

103^D CONGRESS
1ST SESSION

S. 1025

To promote technology transfer to small manufacturers by providing for engineering students to work as interns with small manufacturers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 25 (legislative day, APRIL 19), 1993

Mr. CONRAD (for himself, Mr. BAUCUS, Mr. HARKIN, and Mr. FORD) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To promote technology transfer to small manufacturers by providing for engineering students to work as interns with small manufacturers, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Small Manufacturers’
5 Renewal and Training Act of 1993”.

6 **SEC. 2. FINDINGS.**

7 The Congress finds that—

8 (1) a productive manufacturing sector is essen-
9 tial to a competitive national economy;

1 (2) small businesses are responsible for most
2 new job creation in the United States;

3 (3) small manufacturers play a critical role in
4 maintaining the vitality of the manufacturing sector;

5 (4) small manufacturers often do not use the
6 most modern production technology;

7 (5) the barriers to the adoption of modern tech-
8 nology by small manufacturers include—

9 (A) the lack of readily available sources of
10 information about such technology;

11 (B) the perception that such technology is
12 too costly; and

13 (C) the difficulty in attracting talented en-
14 gineers to work for small manufacturers; and

15 (6) the education of engineering students often
16 does not expose such students to current industrial
17 practices, especially those of small manufacturers.

18 **SEC. 3. PURPOSE.**

19 It is the purpose of this Act to give undergraduate
20 students of engineering the opportunity to work with small
21 manufacturing companies in order to—

22 (1) bring knowledge of modern engineering
23 practices to small manufacturers, increase the rec-
24 ognition by small manufacturers of the importance

1 of these practices, and promote the adoption of mod-
2 ern engineering practices by small manufacturers;

3 (2) expose engineering students to the special
4 environment and needs of small manufacturers, and
5 increase the number of engineers who choose to
6 work for small manufacturers;

7 (3) encourage engineering colleges to devote
8 greater attention to the needs of small manufactur-
9 ers; and

10 (4) promote the development and expansion of
11 a community of technological entrepreneurs in the
12 small manufacturing sector.

13 **SEC. 4. DEFINITIONS.**

14 For the purposes of this Act—

15 (1) the term “cooperative education program”
16 means a program of cooperative education as such
17 term is defined in section 801(b) of the Higher Edu-
18 cation Act of 1965 that is accredited by a nationally
19 recognized accrediting agency or association;

20 (2) the term “Director” means the Director of
21 the National Institute of Standards and Technology;

22 (3) the term “engineering student” means a
23 student enrolled in a program (that is accredited by
24 a nationally recognized accrediting agency or asso-
25 ciation) at a college or university leading to a bach-

1 elor of science degree in engineering, mathematics or
2 science, or an equivalent degree;

3 (4) the term “host company” means a small
4 manufacturer that hosts an intern under this Act;

5 (5) the term “Secretary” means the Secretary
6 of Commerce;

7 (6) the term “small manufacturer” means a
8 company employing 500 or fewer employees engaged
9 in manufacturing, mining, construction, transpor-
10 tation, communication, or public utilities as defined
11 in the Standard Industrial Classification Manual of
12 1987;

13 (7) the term “underrepresented group” means
14 a group of individuals who have been historically
15 underrepresented in the engineering professions, in-
16 cluding women, blacks, hispanics, and native Ameri-
17 cans; and

18 (8) the term “United States” means each of the
19 50 States, the District of Columbia, the Common-
20 wealth of Puerto Rico, the United States Virgin Is-
21 lands, Guam, American Samoa, the Commonwealth
22 of Northern Mariana Islands, the Republic of the
23 Marshal Islands, the Federated State of Micronesia,
24 and the Republic of Palau.

1 **SEC. 5. ESTABLISHMENT OF THE SMART PROGRAM.**

2 (a) SMART PROGRAM ESTABLISHED.—

3 (1) IN GENERAL.—The Director shall carry out
4 a program of awarding grants to manufacturing out-
5 reach centers to enable such centers to carry out in-
6 ternship activities in accordance with this Act. Such
7 program shall be known as the “Small Manufactur-
8 ers Renewal and Training Program” (hereafter in
9 this Act referred to as the “SMART Program”).

10 (2) ELIGIBLE ENTITIES.—For the purpose of
11 this Act the term “manufacturing outreach center”
12 means an organization engaged in technology or
13 manufacturing extension activities, including a Fed-
14 eral, State, or local government agency or labora-
15 tory, a small business development center, an office
16 within a college or university, a professional society,
17 a worker organization, an industrial organization, or
18 a for-profit or nonprofit organization.

19 (b) GRANT DURATION AND RENEWAL.—

20 (1) GRANT DURATION.—Grants under this Act
21 shall be awarded on a multiyear basis for not more
22 than 3 years.

23 (2) RENEWAL.—Grants under this Act may be
24 renewed on a multiyear basis for not more than 5
25 years per renewal.

1 (c) PRIORITY.—In awarding grants under this Act
2 the Director shall give a priority to a grant proposal de-
3 scribing internships that place engineering students with
4 small manufacturers that employ 100 or fewer individuals.

5 (d) FUNDING LIMITATIONS.—

6 (1) OUTREACH.—Not more than 35 percent of
7 the grant funds awarded to a manufacturing out-
8 reach center in the first 3 years that such center re-
9 ceives assistance under this Act shall be expended
10 for outreach activities to solicit the participation of
11 small manufacturers in the SMART Program. In
12 subsequent years such percentage may be altered for
13 grants that are renewed, subject to approval by the
14 Secretary.

15 (2) MINIMUM.—The Director shall award
16 grants under this Act so that a manufacturing out-
17 reach center or centers in each State receives a
18 grant equal to 1 percent of the amount appropriated
19 pursuant to section 11 or \$200,000, whichever is
20 less.

21 **SEC. 6. FEDERAL ROLE.**

22 (a) ROLE OF THE DIRECTOR.—

23 (1) IN GENERAL.—In carrying out the SMART
24 Program the Director shall—

1 (A) solicit and evaluate grant proposals
2 from manufacturing outreach centers;

3 (B) collect information regarding the per-
4 formance of the SMART Program, including an
5 annual report from each manufacturing out-
6 reach center in accordance with section 7(a)(5);
7 and

8 (C) coordinate the activities of the SMART
9 Program with other programs of the Federal
10 Government for manufacturing and technology
11 extension, as appropriate.

12 (2) ADMINISTRATIVE PROVISIONS.—The Direc-
13 tor—

14 (A) is authorized to hire such staff as the
15 Director determines necessary to administer the
16 SMART Program; and

17 (B) shall use not more than \$500,000 or
18 5 percent of the funds appropriated pursuant to
19 the authority of section 11, whichever is less,
20 for the administrative expenses associated with
21 the SMART Program.

22 (b) ROLE OF SECRETARY.—

23 (1) ESTABLISHMENT OF GRANT PROPOSAL CRI-
24 TERIA; PREFERENCES.—The Secretary shall estab-
25 lish criteria for evaluating proposals for grants

1 under this Act, which criteria shall include a pref-
2 erence for proposals that describe programs which—

3 (A) bring together organizations with dem-

4 onstrated commitments to—

5 (i) outreach to small manufacturers;

6 and

7 (ii) cooperative education;

8 (B) serve regions with low economic

9 growth and regions where the manufacturing

10 sector is weak; and

11 (C) in the case of renewal grants, have

12 demonstrated success in placing interns with

13 small manufacturers, particularly small manu-

14 facturers that employ 100 or fewer employees.

15 (2) EVALUATION.—The Secretary shall provide

16 a report to Congress evaluating the SMART Pro-

17 gram 3 years after the date of enactment of this Act

18 and at 5-year intervals thereafter.

19 **SEC. 7. ROLE OF MANUFACTURING OUTREACH CENTERS.**

20 (a) IN GENERAL.—Each manufacturing outreach

21 center receiving a grant under this Act shall use such

22 grant funds—

23 (1) to support outreach activities that solicit the

24 participation of small manufacturers in the SMART

1 Program and determine the eligibility of small man-
2 ufacturers to serve as host companies;

3 (2) to solicit and select engineering students to
4 participate in the SMART Program on the basis of
5 the ability and interest of each student in working
6 with a small manufacturer;

7 (3) to assist in placing selected engineering stu-
8 dents with host companies as interns;

9 (4) to carry out an internship program that—

10 (A) sponsors engineering students for em-
11 ployment as interns with host companies;

12 (B) provides funding to host companies—

13 (i) that is used to supplement the
14 wage of an intern by paying the Federal
15 share of such intern's wages, which Fed-
16 eral share shall not exceed the amount
17 paid to an employee earning the Federal
18 minimum wage for a period of not less
19 than 3 months and not more than 6
20 months;

21 (ii) the total amount of which does
22 not exceed the amount paid to an employee
23 earning the Federal minimum wage during
24 the 24-month period preceding the receipt
25 of such grant; and

1 (iii) that is used to supplement the
2 wage of an intern, in accordance with this
3 subparagraph, who has completed 3 years
4 of study in the standard curriculum for a
5 bachelor of science degree in engineering,
6 mathematics or science, or an equivalent
7 degree;

8 (5) to collect information from interns, from
9 host companies, and from other sources, and use
10 such information to provide annual reports to the
11 Director in accordance with section 6(a)(1)(B); and

12 (6) to provide such training and information to
13 interns regarding modern manufacturing tech-
14 nologies as the Director determines appropriate.

15 (b) PLACEMENT PRIORITY.—Each manufacturing
16 outreach center receiving a grant under this Act shall give
17 a preference to placing interns with host companies that
18 employ 100 or fewer employees.

19 (c) PROPOSALS REQUIRED.—Each manufacturing
20 outreach center desiring a grant under this Act shall sub-
21 mit a proposal to the Secretary at such time, in such man-
22 ner, and accompanied by such information, as the Sec-
23 retary may reasonably require. Each such proposal shall
24 describe the activities and services for which assistance is
25 sought.

1 (d) COOPERATIVE EDUCATION PROGRAM ARRANGE-
2 MENTS.—A manufacturing outreach center may make ar-
3 rangements with cooperative education programs to pro-
4 vide an engineering student with cooperative education
5 work experience pursuant to this Act under which the en-
6 gineering student—

7 (1) performs the outreach activities described in
8 subsection (a)(1);

9 (2) participates in an internship program in ac-
10 cordance with subsection (a)(4); and

11 (3) may perform technology extension services
12 for the manufacturing outreach center.

13 **SEC. 8. ROLE OF HOST COMPANIES.**

14 A host company—

15 (1) shall only be eligible to host interns in man-
16 ufacturing operations in the United States;

17 (2) shall provide such employment-related bene-
18 fits to interns under this Act as are provided to full-
19 time employees of the host company, except that
20 health insurance may be provided by the college or
21 university in which the intern is enrolled;

22 (3) shall use the funds provided by a manufac-
23 turing outreach center under this Act only to pay
24 the wages of interns, and may supplement those
25 wages;

1 (4) shall be eligible to receive funds from a
2 manufacturing outreach center only if such host
3 company has not participated in a cooperative edu-
4 cation program;

5 (5) shall provide to the manufacturing outreach
6 center information on wages and benefits provided to
7 interns, including the expenditure of any funds pro-
8 vided by such center; and

9 (6) shall designate a supervisor for each intern,
10 who shall—

11 (A) oversee the employment of that intern;

12 (B) provide to such center a brief evalua-
13 tion of the performance of that intern; and

14 (C) provide to such center a brief evalua-
15 tion of the value of the host company's partici-
16 pation in the SMART Program.

17 **SEC. 9. ROLE OF INTERNS.**

18 Each intern shall—

19 (1) work as an employee for the host company;
20 and

21 (2) provide a brief evaluation of the internship
22 to the manufacturing outreach center.

1 **SEC. 10. UNDERREPRESENTED GROUPS.**

2 The Director shall make every effort to solicit for par-
3 ticipation in the SMART Program qualified engineering
4 students from underrepresented groups by—

5 (1) soliciting the participation of traditionally
6 minority and women's engineering colleges and uni-
7 versities; and

8 (2) encouraging all manufacturing outreach
9 centers to solicit the participation of qualified engi-
10 neering, mathematics or science students from
11 underrepresented groups.

12 **SEC. 11. AUTHORIZATION.**

13 There are authorized to be appropriated \$10,000,000
14 for fiscal year 1994, and \$25,000,000 for each of the fis-
15 cal years 1995, 1996, 1997, and 1998, to carry out this
16 Act.

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