

STTR's authorization will expire on September 30, 1997. H.R. 2429 will extend the program's life through FY 2000, the same year the authorization for SBIR expires.

Mrs. MORELLA. Are there any amendments to be offered?

[No response.]

Not hearing any amendments, then we'll have a vote on the bill.

So, H.R. 2429, the bill to reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000, all of those who are in favor will say aye.

[Chorus of ayes.]

All those opposed say no.

[No response.]

Not hearing any noes, in the opinion of the Chair, the ayes unanimously have it, and so I would like to recognize our Honorable Ranking Member, Bart Gordon, for a motion.

Mr. BARTLETT. Madam Chairwoman, I move the Subcommittee report the bill, H.R. 2429, and that the Chair take all necessary steps to bring the bill before the Full Committee for consideration.

Mrs. MORELLA. The Subcommittee has heard the motion. Those in favor will say aye.

[Chorus of ayes.]

Those opposed, no.

[No response.]

The ayes have it. The motion is agreed to. Without objection, the motion to reconsider is laid upon the table, and before we adjourn, I want to thank the members of the Subcommittee. I'm just very, very impressed with the attendance here today for this very quick markup, particularly because we had the four votes intervening.

And so, this concludes our Subcommittee markup on H.R. 2429, and the Chair declares the Subcommittee adjourned.

[Whereupon, at 2:59 p.m., the Subcommittee was adjourned.]

XXI. PROCEEDINGS OF FULL COMMITTEE MARKUP

# FULL COMMITTEE MARKUP OF H.R. 2429: TO REAUTHORIZE THE SMALL BUSINESS TRANSFER TECHNOLOGY PROGRAM THROUGH FISCAL YEAR 2000

**WEDNESDAY, SEPTEMBER 17, 1997**

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
*Washington, DC.*

The Committee met, pursuant to call, at 2:10 p.m., in room 2318, Rayburn House Office Building, Hon. F. James Sensenbrenner, Jr., Chairman of the Committee, presiding.

Chairman SENSENBRENNER. The Committee on Science is meeting today to consider the following measures.

H.R. 2429, to reauthorize the Small Business Technology Transfer Program through Fiscal Year 2000, and the H.R. 860, the Surface Transportation, Research and Development Act of 1997.

First up will be H.R. 2429, reauthorizing the Small Business Technology Transfer Program, which expires on September 30th of this year.

[The text of the bill and a summary follow:]

105TH CONGRESS
1ST SESSION

# H. R. 2429

To reauthorize the Small Business Technology Transfer Program through fiscal year 2000.

---

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 8, 1997

Mr. SENSENBRENNER (for himself, Mr. TALENT, Mr. BROWN of California, Mr. LAFALCE, Mrs. MORELLA, Mr. GORDON, Mr. BARTLETT of Maryland, Mr. POSHARD, and Mr. DAVIS of Virginia) introduced the following bill; which was referred to the Committee on Small Business, and in addition to the Committee on Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

# A BILL

To reauthorize the Small Business Technology Transfer Program through fiscal year 2000.

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

**SECTION 1. AMENDMENT.**

Section 9(n)(1)(C) of the Small Business Act (15 U.S.C. 638(n)(1)(C)) is amended by striking "and 1997" and inserting in lieu thereof "through 2000".

September 8, 1997

**Summary and Section By Section of**
**H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program.**

| | |
|---|---|
| **Sponsor:** | Mr. Sensenbrenner |
| **Purpose:** | The Small Business Technology Transfer program expires September 30, 1997. This bill will reauthorize the program through Fiscal Year 2000. |
| **Section Analysis:** | *Section 1. Amendment*—Reauthorizes the Small Business Technology Transfer program at the existing set-aside rate of 0.15 percent through fiscal year 2000. |

Chairman SENSENBRENNER. The STTR was enacted in 1992 as a 3-year program. It requires any agency that has an extramural R&D budget of $1 billion to set aside 0.15 percent of that R&D budget.

Currently, there are five agencies participating in STTR: NASA, Department of Defense, NIH, Department of Energy and the NSF.

The purpose of STTR is to foster collaboration between research institutions, such as universities and small business entities. Ideas awarded grants under the program are cooperatively researched, developed, and ultimately commercialized or used by the Federal Government.

H.R. 2429 will extend the STTR through Fiscal Year 2000, the same year the authorization will expire for its parent program, the Small Business Innovation Research Program.

The bill was jointly introduced by a bipartisan group of members from both this Committee and the Committee on Small Business, including Ranking Member Brown, Technology Subcommittee Chairwoman Morella, Technology Subcommittee Ranking Member Gordon and Congressmen Bartlett and Davis.

I believe this bill is not controversial and would urge members to vote favorably on reporting this measure to the House, and I yield to Mr. Brown for an opening statement.

Mr. BROWN of California. Thank you, Mr. Chairman. And I, too, would like to commend the bipartisan leadership of the Technology Subcommittee for the care and sense of urgency with which they have approached the STTR reauthorization by listening to all points of view. We have a much better understanding of this program's promise about the possibilities for program improvement and about the concerns of the program's critics.

It is clear that the program has not been in operation long enough to prove itself. Hardly any of the grantees have had enough time to move from promising idea to commercial product or government supplier. It is equally clear that those who have participated in the program feel very good about it. Therefore, we are doing the right thing by extending the program.

The most disturbing aspects of the hearings on this program is the difficulty with countering Scott Wallsten's assertion that STTR and SBIR are paying for research that would have been done otherwise.

Because of the lack of available information, we were left with a record that neither proves nor disproves this hypothesis. This is a situation that must be rectified by the Fullscale Program Review, prior to the next authorization of this program.

The amendment to be offered by Mr. Sensenbrenner and me, among other things, will bring the programs under the Government Performance and Results Act. It will require the participating agencies to develop performance measures for these programs, to collect information on the performance of grantees, and to analyze that performance in the light of program goals.

I am pleased with our Committee's work. I urge my colleagues to pass the amendment and to report the bill, as amended, for speedy consideration by the full House.

And, Mr. Chairman, I ask unanimous consent, in his absence, to submit a statement for the record for the Ranking Minority Member on the Technology Subcommittee, Mr. Gordon.

Chairman SENSENBRENNER. Without objection, and without objection, all members may submit opening statements for the record at this time.

[The prepared statements of Mrs. Morella and Mr. Gordon follow:]

**OPENING STATEMENT OF SUBCOMMITTEE ON TECHNOLOGY CHAIRWOMAN CONSTANCE A. MORELLA**

**Committee on Science Markup**
**of**
**H.R. 2429, a bill to reauthorize the Small Business Technology Transfer program.**

September 17, 1997

---

Last week, the Subcommittee on Technology favorably reported H.R. 2429, a bill which will reauthorize STTR through Fiscal Year 2000 at its current percentage set-aside.

The STTR program is a mechanism to unite high-tech small businesses with non-profit research institutions. It is an offshoot of the similar, but much larger SBIR program, which will top the 1 billion dollar mark for FY 1997. STTR is expected to issue over 60 million dollars in awards this fiscal year.

STTR differs from the SBIR program in that it requires a collaboration between businesses and research institutions, such as a university. Second, STTR allows the primary investigator to remain in the employment of the university. The SBIR program, on the other hand, allows for a collaboration, but does not allow the principle investigator to be in the employment of the research institution.

STTR is implemented in three phases. Phase I is a one-year award up to 100,000 dollars to research the scientific and commercial merit of the idea. Phase II is a two-year award up to 500,000 dollars and is used to develop the research done in Phase I. Both Phase I and Phase II awards are made on the basis of competitive, merit-based review by the awarding agency. Phase III is the commercialization or use of the product or service by the Federal government. No STTR dollars may be used for Phase III awards.

Today, we are considering the reauthorization of STTR and I would like to thank the Ranking Member of the Subcommittee, Mr. Gordon, as well as Mr. Bartlett and Mr. Davis for their support in bringing this bill to Full Committee. Noting the strong bi-partisan support this bill enjoys, I urge my colleagues to vote in favor of this legislation.

Statement

**Hon. Bart Gordon**

H.R. 2429, Reauthorize the Small Business Technology Transfer Program
Committee on Science
17 September 1997

I'll be very brief in my remarks this afternoon.

During the Technology Subcommittee's hearing on the STTR program we heard strong bipartisan support for this small business/university/government partnership.

This program has been very successful at linking the research capabilities of universities and national laboratories, with the business sense and drive of our Nation's small business community.

A number of amendments have been drafted to the original legislation and I would like to call the attention of my colleagues to one amendment in particular. From reviewing the STTR awards made during the past 3 years and during the hearing, I became concerned that the majority of awards are made to only five states.

Therefore, I suggested a provision that would require SBA to develop an outreach program to under represented states. Under represented states are defined as those which receive less than 20 awards during the prior two year period. During FY95 and FY96 only 8 states received more than 20 awards.

During the Subcommittee's hearing it seemed clear that other states have fully qualified small businesses, universities, and non-profit labs to enable them to compete successfully in the STTR program. However, in many states the program is not well-known nor does the business community know how to apply to the program. The goal of these provisions are to expand participation in the STTR program.

I want to thank Chairman Sensenbrenner and Ranking Member Brown for listening to my concerns and including these specific provisions in their substitute.

I urge my colleagues to support this important program.

Chairman SENSENBRENNER. We will now go to the amendments, and the first amendment is an amendment in the nature of the substitute authored by Mr. Brown and the Chair.

The clerk will report the amendment.

Ms. SCHWARTZ. Amendment in the nature of a substitute to H.R. 2429.

[The amendment roster and the text of the amendment follow:]

**COMMITTEE ON SCIENCE**

**FULL COMMITTEE MARKUP**

**September 17, 1997**

**AMENDMENT ROSTER**

**H.R. 2429, To reauthorize the Small Business Technology Transfer Program through fiscal year 2000**

--Motion to adopt the bill, as amended: Adopted by a voice vote.
--Motion to report the bill, as amended: Adopted by a voice vote.

| No. | Sponsor | Description | Results |
|---|---|---|---|
| 1. | Mr. Sensenbrenner & Mr. Brown | Amendment In The Nature Of A Substitute to H.R. 2249. | --Adopted by a voice vote. |
| | | | |

## AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 2429 OFFERED BY MR. SENSENBRENNER AND MR. BROWN OF CALIFORNIA

Strike all after the enacting clause and insert in lieu thereof the following:

1 **SECTION 1. AMENDMENTS.**

2 Section 9 of the Small Business Act (15 U.S.C. 638)
3 is amended—

4 (1) in subsection (b)(7), by inserting ", and the
5 Committee on Science" after "of the Senate";

6 (2) in subsection (e)(6)(B), by inserting "agen-
7 cy" after "to meet particular";

8 (3) in subsection (n)—

9 (A) by striking "and 1997" in paragraph
10 (1)(C) and inserting in lieu thereof "through
11 2000";

12 (B) by striking "or" at the end of para-
13 graph (2)(A); and

14 (C) by striking the period at the end of
15 paragraph (2)(B) and inserting in lieu thereof
16 "; or";

17 (4) in subsection (o)—

1 (A) by redesignating paragraphs (8)
2 through (11) as paragraphs (10) through (13),
3 respectively; and
4 (B) by inserting after paragraph (7) the
5 following new paragraphs:
6 "(8) include, as part of its annual performance
7 plan as required by section 1115(a) and (b) of title
8 31, United States Code, a section on ~~a description of~~ its STTR
9 program, and shall submit such section ~~description~~ to the
10 Committee on Small Business of the Senate, and the
11 Committee on Science and the Committee on Small
12 Business of the House of Representatives;
13 "(9) collect such data from awardees as is nec-
14 essary to assess STTR program outputs and out-
15 comes;"; and
16 (5) by adding at the end the following new sub-
17 sections:
18 "(s) OUTREACH PROGRAM.—Within 90 days after
19 the date of the enactment of this subsection, the Adminis-
20 trator shall develop and begin implementation of an out-
21 reach program to encourage increased participation in the
22 STTR program of small business concerns, universities,
23 and other research institutions located in States in which
24 the total number of STTR awards for the previous 2 fiscal
25 years is less than 20.

1 "(t) INCLUSION IN STRATEGIC PLANS.—Program in-
2 formation relating to the SBIR and STTR programs shall
3 be included by Federal agencies in any updates and revi-
4 sions required under section 306(b) of title 5, United
5 States Code.".

Chairman SENSENBRENNER. Without objection, the amendment is considered as read and open for amendment at any point, and I recognize myself to explain the amendment.

This amendment is a bipartisan effort that has been drafted with the collaboration of the Committee on Small Business. The amendment fine tunes the STTR program by addressing concerns that have been raised by the participating small business community and federal agencies.

The amendment does not change the set-aside percentage for STTR. It authorizes 0.15 percent set aside through Fiscal Year 2000.

The amendment makes the following changes to the program:

First, it will add the Committee on Science to the list of recipients of the annual SBA report on STTR and SBIR. The Science Committee shares jurisdiction over these programs, and therefore, it is only logical that we should be included as a recipient of the report.

Second, the amendment clarifies that a Phase II award should meet agency program needs.

Third, the amendment ensures that STTR is included in the agency reviews conducted under the Results Act. The amendment directs the agencies to include STTR in their annual performance plan, as described in Sections 1115(a) and (b) of the U.S. Code.

The section of the plan that includes STTR will then be submitted annually to the Committees on Science and Small Business in the House and the Committee on Small Business in the Senate.

The STTR section will establish performance goals, performance indicators, and will measure those goals and will provide a basis to compare the results of the STTR with a goal set out in the plan.

I think it has been quite clear in the hearing held by the Subcommittee on Technology that no one was quite sure how you measure the success of STTR. This plan will at least mandate that STTR goals be outlined so that relative evaluations can be made on its performance.

The amendment also requires the STTR and SBIR programs be included in each of the strategic plan updates as required by the Results Act.

In a similar vein, the amendment requires participating federal agencies to collect data from awardees that will give agencies, the SBA and the Congress the ability to better assess STTR's effectiveness.

Fourth, and finally, the amendment requires the SBA to conduct an outreach program for small businesses and universities which receive less than 20 STTR awards every 2 years. The purpose of the outreach program is to encourage small business to apply for grants under the program.

Currently, there is a significant regional disparity in the awarding of STTR grants. I oppose the notion of mandating regional diversity in the program since such a mandate could result in a regional quota system and potentially impact the quality of the STTR awards.

However, conducting an outreach program to increase the number of applicants from States which have been historically underrepresented, can only strengthen the program.

The amendment does not cap the number of STTR grants a single business can receive, nor does it alter the Phase I process. It has been cleared by the Minority and Majority of both our Committee and the Small Business Committee, and it should be without controversy.

And I yield back the balance of my time.

Further discussion on the amendment in the nature of a substitute.

Hearing none, the Chair will put the question.

All those in favor will signify by saying, "Aye."

[Chorus of ayes.]

Opposed, no?

[No response.]

The ayes appear to have it. The ayes have it and the amendment is adopted.

Are there further amendments?

If not, the Chair will recognize the gentleman from California to make a motion.

Mr. BROWN of California. Mr. Chairman, I move that the Committee pass the bill and give the appropriate instructions to the staff for it to be brought to the Floor as quickly as possible.

Chairman SENSENBRENNER. Okay. The Chair notes the presence of a reporting quorum. The question is on reporting the bill favorably to the House of Representatives.

All those in favor will signify by saying, "Aye."

[Chorus of ayes.]

Those opposed, no.

[No response.]

The ayes appear to have it. The ayes have it, and without objection, the staff is requested to prepare the legislative report, to make technical and conforming amendments, and that the Chair take all necessary steps to bring the bill before the House for consideration.

Furthermore, without objection, members have 2 subsequent calendar days in which to submit supplemental, minority or additional views on the measure, and finally, without objection, pursuant to Clause 1 of Rule 20 of the Rules of the House of Representatives, the Committee authorizes the Chairman to offer such motions as may be necessary in the House in order to go to conference with the Senate on the bill, H.R. 2429.

Without objection, so ordered.

[Whereupon, at 2:19 p.m., the Committee proceeded to further business.]

JAMES M. TALENT, MISSOURI
CHAIRMAN

JOHN J. LAFALCE, NEW YORK

# Congress of the United States
## House of Representatives
105th Congress
## Committee on Small Business
2361 Rayburn House Office Building
Washington, DC 20515-6315

September 22, 1997

Hon. F. James Sensenbrenner, Jr.
Chairman
Committee on Science
Rayburn House Office Building
Washington, DC

Dear Mr. Chairman:

This letter responds to your request that the Committee on Small Business waive its primary jurisdiction over H.R. 2429, a bill to reauthorize the Small Business Technology Transfer Program through fiscal year 2000, as introduced on September 8, 1997. After reviewing this legislation and the detailed legislative history created by your Committee, I have agreed to waive the jurisdiction of the Committee on Small Business over this legislation.

H.R. 2429 would reauthorize for three years (through fiscal year 2000) the Pilot Small Business Technology Transfer (STTR) Program, which was originally established by Title II of Public Law 102-564, the "Small Business Research and Development Enhancement Act of 1992." Building upon the established model of the Small Business Innovation Research (SBIR) Program, the Pilot STTR Program provides the statutory basis for structured collaborations between small technology entrepreneurs and non-profit research institutions, such as universities or Federal-funded Research and Development Centers (FFRDCs), to foster commercialization of the results of Federally sponsored research.

As you know, House Rule X, Establishment and Jurisdiction of Standing Committees, grants the Committee on Small Business jurisdiction over this small business program. Our waiver of jurisdiction over H.R. 2429 is not designed to limit our jurisdiction over any future consideration of legislation which might address the Pilot STTR Program or the SBIR Program.

Thank you and your staff for your dedication and hard work in this area. I look forward to working with you on this and other issues throughout the 105th Congress.

Sincerely,

Jim Talent

James M. Talent
Chairman