A, title XVIII, §1843(b)(2), Jan. 1, 2021, 134 Stat. 4245; Pub. L. 117-81, div. A, title XVII, §1701(u)(4)(A), Dec. 27, 2021, 135 Stat. 2153.)

Editorial Notes

Amendments

2021—Pub. L. 116-283, 1844(b), as added by Pub. L. 117-81, 17-81, 1701(u)(5)(B), renumbered section 2360 of this title as this section.

Pub. L. 116–283, \$1843(b)(2), which directed the renumbering of section 2360 of this title as section 4112 instead of this section, was repealed by Pub. L. 117–81, \$1701(u)(4)(A), effective as if included therein, so that such renumbering was no longer directed.

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE OF 2021 AMENDMENT

Amendment by Pub. L. 117-81 applicable as if included in the enactment of title XVIII of Pub. L. 116-283 as enacted, see section 1701(a)(2) of Pub. L. 117-81, set out in a note preceding section 3001 of this title and note below.

Amendment by Pub. L. 116-283 effective Jan. 1, 2022, with additional provisions for delayed implementation and applicability of existing law, see section 1801(d) of Pub. L. 116-283, set out as a note preceding section 3001 of this title.

§4144. Research and educational programs and activities: historically black colleges and universities and minority-serving institutions of higher education

(a) PROGRAM ESTABLISHED.—(1) The Secretary of Defense, acting through the Under Secretary of Defense for Research and Engineering and the Secretary of each military department, shall carry out a program to provide assistance to covered educational institutions to assist the Department in defense-related research, development, testing, and evaluation activities.

(2) The Secretary of Defense may not delegate or transfer to an individual outside the Office of the Secretary of Defense the authority regarding the programming or budgeting of the program established by this section that is carried out by the Under Secretary of Defense for Research and Engineering.

(b) PROGRAM OBJECTIVE.—The objective of the program established by subsection (a)(1) is to enhance defense-related research and education at covered educational institutions. Such objective shall be accomplished through initiatives designed to—

(1) enhance the research and educational capabilities of such institutions in areas of importance to national defense, as determined by the Secretary;

(2) encourage the participation of such institutions in the research, development, testing, and evaluation programs and activities of the Department of Defense;

(3) increase the number of graduates from such institutions engaged in disciplines important to the national security functions of the Department of Defense, as determined by the Secretary; and

(4) encourage research and educational collaborations between such institutions and other institutions of higher education, Government defense organizations, and the defense industry. (c) ASSISTANCE PROVIDED.—Under the program established by subsection (a)(1), the Secretary of Defense may provide covered educational institutions with funding or technical assistance, including any of the following:

(1) Support for research, development, testing, evaluation, or educational enhancements in areas important to national defense through the competitive awarding of grants, cooperative agreements, contracts, scholarships, fellowships, or the acquisition of research equipment or instrumentation.

(2) Support to assist in the attraction and retention of faculty in scientific disciplines important to the national security functions of the Department of Defense.

(3) Establishing partnerships between such institutions and defense laboratories, Government defense organizations, the defense industry, and other institutions of higher education in research, development, testing, and evaluation in areas important to the national security functions of the Department of Defense.

(4) Other such non-monetary assistance as the Secretary finds appropriate to enhance defense-related research, development, testing, and evaluation activities at such institutions.

(d) INCENTIVES.—(1) The Secretary of Defense may develop incentives to encourage research and educational collaborations between covered educational institutions and other institutions of higher education.

(2) The Secretary of Defense shall establish goals and incentives to encourage federally funded research and development centers, science and technology reinvention laboratories, and University Affiliated Research Centers funded by the Department of Defense—

(A) to assess the capacity of covered educational institutions to address the research and development needs of the Department through partnerships and collaborations; and

(B) if appropriate, to enter into partnerships and collaborations with such institutions.

(e) CRITERIA FOR FUNDING.—The Secretary of Defense may establish procedures under which the Secretary may limit funding under this section to institutions that have not otherwise received a significant amount of funding from the Department of Defense for research, development, testing, and evaluation programs supporting the national security functions of the Department.

(f) DEFINITION OF COVERED EDUCATIONAL INSTI-TUTION.—In this section the term "covered educational institution" means—

(1) an institution of higher education eligible for assistance under title III or V of the Higher Education Act of 1965 (20 U.S.C. 1051 et seq.); or

(2) an accredited postsecondary minority institution.

(Added Pub. L. 111-84, div. A, title II, §252(a), Oct. 28, 2009, 123 Stat. 2242, §2362; amended Pub. L. 111-383, div. A, title X, §1075(b)(32), Jan. 7, 2011, 124 Stat. 4370; Pub. L. 112-81, div. A, title II, §219, Dec. 31, 2011, 125 Stat. 1335; Pub. L. 112-239, div. A, title X, §1076(c)(2)(A)(i), Jan. 2, 2013, 126 Stat. 1949; Pub. L. 115-232, div. A, title II, §245, Aug. 13, 2018, 132 Stat. 1700; Pub. L. 116-92, div. A, title II, §214, Dec. 20, 2019, 133 Stat. 1257; renumbered §4144, Pub. L. 116–283, div. A, title XVIII, §1844(b), as added Pub. L. 117–81, div. A, title XVII, §1701(u)(5)(B), Dec. 27, 2021, 135 Stat. 2154; Pub. L. 116–283, div. A, title XVIII, §1838(b), Jan. 1, 2021, 134 Stat. 4242; Pub. L. 117–81, div. A, title II, §220(c), title XVII, §1701(v)(2)(A), Dec. 27, 2021, 135 Stat. 1599, 2154.)

Editorial Notes

References in Text

The Higher Education Act of 1965, referred to in subsec. (f)(1), is Pub. L. 89–329, Nov. 8, 1965, 79 Stat. 1219. Titles III and V of the Act are classified generally to subchapters III (§1051 et seq.) and V (§1101 et seq.), respectively, of chapter 28 of Title 20, Education. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of Title 20 and Tables.

Amendments

2021—Pub. L. 116–283, 1844(b), as added by Pub. L. 117–81, 17-81, 1701(u)(5)(B), renumbered section 2362 of this title as this section.

Pub. L. 116-283, \$1838(b), which directed renumbering section 2362 of this title as section 3904 instead of this section, was amended by Pub. L. 117-81, \$1701(v)(2)(A), effective as if included therein, so that such renumbering was no longer directed.

Subsec. (a). Pub. L. 117–81, 220(c)(1), substituted "Under Secretary" for "Assistant Secretary" in pars. (1) and (2).

Subsec. (d). Pub. L. 117–81, §220(c)(2), designated existing provisions as par. (1) and added par. (2).

2019—Subsecs. (d) to (f). Pub. L. 116-92 added subsec. (d) and redesignated former subsecs. (d) and (e) as (e) and (f), respectively.

2018—Subsec. (d). Pub. L. 115–232 substituted "Criteria" for "Priority" in heading and "limit" for "give priority in providing" in text.

2013—Subsec. (a)(1). Pub L. 112-239 substituted "Assistant Secretary of Defense for Research and Engineering" for "Director of Defense Research and Engineering".

2011—Subsec. (a). Pub. L. 112–81, §219(a), designated existing provisions as par. (1) and added par. (2).

Subsec. (b). Pub. L. 112–81, \$219(b)(1), substituted "established by subsection (a)(1)" for "established under subsection (a)" in introductory provisions.

subsection (a)" in introductory provisions. Subsec. (c). Pub. L. 112-81, §219(b)(2), substituted "subsection (a)(1)" for "subsection (a)" in introductory provisions.

Subsec. (e)(1). Pub. L. 111-383 substituted "title III or V" for "title III or IV".

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE OF 2021 AMENDMENT

Amendment by Pub. L. 117-81 applicable as if included in the enactment of title XVIII of Pub. L. 116-283 as enacted, see section 1701(a)(2) of Pub. L. 117-81, set out in a note preceding section 3001 of this title and Effective Date note below.

Amendment by Pub. L. 116-283 effective Jan. 1, 2022, with additional provisions for delayed implementation and applicability of existing law, see section 1801(d) of Pub. L. 116-283, set out as a note preceding section 3001 of this title.

DEFENSE RESEARCH AND ENGINEERING ACTIVITIES AT MINORITY INSTITUTIONS

Pub. L. 117-81, div. A, title II, §220(b), (d), Dec. 27, 2021, 135 Stat. 1598, 1599, provided that:

"(b) ACTIVITIES TO SUPPORT THE RESEARCH AND ENGI-NEERING CAPACITY OF HISTORICALLY BLACK COLLEGES AND UNIVERSITIES AND MINORITY INSTITUTIONS.— "(1) IN GENERAL.—Subject to the availability of appropriations, the Secretary [of Defense] may establish a program to award contracts, grants, or other agreements on a competitive basis, and to perform other appropriate activities for the purposes described in paragraph (2).

"(2) PURPOSES.—The purposes described in this paragraph are the following:

"(A) Developing the capability, including workforce and research infrastructure, for minority institutions to more effectively compete for Federal engineering, research, and development funding opportunities.

"(B) Improving the capability of such institutions to recruit and retain research faculty, and to participate in appropriate personnel exchange programs and educational and career development activities.

"(C) Any other purposes the Secretary determines appropriate for enhancing the defense-related engineering, research, and development capabilities of minority institutions.

"(d) MINORITY INSTITUTION DEFINED.—In this section, the term 'minority institution' means a covered educational institution (as defined in section 2362 of title 10, United States Code [now 10 U.S.C. 4144])."

NATIONAL STUDY ON DEFENSE RESEARCH AT HISTORI-CALLY BLACK COLLEGES AND UNIVERSITIES AND OTHER MINORITY INSTITUTIONS

Pub. L. 116-92, div. A, title II, §262, Dec. 20, 2019, 133 Stat. 1295, provided that:

"(a) STUDY REQUIRED.—The Secretary of Defense shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (referred to in this section as the 'National Academies') under which the National Academies will conduct a study on the status of defense research at covered institutions and the methods and means necessary to advance research capacity at covered institutions to comprehensively address the national security and defense needs of the United States.

"(b) DESIGNATION.—The study conducted under subsection (a) shall be known as the 'National Study on Defense Research At Historically Black Colleges and Universities and Other Minority Institutions'.

"(c) ELEMENTS.—The study conducted under subsection (a) shall include an examination of each of the following:

"(1) The degree to which covered institutions are successful in competing for and executing Department of Defense contracts and grants for defense research.

"(2) Best practices for advancing the capacity of covered institutions to compete for and conduct research programs related to national security and defense.

"(3) The advancements and investments necessary to elevate covered institutions to R2 status or R1 status on the Carnegie Classification of Institutions of Higher Education, consistent with the criteria of the classification system.

"(4) The facilities and infrastructure for defense-related research at covered institutions as compared to the facilities and infrastructure at institutions classified as R1 status on the Carnegie Classification of Institutions of Higher Education.

"(5) Incentives to attract, recruit, and retain leading research faculty to covered institutions.

"(6) Best practices of institutions classified as R1 status on the Carnegie Classification of Institutions of Higher Education, including best practices with respect to—

``(A) the establishment of a distinct legal entity to—

"(i) enter into contracts or receive grants from the Department;

"(ii) lay the groundwork for future research opportunities;

"(iii) develop research proposals;

"(iv) engage with defense research funding organizations; and

"(B) determining the type of legal entity, if any, to establish for the purposes described in subparagraph (A).

"(7) The ability of covered institutions to develop, protect, and commercialize intellectual property created through defense-related research.

"(8) The total amount of defense research funding awarded to all institutions of higher education, including covered institutions, through contracts and grants for each of fiscal years 2010 through 2019 and, with respect to each such institution-

(A) whether the institution established a distinct legal entity to enter into contracts or receive grants from the Department and, if so, the type of legal entity that was established;

"(B) the total value of contracts and grants awarded to the institution of higher education for each of fiscal years 2010 through 2019;

"(C) the overhead rate of the institution of higher education for fiscal year 2019;

"(D) the institution's classification on the Carnegie Classification of Institutions of Higher Education; and

"(E) whether the institution qualifies as a covered institution.

"(9) Recommendations for strengthening and enhancing the programs executed under section 2362 of title 10, United States Code [now 10 U.S.C. 4144]

(10) Recommendations to enhance the capacity of covered institutions to transition research products into defense acquisition programs or commercialization

"(11) Previous executive or legislative actions by the Federal Government to address imbalances in Federal research funding, including such programs as the Defense Established Program to Stimulate Com-

petitive Research (commonly known as 'DEPSCOR'). "(12) The effectiveness of the Department in attracting and retaining students specializing in science, technology, engineering, and mathematics fields from covered institutions for the Department's programs on emerging capabilities and technologies.

"(13) Recommendations for the development of incentives to encourage research and educational collaborations between covered institutions and other institutions of higher education.

"(14) Any other matters the Secretary of Defense determines to be relevant to advancing the defense research capacity of covered institutions.

'(d) REPORTS.-

(1) INITIAL REPORT.—Not later than 180 days after the date of the enactment of this Act [Dec. 20, 2019], the Secretary of Defense shall submit to the President and the appropriate congressional committees an initial report that includes-

"(A) the findings of the study conducted under subsection (a); and

"(B) any recommendations that the National Academies may have for action by the executive branch and Congress to improve the participation of covered institutions in Department of Defense research and any actions that may be carried out to expand the research capacity of such institutions.

"(2) FINAL REPORT .- Not later than December 31, 2021, the Secretary of Defense shall submit to the President and the appropriate congressional committees a comprehensive report on the results of the study required under subsection (a).

"(3) FORM OF REPORTS.—Each report submitted under this subsection shall be made publicly available.

"(e) IMPLEMENTATION REQUIRED.—

"(1) IN GENERAL.—Except as provided in paragraph (2), not later than March 1, 2022, the Secretary of Defense shall commence implementation of each recommendation included in the final report submitted under subsection (d)(2).

(2) EXCEPTIONS.— (A) DELAYED IMPLEMENTATION.—The Secretary of Defense may commence implementation of a recommendation described paragraph (1) later than March 1, 2022, if-

"(i) the Secretary submits to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] written notice of the intent of the Secretary to delay implementation of the recommendation; and

(ii) includes, as part of such notice, a specific justification for the delay in implementing the recommendation.

"(B) NONIMPLEMENTATION.—The Secretary of Defense may elect not to implement a recommendation described in paragraph (1), if-

"(i) the Secretary submits to the congressional defense committees written notice of the intent of the Secretary not to implement the recommendation; and

'(ii) includes, as part of such notice-

"(I) the reasons for the Secretary's decision not to implement the recommendation; and

"(II) a summary of alternative actions the Secretary will carry out to address the purposes underlying the recommendation.

"(3) IMPLEMENTATION PLAN.—For each recommendation that the Secretary implements under this subsection, the Secretary shall submit to the congressional defense committees an implementation plan that includes-

"(A) a summary of actions that have been, or will be, carried out to implement the recommendation; and

"(B) a schedule, with specific milestones, for completing the implementation of the recommendation.

"(f) LIST OF COVERED INSTITUTIONS.—The Secretary of Defense, in consultation with the Secretary of Education and the Presidents of the National Academies, shall make available a list identifying each covered institution examined as part of the study under subsection (a). The list shall be made available on a publicly accessible website and shall be updated not less frequently than once annually until the date on which the final report is submitted under subsection (d)(2).

(g) DEFINITIONS.—In this section:

(1) The term 'appropriate congressional committees' means-

"(A) the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives];

"(B) the Committee on Health, Education, Labor, and Pensions of the Senate; and

"(C) the Committee on Education and Labor of the House of Representatives.

"(2) The term 'covered institution' means-

"(A) a part B institution (as that term is defined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2))[)]; or

"(B) any other institution of higher education (as that term is defined in section 101 of such Act (20 U.S.C. 1001)) at which not less than 50 percent of the total student enrollment consists of students from ethnic groups that are underrepresented in the fields of science and engineering.'

STRATEGIES FOR ENGAGEMENT WITH HISTORICALLY BLACK COLLEGES AND UNIVERSITIES AND MINORITY-SERVING INSTITUTIONS OF HIGHER EDUCATION

Pub. L. 114-92, div. A, title II, §233, Nov. 25, 2015, 129 Stat. 779, provided that:

'(a) BASIC RESEARCH ENTITIES.-

"(1) STRATEGY.—The heads of each basic research entity shall each develop a strategy for how to engage with and support the development of scientific, technical, engineering, and mathematics capabilities of covered educational institutions in carrying out section 2362 of title 10, United States Code [now 10 U.S.C. 41441.

"(2) ELEMENTS.—Each strategy under paragraph (1) shall include the following:

Sec.

"(A) Goals and vision for maintaining a credible and sustainable program relating to the engagement and support under the strategy.

"(B) Metrics to enhance scientific, technical, engineering, and mathematics capabilities at covered educational institutions, including with respect to measuring progress toward increasing the success of such institutions to compete for broader research funding sources other than set-aside funds.

"(C) Promotion of mentoring opportunities between covered educational institutions and other research institutions.

"(D) Regular assessment of activities that are used to develop, maintain, and grow scientific, technical, engineering, and mathematics capabilities.

"(E) Inclusion of faculty of covered educational institutions into program reviews, peer reviews, and other similar activities.

"(F) Targeting of undergraduate, graduate, and postgraduate students at covered educational institutions for inclusion into research or internship opportunities within the military department.

portunities within the military department. "(b) OFFICE OF THE SECRETARY.—The Secretary of Defense shall develop and implement a strategy for how to engage with and support the development of scientific, technical, engineering, and mathematics capabilities of covered educational institutions pursuant to the strategies developed under subsection (a).

(c) Submission.-

"(1) BASIC RESEARCH ENTITIES.—Not later than 180 days after the date of the enactment of this Act [Nov. 25, 2015], the heads of each basic research entity shall each submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] the strategy developed by the head under subsection (a)(1).

"(2) OFFICE OF THE SECRETARY.—Not later than one year after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees the strategy developed under subsection (b).

"(d) COVERED INSTITUTION DEFINED.—In this section:

"(1) The term 'basic research entity' means an entity of the Department of Defense that executes research, development, test, and evaluation budget activity 1 funding, as described in the Department of Defense Financial Management Regulation.

"(2) The term 'covered educational institution' has the meaning given that term in section 2362(e) of title 10, United States Code [now 10 U.S.C. 4144(f)]."

[§§ 4145 to 4147. Omitted]

Editorial Notes

CODIFICATION

Sections 4145 to 4147 were initially transferred from sections 25507, 2368, and 2367 of this title, respectively, by Pub. L. 116-283, div. A, title XVIII, §1844(b), Jan. 1, 2021, 134 Stat. 4246, to become effective Jan. 1, 2022. Subsequently, Pub. L. 117-81, div. A, title XVII, §1701(u)(5)(B), Dec. 27, 2021, 135 Stat. 2154, struck out and added a new section 1844(b) of Pub. L. 116-283, effective as if included therein. The new section 1844(b) did not direct any transfers to sections 4145 to 4147, thereby omitting these sections before they took effect. After other amendments by Pub. L. 117-81, section 23507 was not transferred, and sections 2368 and 2367 were transferred to sections 4124 and 4126 of this title, respectively.

CHAPTER 307—TEST AND EVALUATION

Sec. 4171.

171. Operational test and evaluation of defense acquisition programs.

4172. Major systems and munitions programs: survivability testing and lethality testing required before full-scale production.

- 4173. Department of Defense Test Resource Management Center.
- 4174. Contracts: acquisition, construction, or furnishing of test facilities and equipment.
- 4175. Use of test and evaluation installations by commercial entities.

Editorial Notes

CODIFICATION

Pub. L. 116-283, div. A, title XVIII, §1844(a), Jan. 1, 2021, 134 Stat. 4245, initially enacted chapter 307 of this title, consisting of sections 4141 to 4147, which was to become effective Jan. 1, 2022. However, Pub. L. 117-81, div. A, title XVII, §1701(u)(5)(A), Dec. 27, 2021, 135 Stat. 2153, amended section 1844(a) of Pub. L. 116-283, effective as if included therein, so that instead of enacting chapter 307, it enacted chapter 305 of this title consisting of sections 4141 to 4144.

Amendments

2021—Pub. L. 117–81, div. A, title XVII, \$1701(u)(6)(A), (C), Dec. 27, 2021, 135 Stat. 2154, amended Pub. L. 116–283, div. A, title XVIII, \$1845(a), Jan. 1, 2021, 134 Stat. 4247, which added this analysis, by redesignating chapter 309 as this chapter and by adding items 4174 and 4175.

Statutory Notes and Related Subsidiaries

PILOT PROGRAM TO TEST MACHINE-VISION TECH-NOLOGIES TO DETERMINE THE AUTHENTICITY AND SE-CURITY OF MICROELECTRONIC PARTS IN WEAPON SYS-TEMS

Pub. L. 115-232, div. A, title VIII, §843, Aug. 13, 2018, 132 Stat. 1878, as amended by Pub. L. 116-283, div. A, title XVIII, §§1806(e)(3)(C), 1866(d)(1), Jan. 1, 2021, 134 Stat. 4156, 4280, provided that:

"(a) PILOT PROGRAM AUTHORIZED.—The Undersecretary of Defense for Research and Engineering, in coordination with the Defense Microelectronics Activity, shall establish a pilot program to test the feasibility and reliability of using machine-vision technologies to determine the authenticity and security of microelectronic parts in weapon systems.

"(b) OBJECTIVES OF PILOT PROGRAM.—The Undersecretary of Defense for Research and Engineering, in coordination with the Defense Microelectronics Activity, shall design any pilot program conducted under this section to determine the following:

"(1) The effectiveness and technology readiness level of machine-vision technologies to determine the authenticity of microelectronic parts at the time of the creation of such part through final insertion of such part into weapon systems.

"(2) The best method of incorporating machine-vision technologies into the process of developing, transporting, and inserting microelectronics into weapon systems.

"(3) The rules, regulations, or processes that hinder the development and incorporation of machine-vision technologies, and the application of such rules, regulations, or processes to mitigate counterfeit microelectronics proliferation throughout the Department of Defense.

"(c) CONSULTATION.—To develop the pilot program under this section, the Undersecretary of Defense for Research and Engineering, in coordination with the Defense Microelectronics Activity, may consult with the following entities:

"(1) Manufacturers of semiconductors or electronics.

"(2) Industry associations relating to semiconductors or electronics.

"(3) Original equipment manufacturers of products for the Department of Defense.

"(4) Nontraditional defense contractors (as defined in section 3014 of title 10, United States Code) that are machine vision companies.