

(2) conduct the necessary development, engineering, and operational prototype testing considered appropriate to the overall mission of the Department of Defense. Such operational prototype testing shall, where appropriate, utilize criteria developed by the Defense Advanced Research Projects Agency.

(c) Defense Advanced Research Projects Agency

The Director of the Defense Advanced Research Projects Agency shall, in conformance with the Superconductivity Action Plan, conduct activities to—

- (1) augment, as appropriate, basic and applied superconductivity research conducted in other Federal agencies and industry; and
- (2) develop criteria for operational prototype testing within the Department of Defense.

(Pub. L. 100-697, § 8, Nov. 19, 1988, 102 Stat. 4615.)

§ 5208. International cooperation

The President, as part of the Superconductivity Action Plan, shall establish a program of international cooperation in the conduct of fundamental and basic research on superconducting materials. Such program of international cooperation shall include the exchange of basic information and data, as well as the development of international standards for the use and application of superconducting materials.

(Pub. L. 100-697, § 9, Nov. 19, 1988, 102 Stat. 4616.)

§ 5209. Technology transfer

(a) Promotion

In pursuance of the goals of this chapter, all Federal departments and agencies shall conduct technology transfer activities as appropriate to the overall mission of each department or agency to—

- (1) complement basic superconductivity research by promoting the rapid development of manufacturing and processing technologies necessary for the commercialization of high-temperature superconductors; and
- (2) promote collaborative arrangements and consortia of industry (which shall include small business) in order to lower the barriers to deployment of advanced high-temperature superconductor technology; such consortia to also include, as appropriate, universities and independent research organizations.

(b) Impediments to commercialization

The Director of the Office of Science and Technology Policy, in collaboration with the Secretary of Commerce and the Secretary of Energy, shall identify those Federal policies and regulations which impede the ability of the private sector to undertake long-term investment programs to commercialize superconductivity applications.

(Pub. L. 100-697, § 10, Nov. 19, 1988, 102 Stat. 4616.)

**CHAPTER 79—METAL CASTING
COMPETITIVENESS RESEARCH PROGRAM**

Sec.	
5301.	Findings.
5302.	Definitions.
5303.	Establishment of program.

Sec.	
5304.	Operation of program.
5305.	Review.
5306.	Industrial Advisory Board.
5307.	Authorization of appropriations.
5308.	Protection of proprietary rights.
5309.	Omitted.

§ 5301. Findings

The Congress finds that—

(1) metal casting is an important process for manufacturing many items imported into or exported from the United States;

(2) the encouragement and maintenance of a technically advanced United States metal casting industry is essential to the competitiveness of many American industries;

(3) maintaining a viable metal casting industry is vital to the national security and economic well being of the United States;

(4) the promotion of technology competitiveness and energy efficiency in the United States metal casting industry by the Federal Government is necessary to maintain a viable metal casting industry;

(5) many metal casting companies lack the resources to conduct metal casting research alone, placing them at a serious competitive disadvantage;

(6) the support of university-based research in metal casting is important in promoting technology development and providing industry with qualified engineers; and

(7) by combining the resources of the Federal Government, universities, industry, and private organizations, to conduct research and development activities, substantial technological benefits will result to the metal casting industry.

(Pub. L. 101-425, § 2, Oct. 15, 1990, 104 Stat. 915.)

Statutory Notes and Related Subsidiaries

SHORT TITLE

Pub. L. 101-425, § 1, Oct. 15, 1990, 104 Stat. 915, provided that: "This Act [enacting this chapter] may be cited as the 'Department of Energy Metal Casting Competitiveness Research Act of 1990'."

§ 5302. Definitions

As used in this chapter, the term—

- (1) "applicant" means:
 - (A) an educational institution;
 - (B) a consortium of educational institutions;
 - (C) a consortium of an educational institution or educational institutions with one or more of the following: Government-owned laboratories, private research organizations, nonprofit institutions, or private firms;

that is located in a region where the metal casting industry is concentrated;

(2) "census region" means one of the four census regions (Northeast, South, Midwest, and West) that are designated as census regions by the Bureau of the Census as of October 15, 1990;

(3) "Department" means the Department of Energy;

(4) "educational institution" means a degree granting institution of at least a baccalaureate level;

(5) “non-Federal source” means the United States metal casting industry, related industries, industry-related associations, individuals, organizations, universities, State agencies, or other entities supporting the metal casting industry;

(6) “metal casting industry” or “industry” means the industries identified by codes numbered 3321, 3322, 3324, 3325, 3363, 3364, 3365, 3366, and 3369, in the Standard Industrial Classification manual¹ published by the Office of Management and Budget in 1987;

(7) “Secretary” means the Secretary of Energy.

(Pub. L. 101-425, §3, Oct. 15, 1990, 104 Stat. 915.)

§ 5303. Establishment of program

The Secretary, acting in accordance with authority provided in the Federal Non-Nuclear Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), except as otherwise provided in this chapter, shall establish a Metal Casting Competitiveness Research Program (hereafter in this chapter referred to as the “Program”) for the purpose of performing and promoting the performance of research and development on issues related to the technology competitiveness and energy efficiency of the United States metal casting industry.

(Pub. L. 101-425, §4, Oct. 15, 1990, 104 Stat. 916.)

Editorial Notes

REFERENCES IN TEXT

The Federal Non-Nuclear Research and Development Act of 1974, referred to in text, probably means the Federal Nonnuclear Energy Research and Development Act of 1974, Pub. L. 93-577, Dec. 31, 1974, 88 Stat. 1878, which is classified generally to chapter 74 (§5901 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 5901 of Title 42 and Tables.

§ 5304. Operation of program

(a) Solicitation of proposals

Within one year after October 15, 1990, the Secretary shall solicit and, subject to available appropriations, select proposals on a competitive basis from applicants to carry out the program under section 5303 of this title. In order for a proposal to be considered by the Secretary, the applicant shall have in existence at the time the proposal is submitted the following qualifications:

- (1) the technical capability to enable it to make use of existing research support and facilities in carrying out its research objectives;
- (2) a multidisciplinary research staff experienced in metal casting or other directly related technologies; and
- (3) the facilities and equipment capable of conducting at least laboratory scale testing or demonstration of metal casting or related processes.

(b) Proposal criteria

Each proposal shall—

- (1) demonstrate the support of the metal casting industry by describing—

(A) how industry has participated in deciding what research activities will be undertaken;

(B) how industry will participate in the evaluation of the applicant's progress in research and development activities; and

(C) the extent to which industry funds are committed to the applicant's proposal;

(2) have a commitment for matching funds from non-Federal sources, which shall consist of:

(A) cash, or

(B) as determined by the Secretary, the fair market value of equipment, services, materials, appropriate technology transfer activities, and other assets directly related to the proposal's cost;

(3) include a single or multiyear management plan that outlines how the research and development activities will be administered and carried out;

(4) state the annual cost of the proposal and a breakdown of those costs; and

(5) describe the technology transfer mechanisms the applicant will use to make available research results to industry and to other researchers.

(c) Content of management plan

The management plan set forth in subsection (b)(3) shall—

(1) outline the basic research and development activities expected to be performed;

(2) outline who will conduct those research activities;

(3) establish the time frame over which the research activities will take place; and

(4) define the overall program management and direction by—

(A) identifying managerial, organizational and administrative procedures and responsibilities;

(B) outlining how the coordination of research and development between the individuals and organizations involved will be achieved;

(C) demonstrating how implementation and monitoring of the progress of research projects after receipt of funding from the Secretary will be achieved;

(D) demonstrating how recommendations and implementations on modifications to the plan will be achieved; and

(E) providing sufficient rationale to support the plan's costs.

(d) Selection of proposals

From the proposals submitted, the Secretary shall select proposals for funding. The Secretary shall attempt to select at least four proposals. The Secretary shall select the proposals that—

(1) will best result in carrying out needed metal casting research and development in one or more of the following general areas—

(A) solidification and casting technologies;

(B) computational modeling and design;

(C) processing technologies and design for energy efficiency, material conservation, environmental protection, or industrial productivity; and

(D) other areas of research, which in the judgment of the Secretary, after consulting

¹ So in original. Probably should be capitalized.

with the Board established in section 5306 of this title, further the purposes of this chapter;

(2) represent research and development in specific areas identified in the “Metal Casting Research Priorities” developed annually by the Board pursuant to section 5306(b)(1) of this title;

(3) to the greatest extent possible and subject to available appropriations, ensure that at least one applicant is selected from each of the four census regions of the country where the metal casting industry is concentrated;

(4) demonstrate strong industry support;

(5) ensure the timely transfer of technology to industry; and

(6) otherwise best carry out the purposes of this chapter.

(e) Funding of program

From amounts made available in separate appropriation Acts, the Secretary shall provide to each applicant selected the financial and technical assistance and other incentives that are necessary and appropriate to carry out the purposes of this chapter.

(f) National Metal Casting Research Institute

Each recipient of financial assistance under subsection (d) shall be known as a “National Metal Casting Research Institute”.

(Pub. L. 101-425, §5, Oct. 15, 1990, 104 Stat. 916.)

§ 5305. Review

(a) Evaluation of research activities

The Secretary shall regularly monitor and evaluate the research activities of the applicants selected. After considering the reports of the Board provided for in section 5306(b)(2) of this title, the Secretary shall determine whether each applicant selected has complied with the management plan submitted in the original proposal and any modifications made since.

(b) Annual report

Each selected applicant in the program shall provide an annual report to the Secretary that explains the progress made, compliance with the management plan, whether changes are needed and are being made to the management plan, and what new research is planned.

(c) Discontinuation of funding

In the event a selected applicant has substantially failed in the implementation of the management plan and research activities, the Secretary shall discontinue funding.

(d) Solicitation of new proposals

Upon completion or discontinuance of any research activity authorized in section 5304 of this title, the Secretary shall, using available funds appropriated pursuant to this chapter, solicit new research proposals as set forth under the terms of this chapter.

(Pub. L. 101-425, §6, Oct. 15, 1990, 104 Stat. 918.)

§ 5306. Industrial Advisory Board

(a) Establishment of Board

Within 120 days after October 15, 1990, the Secretary, after consulting with representatives of

trade and technical associations of the metal casting industry, shall establish an Industrial Advisory Board (hereafter in this chapter referred to as the “Board”) to provide guidance and oversight in implementing the selection criteria and operation of the program. The Board shall be composed of nine members who are selected by the Secretary, a majority of whom shall be individuals from the metal casting industry or individuals affiliated with the industry. At least one member of the Board shall be chosen from each of the four census regions of the country. Each Board member shall serve for a term not to exceed five years, but may be reappointed for successive terms.

(b) Review and recommendations

(1) Within 180 days after October 15, 1990, and annually thereafter, the Board shall develop from the general research areas identified in section 5304(d) of this title and submit to the Secretary a list of Metal Casting Research Priorities. Such list shall, to the greatest extent possible, identify specific areas of research that would be considered of a priority nature to the United States metal casting industry.

(2) On an annual basis the Board shall—

(A) review the Secretary’s solicitation and selection of research proposals and make recommendations as to how each such activity can be altered so as to better achieve the purposes of this chapter; and

(B) review the research activities of each selected applicant, and the selected applicant’s management plan, and report its findings and recommendations to the Secretary.

(Pub. L. 101-425, §7, Oct. 15, 1990, 104 Stat. 918.)

Statutory Notes and Related Subsidiaries

TERMINATION OF ADVISORY BOARDS

Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a board established by the Congress, its duration is otherwise provided for by law. See sections 1001(2) and 1013 of Title 5, Government Organization and Employees.

§ 5307. Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this chapter \$5,000,000 for each of the fiscal years 1991, 1992, 1993, 1994, 1995, 1996, and 1997, to be derived from such sums as are otherwise authorized under section 13451(e) of title 42.

(Pub. L. 101-425, §8, Oct. 15, 1990, 104 Stat. 919; Pub. L. 102-486, title XXI, §2106(b), Oct. 24, 1992, 106 Stat. 3070.)

Editorial Notes

AMENDMENTS

1992—Pub. L. 102-486 substituted “1993, 1994, 1995, 1996, and 1997, to be derived from such sums as are otherwise authorized under section 13451(e) of title 42” for “and 1993”.

§ 5308. Protection of proprietary rights**(a) Proprietary rights**

No trade secrets or commercial or financial information that is privileged or confidential, under the meaning of section 552(b)(4) of title 5, which is obtained from a company as a result of activities under this chapter shall be disclosed.

(b) Commercial information

The Secretary, for a period of up to 5 years after the development of information that—

- (1) results from research and development activities conducted under this chapter; and
- (2) would be a trade secret or commercial or financial information that is privileged or confidential, under the meaning of section 552(b)(4) of title 5, if the information had been obtained from a company,

may provide appropriate protection against the dissemination of such information, including exemption from subchapter II of chapter 5 of title 5.

(c) Patent rights

With respect to patent rights, the Institutes shall be treated in the same manner as are non-profit organizations and small business firms under chapter 18 of title 35, notwithstanding any provisions to the contrary contained in that chapter.

(Pub. L. 101-425, § 9, Oct. 15, 1990, 104 Stat. 919.)

§ 5309. Omitted**Editorial Notes****CODIFICATION**

Section, Pub. L. 101-425, § 10, Oct. 15, 1990, 104 Stat. 919, which required, at the time the President's annual budget request for the Department is submitted, that the Secretary provide to Congress a detailed review of the progress of the research and development activities authorized under this chapter, terminated, effective May 15, 2000, pursuant to section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance. See, also, page 84 of House Document No. 103-7.

CHAPTER 80—FASTENERS

Sec.	
5401.	Findings.
5402.	Definitions.
5403.	Sale of fasteners.
5404 to 5406.	Repealed.
5407.	Manufacturers' insignias.
5408.	Remedies and penalties.
5409.	Recordkeeping requirements.
5410.	Relationship to State laws.
5411.	Construction.
5411a.	Certification and accreditation.
5411b.	Applicability.
5412 to 5414.	Repealed.

§ 5401. Findings

The Congress finds that—

- (1) the United States fastener industry is a significant contributor to the global economy, employing thousands of workers in hundreds of communities;
- (2) the American economy uses billions of fasteners each year;
- (3) state-of-the-art manufacturing and improved quality assurance systems have dra-

matically improved fastener quality, so virtually all fasteners sold in commerce meet or exceed the consensus standards for the uses to which they are applied;

(4) a small number of mismarked, misrepresented, and counterfeit fasteners do enter commerce in the United States; and

(5) multiple criteria for the identification of fasteners exist, including grade identification markings and manufacturer's insignia, to enable purchasers and users of fasteners to accurately evaluate the characteristics of individual fasteners.

(Pub. L. 101-592, § 2, Nov. 16, 1990, 104 Stat. 2943; Pub. L. 104-113, § 11(a), Mar. 7, 1996, 110 Stat. 780; Pub. L. 106-34, § 2, June 8, 1999, 113 Stat. 118.)

Editorial Notes**AMENDMENTS**

1999—Pub. L. 106-34 amended section generally. Prior to amendment, section consisted of subsecs. (a) and (b) stating findings of Congress and purpose of this chapter.

1996—Subsec. (a)(4) to (6). Pub. L. 104-113, § 11(a)(1), redesignated pars. (5) to (7) as (4) to (6), respectively, and struck out former par. (4) which read as follows: "the sale in commerce of nonconforming fasteners and the use of nonconforming fasteners in numerous critical applications have reduced the combat readiness of the Nation's military forces, endangered the safety of other Federal projects and activities, and cost both the public and private sectors large sums in connection with the retesting and purging of fastener inventories;".

Subsec. (a)(7). Pub. L. 104-113, § 11(a)(2), struck out "by lot number" after "traceability".

Pub. L. 104-113, § 11(a)(1), redesignated par. (8) as (7). Former par. (7) redesignated (6).

Subsec. (a)(8), (9). Pub. L. 104-113, § 11(a)(1), redesignated par. (9) as (8). Former par. (8) redesignated (7).

Subsec. (b). Pub. L. 104-113, § 11(a)(3), substituted "in commerce" for "used in critical applications".

Statutory Notes and Related Subsidiaries**SHORT TITLE OF 1999 AMENDMENT**

Pub. L. 106-34, § 1, June 8, 1999, 113 Stat. 118, provided that: "This Act [enacting sections 5403, 5411a, and 5411b of this title, amending this section and sections 5402 and 5407 to 5411 of this title, repealing sections 5404 to 5406, 5412, and 5414 of this title, and enacting provisions set out as notes under sections 5402 and 5403 of this title] may be cited as the 'Fastener Quality Act Amendments Act of 1999'."

SHORT TITLE

Pub. L. 101-592, § 1, Nov. 16, 1990, 104 Stat. 2943, provided that: "This Act [enacting this chapter] may be cited as the 'Fastener Quality Act'."

§ 5402. Definitions

As used in this chapter, the term—

(1) "accredited laboratory" means a fastener testing facility used to perform end-of-line testing required by a consensus standard or standards to verify that a lot of fasteners conforms to the grade identification marking called for in the consensus standard or standards to which the lot of fasteners has been manufactured, and which—

(A) meets the requirements of ISO/IEC Guide 25 (or another document approved by the Director under section 5411a(c) of this title), including revisions from time-to-time; and