

in the Program may acquire prototype or early production models of new networking and information technology systems and subsystems to stimulate hardware and software development. Items of computing equipment acquired under this subsection shall be considered research computers for purposes of applicable acquisition regulations.

(Pub. L. 102-194, title II, §207, Dec. 9, 1991, 105 Stat. 1602; Pub. L. 114-329, title I, §105(p), Jan. 6, 2017, 130 Stat. 2984.)

#### AMENDMENTS

2017—Subsec. (a)(2). Pub. L. 114-329, §105(p)(1), substituted “section 3552(b)(6)(A)(i) of title 44” for “paragraphs (1) through (5) of section 2315(a) of title 10”.

Subsec. (b). Pub. L. 114-329, §105(p)(2), substituted “networking and information technology” for “high-performance computing”.

#### § 5528. Repealed. Pub. L. 114-329, title I, § 105(q), Jan. 6, 2017, 130 Stat. 2984

Section, Pub. L. 102-194, title II, §208, Dec. 9, 1991, 105 Stat. 1603; Pub. L. 110-69, title III, §3002(c)(6), Aug. 9, 2007, 121 Stat. 587, related to findings and annual reports for fostering United States competitiveness in high-performance computing and related activities.

#### SUBCHAPTER III—DEPARTMENT OF ENERGY HIGH-END COMPUTING REVITALIZATION

#### § 5541. Definitions

In this subchapter:

##### (1) Center

The term “Center” means a High-End Software Development Center established under section 5542(d) of this title.

##### (2) High-end computing system

The term “high-end computing system” means a computing system with performance that substantially exceeds that of systems that are commonly available for advanced scientific and engineering applications.

##### (3) Leadership System

The term “Leadership System” means a high-end computing system that is among the most advanced in the world in terms of performance in solving scientific and engineering problems.

##### (4) Institution of higher education

The term “institution of higher education” has the meaning given the term in section 1001(a) of title 20.

##### (5) Secretary

The term “Secretary” means the Secretary of Energy, acting through the Director of the Office of Science of the Department of Energy.

(Pub. L. 108-423, §2, Nov. 30, 2004, 118 Stat. 2400.)

#### REFERENCES IN TEXT

This subchapter, referred to in text, was in the original “this Act”, meaning Pub. L. 108-423, Nov. 30, 2004, 118 Stat. 2400, which is classified principally to this subchapter. For complete classification of this Act to the Code, see Short Title note set out under section 5501 of this title and Tables.

#### CODIFICATION

This section was enacted as part of the Department of Energy High-End Computing Revitalization Act of

2004 which comprises this subchapter, and not as part of the High-Performance Computing Act of 1991 which comprises this chapter.

#### SHORT TITLE

This subchapter known as the “Department of Energy High-End Computing Revitalization Act of 2004”, see Short Title note set out under section 5501 of this title.

#### § 5542. Department of Energy high-end computing research and development program

##### (a) In general

The Secretary shall—

(1) carry out a program of research and development (including development of software and hardware) to advance high-end computing systems; and

(2) develop and deploy high-end computing systems for advanced scientific and engineering applications.

##### (b) Program

The program shall—

(1) support both individual investigators and multidisciplinary teams of investigators;

(2) conduct research in multiple architectures, which may include vector, reconfigurable logic, streaming, processor-in-memory, and multithreading architectures;

(3) conduct research on software for high-end computing systems, including research on algorithms, programming environments, tools, languages, and operating systems for high-end computing systems, in collaboration with architecture development efforts;

(4) provide for sustained access by the research community in the United States to high-end computing systems and to Leadership Systems, including provision of technical support for users of such systems;

(5) support technology transfer to the private sector and others in accordance with applicable law; and

(6) ensure that the high-end computing activities of the Department of Energy are coordinated with relevant activities in industry and with other Federal agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the National Nuclear Security Administration, the National Security Agency, the National Institutes of Health, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the National Institutes of Standards and Technology, and the Environmental Protection Agency.

##### (c) Leadership Systems facilities

###### (1) In general

As part of the program carried out under this subchapter, the Secretary shall establish and operate 1 or more Leadership Systems facilities to—

(A) conduct advanced scientific and engineering research and development using Leadership Systems; and

(B) develop potential advancements in high-end computing system hardware and software.

###### (2) Administration

In carrying out this subsection, the Secretary shall provide to Leadership Systems, on

a competitive, merit-reviewed basis, access to researchers in United States industry, institutions of higher education, national laboratories, and other Federal agencies.

**(d) High-End Software Development Center**

**(1) In general**

As part of the program carried out under this subchapter, the Secretary shall establish at least 1 High-End Software Development Center.

**(2) Duties**

A Center shall concentrate efforts to develop, test, maintain, and support optimal algorithms, programming environments, tools, languages, and operating systems for high-end computing systems.

**(3) Proposals**

In soliciting proposals for the Center, the Secretary shall encourage staffing arrangements that include both permanent staff and a rotating staff of researchers from other institutions and industry to assist in coordination of research efforts and promote technology transfer to the private sector.

**(4) Use of expertise**

The Secretary shall use the expertise of a Center to assess research and development in high-end computing system architecture.

**(5) Selection**

The selection of a Center shall be determined by a competitive proposal process administered by the Secretary.

(Pub. L. 108-423, § 3, Nov. 30, 2004, 118 Stat. 2400.)

REFERENCES IN TEXT

This subchapter, referred to in subsecs. (c)(1) and (d)(1), was in the original “this Act”, meaning Pub. L. 108-423, Nov. 30, 2004, 118 Stat. 2400, which is classified principally to this subchapter. For complete classification of this Act to the Code, see Short Title note set out under section 5501 of this title and Tables.

CODIFICATION

This section was enacted as part of the Department of Energy High-End Computing Revitalization Act of 2004 which comprises this subchapter, and not as part of the High-Performance Computing Act of 1991 which comprises this chapter.

**§ 5543. Repealed. Pub. L. 114-329, title I, § 105(u), Jan. 6, 2017, 130 Stat. 2985**

Section, Pub. L. 108-423, § 4, Nov. 30, 2004, 118 Stat. 2402, authorized appropriations for fiscal years 2005 to 2007.

**CHAPTER 82—LAND REMOTE SENSING POLICY**

**§ 5601. Transferred**

CODIFICATION

Section, Pub. L. 102-555, § 2, Oct. 28, 1992, 106 Stat. 4163, which related to findings, was transferred and is set out as a note under section 60101 of Title 51, National and Commercial Space Programs.

**§ 5602. Repealed. Pub. L. 111-314, § 6, Dec. 18, 2010, 124 Stat. 3444**

Section, Pub. L. 102-555, § 3, Oct. 28, 1992, 106 Stat. 4164, provided definitions for this chapter. See section

60101 of Title 51, National and Commercial Space Programs.

**SUBCHAPTER I—LANDSAT**

**§§ 5611 to 5615. Repealed. Pub. L. 111-314, § 6, Dec. 18, 2010, 124 Stat. 3444**

Section 5611, Pub. L. 102-555, title I, § 101, Oct. 28, 1992, 106 Stat. 4166, related to management of the Landsat Program. See section 60111 of Title 51, National and Commercial Space Programs.

Section 5612, Pub. L. 102-555, title I, § 102, Oct. 28, 1992, 106 Stat. 4168, related to procurement of Landsat 7.

Section 5613, Pub. L. 102-555, title I, § 103, Oct. 28, 1992, 106 Stat. 4168, related to data policy for Landsat 4 through 6.

Section 5614, Pub. L. 102-555, title I, § 104, Oct. 28, 1992, 106 Stat. 4170, related to transfer of Landsat 6 program responsibilities. See section 60112 of Title 51.

Section 5615, Pub. L. 102-555, title I, § 105, Oct. 28, 1992, 106 Stat. 4170, related to data policy for Landsat 7. See section 60113 of Title 51.

**SUBCHAPTER II—LICENSING OF PRIVATE REMOTE SENSING SPACE SYSTEMS**

**§§ 5621 to 5625. Repealed. Pub. L. 111-314, § 6, Dec. 18, 2010, 124 Stat. 3444**

Section 5621, Pub. L. 102-555, title II, § 201, Oct. 28, 1992, 106 Stat. 4171; Pub. L. 105-303, title I, § 107(f)(1), Oct. 28, 1998, 112 Stat. 2854, related to general licensing authority. See section 60121 of Title 51, National and Commercial Space Programs.

Section 5622, Pub. L. 102-555, title II, § 202, Oct. 28, 1992, 106 Stat. 4172; Pub. L. 105-303, title I, § 107(f)(2), Oct. 28, 1998, 112 Stat. 2854, related to conditions for operation. See section 60122 of Title 51.

Section 5623, Pub. L. 102-555, title II, § 203, Oct. 28, 1992, 106 Stat. 4172, related to administrative authority of Secretary. See section 60123 of Title 51.

Section 5624, Pub. L. 102-555, title II, § 204, Oct. 28, 1992, 106 Stat. 4173, related to regulatory authority of Secretary. See section 60124 of Title 51.

Section 5625, Pub. L. 102-555, title II, § 205, Oct. 28, 1992, 106 Stat. 4173, related to agency activities. See section 60125 of Title 51.

**SUBCHAPTER III—RESEARCH, DEVELOPMENT, AND DEMONSTRATION**

**§§ 5631 to 5633. Repealed. Pub. L. 111-314, § 6, Dec. 18, 2010, 124 Stat. 3444**

Section 5631, Pub. L. 102-555, title III, § 301, Oct. 28, 1992, 106 Stat. 4174, related to continued Federal research and development. See section 60131 of Title 51, National and Commercial Space Programs.

Section 5632, Pub. L. 102-555, title III, § 302, Oct. 28, 1992, 106 Stat. 4174, related to availability of federally gathered unenhanced data. See section 60132 of Title 51.

Section 5633, Pub. L. 102-555, title III, § 303, Oct. 28, 1992, 106 Stat. 4174, related to technology demonstration program. See section 60133 of Title 51.

**SUBCHAPTER IV—ASSESSING OPTIONS FOR SUCCESSOR LAND REMOTE SENSING SYSTEM**

**§ 5641. Repealed. Pub. L. 111-314, § 6, Dec. 18, 2010, 124 Stat. 3444**

Section, Pub. L. 102-555, title IV, § 401, Oct. 28, 1992, 106 Stat. 4175, related to assessing options for successor land remote sensing system. See section 60134 of Title 51, National and Commercial Space Programs.