Sec.

2192. Improvement of education in technical fields: general authority regarding education in science, mathematics, and engineering.

[2192a. Renumbered.]

2192b. Program on enhancement of preparation of dependents of members of armed forces for careers in science, technology, engineering, and mathematics.

2193. Improvement of education in technical fields: grants for higher education in science and mathematics.

2193a. Improvement of education in technical fields:
 general authority for support of elementary
 and secondary education in science and
 mathematics.

2193b. Improvement of education in technical fields:
 program for support of elementary and sec ondary education in science, technology,
 engineering, art and design, and mathematics.

2194. Education partnerships.

2195. Department of Defense cooperative education programs.

[2196, 2197, Renumbered.]

2198. Management training program in Japanese language and culture.

2199. Definitions.

Editorial Notes

AMENDMENTS

2021—Pub. L. 117–81, div. A, title XVII, §1701(p)(2)(B), (w)(2), Dec. 27, 2021, 135 Stat. 2148, 2154, struck out items 2192a "Science, Mathematics, and Research for Transformation (SMART) Defense Education Program", 2196 "Manufacturing engineering education: grant program", and 2197 "Manufacturing experts in the classroom".

Pub. L. 116–283, div. A, title V, §591(b), Jan. 1, 2021, 134 Stat. 3665, added item 2193b and struck out former item 2193b "Improvement of education in technical fields: program for support of elementary and secondary education in science, mathematics, and technology".

2019—Pub. L. 116–92, div. A, title II, §211(b), Dec. 20, 2019, 133 Stat. 1255, added item 2192b.

2006—Pub. L. 109–163, div. A, title XI, 1104(d)(2), Jan. 6, 2006, 119 Stat. 3450, added item 2192a.

1999—Pub. L. 106-65, div. A, title V, §580(d)(3), Oct. 5, 1999, 113 Stat. 633, added items 2192, 2193, 2193a, and 2193b and struck out former items 2192 "Science, mathematics, and engineering education" and 2193 "Science and mathematics education improvement program".

1992—Pub. L. 102–484, div. D, title XLII, $\S4238(b)(2)$, Oct. 23, 1992, 106 Stat. 2694, substituted "experts" for "managers" in item 2197.

1991—Pub. L. 102–190, div. A, title VIII, \$\$825(a)(2), 828(b), Dec. 5, 1991, 105 Stat. 1442, 1444, struck out item 2196 "Definition" and added items 2196 to 2199.

1990—Pub. L. 101–510, div. A, title II, §247(a)(2)(A), (C), Nov. 5, 1990, 104 Stat. 1523, substituted "SUPPORT OF SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION" for "NATIONAL DEFENSE SCIENCE AND ENGINEERING GRADUATE FELLOWSHIPS" in chapter heading and added items 2192 to 2196.

Statutory Notes and Related Subsidiaries

STUDY REGARDING ESTABLISHMENT WITHIN THE DE-PARTMENT OF DEFENSE OF A DESIGNATED CENTRAL PROGRAM OFFICE TO OVERSEE ACADEMIC ENGAGE-MENT PROGRAMS RELATING TO ESTABLISHING CYBER TALENT ACROSS THE DEPARTMENT

Pub. L. 117–81, div. A, title XV, §1532, Dec. 27, 2021, 135 Stat. 2052, provided that:

"(a) IN GENERAL.—Not later than 270 days after the date of the enactment of this Act [Dec. 27, 2021], the Secretary of Defense shall submit to the congressional defense committees [Committees on Armed Services

and Appropriations of the Senate and the House of Representatives] a study regarding the need, feasibility, and advisability of establishing within the Department of Defense a designated central program office responsible for overseeing covered academic engagement programs across the Department. Such study shall examine the following:

"(1) Whether the Department's cyber-focused academic engagement needs more coherence, additional coordination, or improved management, and whether a designated central program office would provide such benefits.

"(2) How such a designated central program office would coordinate and harmonize Department programs relating to covered academic engagement programs

"(3) Metrics such office would use to measure the effectiveness of covered academic engagement programs.

"(4) Whether such an office is necessary to serve as an identifiable entry point to the Department by the academic community.

"(5) Whether the cyber discipline with respect to academic engagement should be treated separately from other STEM fields.

"(6) How such an office would interact with the consortium universities (established pursuant to section 1659 of the National Defense Authorization Act for Fiscal Year 2020 (10 U.S.C. 391 note)) to assist the Secretary on cybersecurity matters.

"(7) Whether the establishment of such an office would have an estimated net savings for the Department.

"(b) CONSULTATION.—In conducting the study required under subsection (a), the Secretary of Defense shall consult with and solicit recommendations from academic institutions and stakeholders, including primary, secondary, and post-secondary educational institutions.

'(c) Determination.—

"(1) IN GENERAL.—Upon completion of the study required under subsection (a), the Secretary of Defense shall make a determination regarding the establishment within the Department of Defense of a designated central program office responsible for overseeing covered academic engagement programs across the Department.

"(2) ÎMPLEMENTATION.—If the Secretary of Defense makes an affirmative determination in accordance with paragraph (1), the Secretary shall establish within the Department of Defense a designated central program office responsible for overseeing covered academic programs across the Department. Not later than 180 days after such a determination, the Secretary shall promulgate such rules and regulations as are necessary to so establish such an office.

"(3) NEGATIVE DETERMINATION.—If the Secretary of Defense makes a negative determination in accordance with paragraph (1), the Secretary shall submit to the congressional defense committees notice of such determination, together with a justification for such determination. Such justification shall include

"(A) how the Secretary intends to coordinate and harmonize covered academic engagement programs; and

"(B) measures to determine effectiveness of covered academic engagement programs absent a designated central program office responsible for overseeing covered academic programs across the Department.

"(d) REPORT.—Not later than 270 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees a report that updates the matters required for inclusion in the reports required pursuant to section 1649 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116-92) [133 Stat. 1758] and section 1726(c) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283) [134 Stat. 4116].

- "(e) Definition.—In this section, the term 'covered academic engagement program' means each of the following:
 - "(1) Primary, secondary, or post-secondary education programs with a cyber focus.
 - "(2) Recruitment or retention programs for Department of Defense cyberspace personnel, including scholarship programs.
 - "(3) Academic partnerships focused on establishing cyber talent.
 - "(4) Cyber enrichment programs."

ENCOURAGEMENT OF CONTRACTOR SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) PROGRAMS

Pub. L. 116-283, div. A, title II, §245(a)-(d), Jan. 1, 2021, 134 Stat. 3489, 3490, provided that:

134 Stat. 3489, 3490, provided that:
"(a) IN GENERAL.—The Under Secretary of Defense for Research and Engineering, in coordination with the Under Secretary of Defense for Acquisition and Sustainment, shall develop programs and incentives to ensure that Department of Defense contractors take appropriate steps to—

"(1) enhance undergraduate, graduate, and doctoral programs in science, technology, engineering, and mathematics (in this section referred to as 'STEM');

"(2) make investments, such as programming and curriculum development, in STEM programs within alementary schools and secondary schools:

elementary schools and secondary schools; "(3) encourage employees to volunteer in elementary schools and secondary schools, including schools that the Secretary of Defense determines serve high numbers or percentages of students from low-income families or that serve significant populations of military dependents, in order to enhance STEM education and programs;

"(4) establish partnerships with appropriate entities, including institutions of higher education for the purpose of training students in technical dis-

ciplines;
"(5) make personnel available to advise and assist
in STEM educational activities aligned with functions of the Department of Defense;

"(6) award scholarships and fellowships, and establish work-based learning programs in scientific disciplines;

"(7) conduct recruitment activities to enhance the diversity of the STEM workforce; or

"(8) make internships available to students of secondary schools, undergraduate, graduate, and doctoral programs in STEM disciplines.

"(b) AWARD PROGRAM.—The Secretary of Defense shall establish procedures to recognize defense industry contractors that demonstrate excellence in supporting STEM education, partnerships, programming, and other activities to enhance participation in STEM fields.

"(c) IMPLEMENTATION.—Not later than 270 days after the date of the enactment of this Act [Jan. 1, 2021], the Under Secretary of Defense for Research and Engineering shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and House of Representatives] a report on the steps taken to implement the requirements of this section.

"(d) DEFINITIONS.—In this section:

"(1) The terms 'elementary school' and 'secondary school' have the meanings given those terms in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

"(2) The term 'institution of higher education' has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)."

Pub. L. 112–81, div. A, title VIII, § 862, Dec. 31, 2011, 125 Stat. 1521, which related to the encouragement of contractor science, technology, engineering, and math (STEM) programs, was repealed by Pub. L. 116–283, div. A, title II, § 245(e), Jan. 1, 2021, 134 Stat. 3490.

§2191. Graduate fellowships

(a) The Secretary of Defense shall prescribe regulations providing for the award of fellow-

ships to citizens and nationals of the United States who agree to pursue graduate degrees in science, engineering, or other fields of study designated by the Secretary to be of priority interest to the Department of Defense.

(b) A fellowship awarded pursuant to regulations prescribed under subsection (a) shall be known as a "National Defense Science and Engineering Graduate Fellowship".

- (c) National Defense Science and Engineering Graduate Fellowships shall be awarded solely on the basis of academic ability. The Secretary shall take all appropriate actions to encourage applications for such fellowships of persons who are members of groups (including minority groups, women, and disabled persons) which historically have been underrepresented in science and technology fields. Recipients shall be selected on the basis of a nationwide competition. The award of a fellowship under this section may not be predicated on the geographic region in which the recipient lives or the geographic region in which the recipient will pursue an advanced degree.
- (d) The regulations prescribed under this section shall include—
 - (1) the criteria for award of fellowships;
 - (2) the procedures for selecting recipients;
 - (3) the basis for determining the amount of a fellowship; and
- (4) the maximum amount that may be awarded to an individual during an academic year.

(Added Pub. L. 101-189, div. A, title VIII, §843(d)(1), Nov. 29, 1989, 103 Stat. 1516.)

§ 2192. Improvement of education in technical fields: general authority regarding education in science, mathematics, and engineering

- (a) The Secretary of Defense, in consultation with the Secretary of Education, shall, on a continuing basis—
 - (1) identify actions which the Department of Defense may take to improve education in the scientific, mathematics, and engineering skills necessary to meet the long-term national defense needs of the United States for personnel proficient in such skills; and
 - (2) establish and conduct programs to carry out such actions.
- (b)(1) In furtherance of the authority of the Secretary of Defense under any provision of this chapter or any other provision of law to support educational programs in science, mathematics, engineering, and technology, the Secretary of Defense may, unless otherwise specified in such provision—
 - (A) enter into contracts and cooperative agreements with eligible entities:
 - (B) make grants of financial assistance to eligible entities;
 - (C) provide cash awards and other items to eligible entities;
 - (D) accept voluntary services from eligible entities; and
 - (E) support national competition judging, other educational event activities, and associated award ceremonies in connection with these educational programs.