shall conduct a pilot program under the authority of section 2521 of title 10, United States Code [now 10 U.S.C. 4841], to identify and transition advanced manufacturing processes and technologies the utilization of which would achieve significant productivity and efficiency gains in the defense manufacturing base.

"(b) Consideration of Defense Priorities.—In carrying out subsection (a), the Under Secretary shall take into consideration the defense priorities established in the most current Joint Warfighting Science and Technology plan, as required under section 270 of the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104-201; [former] 10 U.S.C. 2501 note).

"(c) IDENTIFICATION FOR TRANSITION.—In identifying manufacturing processes and technologies for transition to the defense manufacturing base under the pilot program, the Under Secretary shall select the most promising transformational technologies and manufacturing processes, in consultation with the Assistant Secretary of Defense for Research and Engineering, the Joint Defense Manufacturing Technology Panel, and other such entities as may be appropriate, including the Director of the Small Business Innovation Research Program.

"SEC. 242. TRANSITION OF TRANSFORMATIONAL MANUFACTURING PROCESSES AND TECHNOLOGIES TO DEFENSE MANUFACTURING BASE.

"(a) Prototypes and Test Beds.—The Under Secretary of Defense for Acquisition, Technology, and Logistics shall undertake the development of prototypes and test beds to validate the manufacturing processes and technologies selected for transition under the pilot program under section 241.

"(b) DIFFUSION OF ENHANCEMENTS.—The Under Secretary shall seek the cooperation of industry in adopting such manufacturing processes and technologies through the following:

"(1) The Manufacturing Extension Partnership Program.

"(2) The identification of incentives for industry to incorporate and utilize such manufacturing processes and technologies.

"SEC. 243. MANUFACTURING TECHNOLOGY STRAT-EGIES.

"(a) IN GENERAL.—The Under Secretary of Defense for Acquisition, Technology, and Logistics may—

"(1) identify an area of technology where the development of an industry-prepared roadmap for new manufacturing and technology processes applicable to defense manufacturing requirements would be beneficial to the Department of Defense; and

"(2) establish a task force, and act in cooperation, with the private sector to map the strategy for the development of manufacturing processes and technologies needed to support technology development in the area identified under paragraph (1).

"(b) COMMENCEMENT OF ROADMAPPING.—The Under Secretary shall commence any roadmapping identified pursuant to subsection (a)(1) not later than January 2007

"SEC. 244. REPORT.

"(a) In General.—Not later than December 31, 2007, the Under Secretary of the Defense for Acquisition, Technology, and Logistics shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] a report on the actions undertaken by the Under Secretary under this subtitle during fiscal year 2006.

``(b) ELEMENTS.—The report under subsection (a) shall include—

"(1) a comprehensive description of the actions undertaken under this subtitle during fiscal year 2006;

"(2) an assessment of effectiveness of such actions in enhancing research and development on manufacturing technologies and processes, and the implementation of such within the defense manufacturing base;

"(3) such recommendations as the Under Secretary considers appropriate for additional actions to be undertaken in order to increase the effectiveness of the actions undertaken under this subtitle in enhancing manufacturing activities within the defense manufacturing base.

'SEC. 245. DEFINITIONS.

"In this subtitle:

"(1) DEFENSE MANUFACTURING BASE.—The term 'defense manufacturing base' includes any supplier of the Department of Defense, including a supplier of raw materials.

"(2) MANUFACTURING EXTENSION PARTNERSHIP PROGRAM.—The term 'Manufacturing Extension Partnership Program' means the Manufacturing Extension Partnership Program of the Department of Commerce.

"(3) SMALL BUSINESS INNOVATION RESEARCH PROGRAM.—The term 'Small Business Innovation Research Program' has the meaning given that term in section 2500(11) of title 10, United States Code [now 10 U.S.C. 4801(11)]."

PARTICIPATION IN MANUFACTURING EXTENSION PROGRAM

Pub. L. 108-87, title VIII, §8062, Sept. 30, 2003, 117 Stat. 1086, provided that: "Notwithstanding any other provision of law, the Naval shipyards of the United States shall be eligible to participate in any manufacturing extension program financed by funds appropriated in this or any other Act."

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 107–248, title VIII, §8063, Oct. 23, 2002, 116 Stat. 1550.

Pub. L. 107-117, div. A, title VIII, §8068, Jan. 10, 2002, 115 Stat. 2262.

Pub. L. 106–259, title VIII, $\S 8067$, Aug. 9, 2000, 114 Stat. 689.

Pub. L. 106–79, title VIII, §8070, Oct. 25, 1999, 113 Stat. 1245.

Pub. L. 105–262, title VIII, §8070, Oct. 17, 1998, 112 Stat. 2312.

Pub. L. 105–56, title VIII, \$8076, Oct. 8, 1997, 111 Stat. 1236.

Pub. L. 104–208, div. A, title I, \$101(b) [title VIII, \$8085], Sept. 30, 1996, 110 Stat. 3009–71, 3009–105.

Pub. L. 104–61, title VIII, §8064, Dec. 1, 1995, 109 Stat. 664.

Pub. L. 103-335, title VIII, §8071, Sept. 30, 1994, 108 Stat. 2635.

Pub. L. 103-139, title VIII, §8083A, Nov. 11, 1993, 107 Stat. 1459.

Pub. L. 102–396, title IX, §9112, Oct. 6, 1992, 106 Stat. 1929.

§ 4842. Joint Defense Manufacturing Technology Panel

(a) There is in the Department of Defense the Joint Defense Manufacturing Technology Panel.

(b)(1) The Chair of the Joint Defense Manufacturing Technology Panel shall be the head of the Panel. The Chair shall be appointed, on a rotating basis, from among the appropriate personnel of the military departments and Defense Agencies with manufacturing technology programs.

(2) The Panel shall be composed of at least one individual from among appropriate personnel of each military department and Defense Agency with manufacturing technology programs. The Panel may include as ex-officio members such individuals from other government organizations, academia, and industry as the Chair considers appropriate.

(c) The purposes of the Panel shall be as follows:

- (1) To identify and integrate requirements for the program.
- (2) To conduct joint planning for the program.
- (3) To develop joint strategies for the program.
- (d) In carrying out the purposes specified in subsection (c), the Panel shall perform the functions as follows:
 - (1) Conduct comprehensive reviews and assessments of defense-related manufacturing issues being addressed by the manufacturing technology programs and related activities of the Department of Defense.
 - (2) Execute strategic planning to identify joint planning opportunities for increased cooperation in the development and implementation of technological products and the leveraging of funding for such purposes with the private sector and other government agencies.
 - (3) Ensure the integration and coordination of requirements and programs under the program with the Office of the Secretary of Defense and other national-level initiatives, including the establishment of information exchange processes with other government agencies, private industry, academia, and professional associations.
 - (4) Conduct such other functions as the Under Secretary of Defense for Research and Engineering shall specify.
- (e) The Panel shall report to and receive direction from one or more individuals designated by the Under Secretary of Defense for Research and Engineering for purposes of this subsection on manufacturing technology issues of multi-service concern and application.
- (f) The administrative expenses of the Panel shall be borne by each military department and Defense Agency with manufacturing technology programs in such manner as the Panel shall provide.

(Added and amended Pub. L. 116–283, div. A, title XVIII, \$1869(c)(1)(B), (2), Jan. 1, 2021, 134 Stat. 4283, 4284.)

Editorial Notes

CODIFICATION

The text of subsec. (e), related to Joint Defense Manufacturing Technology Panel, of section 4841 of this title, which was transferred to this section by Pub. L. 116–283, §1869(c)(1)(B), was based on Pub. L. 111–84, div. A, title II, §212(2), Oct. 28, 2009, 123 Stat. 2225; Pub. L. 112–239, div. A, title X, §1076(c)(2)(A)(i), Jan. 2, 2013, 126 Stat. 1949; Pub. L. 113–291, div. A, title II, §212(a), Dec. 19, 2014, 128 Stat. 3325; Pub. L. 116–92, div. A, title IX, §902(76)(B), (C), Dec. 20, 2019, 133 Stat. 1552.

Prior Provisions

A prior section 4842 was renumbered section 7842 of this title.

AMENDMENTS

2021—Pub. L. 116-283, §1869(c)(2)(A), (B), struck out subsec. (e) designation and heading and redesignated pars. (1) to (6) as subsecs. (a) to (f), respectively.

Pub. L. 116-283, §1869(c)(1)(B), transferred subsec. (e), related to Joint Defense Manufacturing Technology Panel, of section 4841 of this title to this section and added section catchline.

Subsec. (b). Pub. L. 116-283, \$1869(c)(2)(C), redesignated subpars. (A) and (B) as pars. (1) and (2), respectively

Subsec. (c). Pub. L. 116–283, §1869(c)(2)(D), redesignated subpars. (A) to (C) as pars. (1) to (3), respectively. Subsec. (d). Pub. L. 116–283, §1869(c)(2)(E), substituted "subsection (c)" for "paragraph (3)" in introductory provisions and redesignated subpars. (A) to (D) as pars. (1) to (4), respectively.

Subsec. (e). Pub. L. 116-283, §1869(c)(2)(F), substituted "this subsection" for "this paragraph".

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Section and 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 an Effective Date of 2021 Amendment note preceding section 3001 of this title.

§ 4843. Manufacturing engineering education program

- (a) ESTABLISHMENT OF MANUFACTURING ENGINEERING EDUCATION PROGRAM.—(1) The Secretary of Defense shall establish a program under which the Secretary makes grants or other awards to support—
 - (A) the enhancement of existing programs in manufacturing engineering education to further a mission of the department; or
 - (B) the establishment of new programs in manufacturing engineering education that meet such requirements.
- (2) Grants and awards under this section may be made to industry, not-for-profit institutions, institutions of higher education, or to consortia of such institutions or industry.
- (3) The Secretary shall establish the program in consultation with the Secretary of Education, the Director of the National Science Foundation, the Director of the Office of Science and Technology Policy, and the secretaries of such other relevant Federal agencies as the Secretary considers appropriate.
- (4) The Secretary shall ensure that the program is coordinated with Department programs associated with advanced manufacturing.
- (5) The program shall be known as the "Manufacturing Engineering Education Program".
- (b) Geographical Distribution of Grants and Awards.—In awarding grants and other awards under this subsection, the Secretary shall, to the maximum extent practicable, avoid geographical concentration of awards.
- (c) COVERED PROGRAMS.—A program of engineering education supported pursuant to this section shall meet the requirements of this section.
- (d) COMPONENTS OF PROGRAM.—The program of education for which such a grant is made shall be a consolidated and integrated multidisciplinary program of education with an emphasis on the following components:
 - (1) Multidisciplinary instruction that encompasses the total manufacturing engineering enterprise and that may include—
 - (A) manufacturing engineering education and training through classroom activities, laboratory activities, thesis projects, individual or team projects, internships, cooper-