

110TH CONGRESS
1ST SESSION

H. R. 4780

To enact title 51, United States Code, “National and Commercial Space Programs”, as positive law.

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 18, 2007

Mr. CONYERS (for himself and Mr. SMITH of Texas) introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To enact title 51, United States Code, “National and Commercial Space Programs”, as positive law.

1 *Be it enacted by the Senate and House of Representatives of the United*
2 *States of America in Congress assembled,*

3 **SECTION 1. TABLE OF CONTENTS.**

4 The table of contents for this Act is as follows:

- Sec. 1. Table of contents.
- Sec. 2. Purpose; conformity with original intent.
- Sec. 3. Enactment of title 51, United States Code.
- Sec. 4. Conforming amendments to other laws.
- Sec. 5. Transitional and savings provisions.
- Sec. 6. Repeals.

5 **SEC. 2. PURPOSE; CONFORMITY WITH ORIGINAL INTENT.**

6 (a) PURPOSE.—The purpose of this Act is to codify certain existing laws
7 related to national and commercial space programs as a positive law title
8 of the United States Code.

9 (b) CONFORMITY WITH ORIGINAL INTENT.—In the codification of laws
10 by this Act, the intent is to conform to the understood policy, intent, and
11 purpose of Congress in the original enactments, with such amendments and
12 corrections as will remove ambiguities, contradictions, and other imperfec-

1 tions, in accordance with section 205(c)(1) of House Resolution No. 988,
 2 93d Congress, as enacted into law by Public Law 93–554 (2 U.S.C.
 3 285b(1)).

4 **SEC. 3. ENACTMENT OF TITLE 51, UNITED STATES CODE.**

5 Title 51, United States Code, “National and Commercial Space Pro-
 6 grams”, is enacted as follows:

7 **TITLE 51—NATIONAL AND COMMERCIAL**
 8 **SPACE PROGRAMS**

Subtitle	Sec.
I. GENERAL	10101
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III. ADMINISTRATIVE PROVISIONS	30101
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9 **Subtitle I—General**

Chapter	Sec.
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10 **CHAPTER 101—DEFINITIONS**

11 Sec.
 12 10101. Definitions.

13 **§ 10101. Definitions**

14 In this title:

15 (1) **ADMINISTRATION.**—The term “Administration” means the Na-
 16 tional Aeronautics and Space Administration.

17 (2) **ADMINISTRATOR.**—The term “Administrator” means the Admin-
 18 istrator of the National Aeronautics and Space Administration.

19 **Subtitle II—General Program and Policy**
 20 **Provisions**

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19 **CHAPTER 201—NATIONAL AERONAUTICS AND SPACE**
 20 **PROGRAM**

SUBCHAPTER I—SHORT TITLE, DECLARATION OF POLICY, AND DEFINITIONS

20101. Short title.
 20102. Congressional declaration of policy and purpose.
 20103. Definitions.

SUBCHAPTER II—COORDINATION OF AERONAUTICAL AND SPACE ACTIVITIES

20111. National Aeronautics and Space Administration.
 20112. Functions of the Administration.
 20113. Powers of the Administration in performance of functions.
 20114. Administration and Department of Defense coordination.
 20115. International cooperation.
 20116. Reports to Congress.
 20117. Disposal of excess land.

SUBCHAPTER III—GENERAL ADMINISTRATIVE PROVISIONS

20131. Public access to information.

1 (d) OBJECTIVES OF AERONAUTICAL AND SPACE ACTIVITIES.—The aero-
2 nautical and space activities of the United States shall be conducted so as
3 to contribute materially to one or more of the following objectives:

4 (1) The expansion of human knowledge of the Earth and of phe-
5 nomena in the atmosphere and space.

6 (2) The improvement of the usefulness, performance, speed, safety,
7 and efficiency of aeronautical and space vehicles.

8 (3) The development and operation of vehicles capable of carrying in-
9 struments, equipment, supplies, and living organisms through space.

10 (4) The establishment of long-range studies of the potential benefits
11 to be gained from, the opportunities for, and the problems involved in
12 the utilization of aeronautical and space activities for peaceful and sci-
13 entific purposes.

14 (5) The preservation of the role of the United States as a leader in
15 aeronautical and space science and technology and in the application
16 thereof to the conduct of peaceful activities within and outside the at-
17 mosphere.

18 (6) The making available to agencies directly concerned with national
19 defense of discoveries that have military value or significance, and the
20 furnishing by such agencies, to the civilian agency established to direct
21 and control nonmilitary aeronautical and space activities, of informa-
22 tion as to discoveries which have value or significance to that agency.

23 (7) Cooperation by the United States with other nations and groups
24 of nations in work done pursuant to this chapter and in the peaceful
25 application of the results thereof.

26 (8) The most effective utilization of the scientific and engineering re-
27 sources of the United States, with close cooperation among all inter-
28 ested agencies of the United States in order to avoid unnecessary dupli-
29 cation of effort, facilities, and equipment.

30 (9) The preservation of the United States preeminent position in aer-
31 onautics and space through research and technology development re-
32 lated to associated manufacturing processes.

33 (e) GROUND PROPULSION SYSTEMS RESEARCH AND DEVELOPMENT.—
34 Congress declares that the general welfare of the United States requires
35 that the unique competence in scientific and engineering systems of the Ad-
36 ministration also be directed toward ground propulsion systems research
37 and development. Such development shall be conducted so as to contribute
38 to the objectives of developing energy and petroleum-conserving ground pro-
39 pulsion systems, and of minimizing the environmental degradation caused
40 by such systems.

1 (f) BIOENGINEERING RESEARCH, DEVELOPMENT, AND DEMONSTRATION
 2 PROGRAMS.—Congress declares that the general welfare of the United
 3 States requires that the unique competence of the Administration in science
 4 and engineering systems be directed to assisting in bioengineering research,
 5 development, and demonstration programs designed to alleviate and mini-
 6 mize the effects of disability.

7 (g) WARNING AND MITIGATION OF POTENTIAL HAZARDS OF NEAR-
 8 EARTH OBJECTS.—Congress declares that the general welfare and security
 9 of the United States require that the unique competence of the Administra-
 10 tion be directed to detecting, tracking, cataloguing, and characterizing near-
 11 Earth asteroids and comets in order to provide warning and mitigation of
 12 the potential hazard of such near-Earth objects to the Earth.

13 (h) PURPOSE OF CHAPTER.—It is the purpose of this chapter to carry
 14 out and effectuate the policies declared in subsections (a) to (g).

15 **§ 20103. Definitions**

16 In this chapter:

17 (1) AERONAUTICAL AND SPACE ACTIVITIES.—The term “aero-
 18 nautical and space activities” means—

19 (A) research into, and the solution of, problems of flight within
 20 and outside the Earth’s atmosphere;

21 (B) the development, construction, testing, and operation for re-
 22 search purposes of aeronautical and space vehicles;

23 (C) the operation of a space transportation system including the
 24 space shuttle, upper stages, space platforms, and related equip-
 25 ment; and

26 (D) such other activities as may be required for the exploration
 27 of space.

28 (2) AERONAUTICAL AND SPACE VEHICLES.—The term “aeronautical
 29 and space vehicles” means aircraft, missiles, satellites, and other space
 30 vehicles, manned and unmanned, together with related equipment, de-
 31 vices, components, and parts.

32 SUBCHAPTER II—COORDINATION OF AERONAUTICAL AND
 33 SPACE ACTIVITIES

34 **§ 20111. National Aeronautics and Space Administration**

35 (a) ESTABLISHMENT AND APPOINTMENT OF ADMINISTRATOR.—There is
 36 established the National Aeronautics and Space Administration. The Admin-
 37 istration shall be headed by an Administrator, who shall be appointed from
 38 civilian life by the President by and with the advice and consent of the Sen-
 39 ate. Under the supervision and direction of the President, the Administrator
 40 shall be responsible for the exercise of all powers and the discharge of all

1 duties of the Administration and shall have authority and control over all
2 personnel and activities thereof.

3 (b) DEPUTY ADMINISTRATOR.—There shall be in the Administration a
4 Deputy Administrator, who shall be appointed from civilian life by the
5 President by and with the advice and consent of the Senate. The Deputy
6 Administrator shall perform such duties and exercise such powers as the
7 Administrator may prescribe. The Deputy Administrator shall act for, and
8 exercise the powers of, the Administrator during the Administrator’s ab-
9 sence or disability.

10 (c) RESTRICTION ON OTHER BUSINESS OR EMPLOYMENT.—The Admin-
11 istrator and the Deputy Administrator shall not engage in any other busi-
12 ness, vocation, or employment while serving as such.

13 **§ 20112. Functions of the Administration**

14 (a) PLANNING, DIRECTING, AND CONDUCTING AERONAUTICAL AND
15 SPACE ACTIVITIES.—The Administration, in order to carry out the purpose
16 of this chapter, shall—

17 (1) plan, direct, and conduct aeronautical and space activities;

18 (2) arrange for participation by the scientific community in planning
19 scientific measurements and observations to be made through use of
20 aeronautical and space vehicles, and conduct or arrange for the conduct
21 of such measurements and observations;

22 (3) provide for the widest practicable and appropriate dissemination
23 of information concerning its activities and the results thereof;

24 (4) seek and encourage, to the maximum extent possible, the fullest
25 commercial use of space; and

26 (5) encourage and provide for Federal Government use of commer-
27 cially provided space services and hardware, consistent with the re-
28 quirements of the Federal Government.

29 (b) RESEARCH AND DEVELOPMENT IN CERTAIN TECHNOLOGIES.—

30 (1) GROUND PROPULSION TECHNOLOGIES.—The Administration
31 shall, to the extent of appropriated funds, initiate, support, and carry
32 out such research, development, demonstration, and other related ac-
33 tivities in ground propulsion technologies as are provided for in sections
34 4 to 10 of the Electric and Hybrid Vehicle Research, Development, and
35 Demonstration Act of 1976 (15 U.S.C. 2503 to 2509).

36 (2) SOLAR HEATING AND COOLING TECHNOLOGIES.—The Adminis-
37 tration shall initiate, support, and carry out such research, develop-
38 ment, demonstrations, and other related activities in solar heating and
39 cooling technologies (to the extent that funds are appropriated there-
40 for) as are provided for in sections 5, 6, and 9 of the Solar Heating
41 and Cooling Demonstration Act of 1974 (42 U.S.C. 5503, 5504, 5507).

1 **§20113. Powers of the Administration in performance of**
2 **functions**

3 (a) RULES AND REGULATIONS.—In the performance of its functions, the
4 Administration is authorized to make, promulgate, issue, rescind, and
5 amend rules and regulations governing the manner of its operations and the
6 exercise of the powers vested in it by law.

7 (b) OFFICERS AND EMPLOYEES.—In the performance of its functions, the
8 Administration is authorized to appoint and fix the compensation of officers
9 and employees as may be necessary to carry out such functions. The officers
10 and employees shall be appointed in accordance with the civil service laws
11 and their compensation fixed in accordance with chapter 51 and subchapter
12 III of chapter 53 of title 5, except that—

13 (1) to the extent the Administrator deems such action necessary to
14 the discharge of the Administrator’s responsibilities, the Administrator
15 may appoint not more than 425 of the scientific, engineering, and ad-
16 ministrative personnel of the Administration without regard to such
17 laws, and may fix the compensation of such personnel not in excess of
18 the rate of basic pay payable for level III of the Executive Schedule;
19 and

20 (2) to the extent the Administrator deems such action necessary to
21 recruit specially qualified scientific and engineering talent, the Admin-
22 istrator may establish the entrance grade for scientific and engineering
23 personnel without previous service in the Federal Government at a level
24 up to 2 grades higher than the grade provided for such personnel under
25 the General Schedule, and fix their compensation accordingly.

26 (c) PROPERTY.—In the performance of its functions, the Administration
27 is authorized—

28 (1) to acquire (by purchase, lease, condemnation, or otherwise), con-
29 struct, improve, repair, operate, and maintain laboratories, research
30 and testing sites and facilities, aeronautical and space vehicles, quar-
31 ters and related accommodations for employees and dependents of em-
32 ployees of the Administration, and such other real and personal prop-
33 erty (including patents), or any interest therein, as the Administration
34 deems necessary within and outside the continental United States;

35 (2) to acquire by lease or otherwise, through the Administrator of
36 General Services, buildings or parts of buildings in the District of Co-
37 lumbia for the use of the Administration for a period not to exceed 10
38 years without regard to section 8141 of title 40;

39 (3) to lease to others such real and personal property;

40 (4) to sell and otherwise dispose of real and personal property (in-
41 cluding patents and rights thereunder) in accordance with the provi-

1 sions of chapters 1 to 11 of title 40 and in accordance with title III
2 of the Federal Property and Administrative Services Act of 1949 (41
3 U.S.C. 251 et seq.); and

4 (5) to provide by contract or otherwise for cafeterias and other nec-
5 essary facilities for the welfare of employees of the Administration at
6 its installations and purchase and maintain equipment therefor.

7 (d) GIFTS.—In the performance of its functions, the Administration is
8 authorized to accept unconditional gifts or donations of services, money, or
9 property, real, personal, or mixed, tangible or intangible.

10 (e) CONTRACTS, LEASES, AND AGREEMENTS.—In the performance of its
11 functions, the Administration is authorized, without regard to subsections
12 (a) and (b) of section 3324 of title 31, to enter into and perform such con-
13 tracts, leases, cooperative agreements, or other transactions as may be nec-
14 essary in the conduct of its work and on such terms as it may deem appro-
15 priate, with any agency or instrumentality of the United States, or with any
16 State, territory, or possession, or with any political subdivision thereof, or
17 with any person, firm, association, corporation, or educational institution.
18 To the maximum extent practicable and consistent with the accomplishment
19 of the purpose of this chapter, such contracts, leases, agreements, and other
20 transactions shall be allocated by the Administrator in a manner which will
21 enable small-business concerns to participate equitably and proportionately
22 in the conduct of the work of the Administration.

23 (f) COOPERATION WITH FEDERAL AGENCIES AND OTHERS.—In the per-
24 formance of its functions, the Administration is authorized to use, with their
25 consent, the services, equipment, personnel, and facilities of Federal and
26 other agencies with or without reimbursement, and on a similar basis to co-
27 operate with other public and private agencies and instrumentalities in the
28 use of services, equipment, and facilities. Each department and agency of
29 the Federal Government shall cooperate fully with the Administration in
30 making its services, equipment, personnel, and facilities available to the Ad-
31 ministration, and any such department or agency is authorized, notwith-
32 standing any other provision of law, to transfer to or to receive from the
33 Administration, without reimbursement, aeronautical and space vehicles,
34 and supplies and equipment other than administrative supplies or equip-
35 ment.

36 (g) ADVISORY COMMITTEES.—In the performance of its functions, the
37 Administration is authorized to appoint such advisory committees as may
38 be appropriate for purposes of consultation and advice to the Administra-
39 tion.

40 (h) OFFICES AND PROCEDURES.—In the performance of its functions, the
41 Administration is authorized to establish within the Administration such of-

1 fices and procedures as may be appropriate to provide for the greatest possible
2 coordination of its activities under this chapter with related scientific
3 and other activities being carried on by other public and private agencies
4 and organizations.

5 (i) TEMPORARY OR INTERMITTENT SERVICES OF EXPERTS OR CONSULTANTS.—In the performance of its functions, the Administration is authorized to obtain services as provided by section 3109 of title 5, but at rates
6 for individuals not to exceed the per diem rate equivalent to the maximum
7 rate payable under section 5376 of title 5.
8

9 (j) ALIENS.—In the performance of its functions, the Administration is
10 authorized, when determined by the Administrator to be necessary, and subject
11 to such security investigations as the Administrator may determine to
12 be appropriate, to employ aliens without regard to statutory provisions prohibiting
13 payment of compensation to aliens.
14

15 (k) CONCESSIONS FOR VISITORS' FACILITIES.—

16 (1) IN GENERAL.—In the performance of its functions, the Administration
17 is authorized to provide by concession, without regard to section
18 1302 of title 40, on such terms as the Administrator may deem to be
19 appropriate and necessary to protect the concessioner against loss of
20 the concessioner's investment in property (but not anticipated profits)
21 resulting from the Administration's discretionary acts and decisions,
22 for the construction, maintenance, and operation of all manner of facilities
23 and equipment for visitors to the several installations of the Administration
24 and, in connection therewith, to provide services incident
25 to the dissemination of information concerning its activities to such
26 visitors, without charge or with a reasonable charge therefor (with this
27 authority being in addition to any other authority that the Administration
28 may have to provide facilities, equipment, and services for visitors
29 to its installations).

30 (2) PUBLIC NOTICE AND DUE CONSIDERATION OF PROPOSALS.—A
31 concession agreement under this subsection may be negotiated with any
32 qualified proposer following due consideration of all proposals received
33 after reasonable public notice of the intention to contract.

34 (3) REASONABLE OPPORTUNITY FOR PROFIT.—The concessioner
35 shall be afforded a reasonable opportunity to make a profit commensurate
36 with the capital invested and the obligations assumed. The consideration
37 paid by the concessioner for the concession shall be based on
38 the probable value of the opportunity and not on maximizing revenue
39 to the United States.

40 (4) RECORDS AND ACCESS TO RECORDS.—Each concession agreement
41 shall specify the manner in which the concessioner's records are

1 to be maintained, and shall provide for access to the records by the
2 Administration and the Comptroller General of the United States for
3 a period of 5 years after the close of the business year to which the
4 records relate.

5 (5) POSSESSORY INTERESTS.—A concessioner may be accorded a
6 possessory interest, consisting of all incidents of ownership except legal
7 title (which shall vest in the United States), in any structure, fixture,
8 or improvement the concessioner constructs or locates upon land owned
9 by the United States. With the approval of the Administration, such
10 possessory interest may be assigned, transferred, encumbered, or relin-
11 quished by the concessioner, and, unless otherwise provided by con-
12 tract, shall not be extinguished by the expiration or other termination
13 of the concession and may not be taken for public use without just
14 compensation.

15 (l) DETAILING MEMBERS OF ARMED SERVICES.—In the performance of
16 its functions, the Administration is authorized, with the approval of the
17 President, to enter into cooperative agreements under which members of the
18 Army, Navy, Air Force, and Marine Corps may be detailed by the appro-
19 priate Secretary for services in the performance of functions under this
20 chapter to the same extent as that to which they might be lawfully assigned
21 in the Department of Defense.

22 (m) CLAIMS AGAINST THE UNITED STATES.—In the performance of its
23 functions, the Administration is authorized—

24 (1) to consider, ascertain, adjust, determine, settle, and pay, on be-
25 half of the United States, in full satisfaction thereof, any claim for
26 \$25,000 or less against the United States for bodily injury, death, or
27 damage to or loss of real or personal property resulting from the con-
28 duct of the Administration's functions as specified in section 20112(a)
29 of this title, where such claim is presented to the Administration in
30 writing within 2 years after the accident or incident out of which the
31 claim arises; and

32 (2) if the Administration considers that a claim in excess of \$25,000
33 is meritorious and would otherwise be covered by this subsection, to re-
34 port the facts and circumstances to Congress for its consideration.

35 **§ 20114. Administration and Department of Defense coordi-**
36 **nation**

37 (a) ADVISE AND CONSULT.—The Administration and the Department of
38 Defense, through the President, shall advise and consult with each other on
39 all matters within their respective jurisdictions related to aeronautical and
40 space activities and shall keep each other fully and currently informed with
41 respect to such activities.

1 (b) REFERRAL TO THE PRESIDENT.—If the Secretary of Defense con-
2 cludes that any request, action, proposed action, or failure to act on the
3 part of the Administrator is adverse to the responsibilities of the Depart-
4 ment of Defense, or the Administrator concludes that any request, action,
5 proposed action, or failure to act on the part of the Department of Defense
6 is adverse to the responsibilities of the Administration, and the Adminis-
7 trator and the Secretary of Defense are unable to reach an agreement with
8 respect to the matter, either the Administrator or the Secretary of Defense
9 may refer the matter to the President for a decision (which shall be final).

10 **§ 20115. International cooperation**

11 The Administration, under the foreign policy guidance of the President,
12 may engage in a program of international cooperation in work done pursu-
13 ant to this chapter, and in the peaceful application of the results thereof,
14 pursuant to agreements made by the President with the advice and consent
15 of the Senate.

16 **§ 20116. Reports to Congress**

17 (a) PRESIDENTIAL REPORT.—The President shall transmit to Congress
18 in May of each year a report, which shall include—

19 (1) a comprehensive description of the programmed activities and the
20 accomplishments of all agencies of the United States in the field of aer-
21 onautics and space activities during the preceding fiscal year; and

22 (2) an evaluation of such activities and accomplishments in terms of
23 the attainment of, or the failure to attain, the objectives described in
24 section 20102(d) of this title.

25 (b) RECOMMENDATIONS FOR ADDITIONAL LEGISLATION.—Any report
26 made under this section shall contain such recommendations for additional
27 legislation as the Administrator or the President may consider necessary or
28 desirable for the attainment of the objectives described in section 20102(d)
29 of this title.

30 (c) CLASSIFIED INFORMATION.—No information that has been classified
31 for reasons of national security shall be included in any report made under
32 this section, unless the information has been declassified by, or pursuant to
33 authorization given by, the President.

34 **§ 20117. Disposal of excess land**

35 Notwithstanding the provisions of this or any other law, the Administra-
36 tion may not report to a disposal agency as excess to the needs of the Ad-
37 ministration any land having an estimated value in excess of \$50,000 that
38 is owned by the United States and under the jurisdiction and control of the
39 Administration, unless—

40 (1) a period of 30 days has passed after the receipt by the Speaker
41 and the Committee on Science and Technology of the House of Rep-

1 representatives and the President and the Committee on Commerce,
2 Science, and Transportation of the Senate of a report by the Adminis-
3 trator or the Administrator's designee containing a full and complete
4 statement of the action proposed to be taken and the facts and cir-
5 cumstances relied upon in support of such action; or

6 (2) each such committee before the expiration of that period has
7 transmitted to the Administrator written notice to the effect that the
8 committee has no objection to the proposed action.

9 SUBCHAPTER III—GENERAL ADMINISTRATIVE PROVISIONS

10 **§ 20131. Public access to information**

11 (a) PUBLIC INSPECTION.—Information obtained or developed by the Ad-
12 ministrator in the performance of the Administrator's functions under this
13 chapter shall be made available for public inspection, except information—

14 (1) authorized or required by Federal statute to be withheld;

15 (2) classified to protect the national security; or

16 (3) described in subsection (b).

17 (b) SPECIAL HANDLING OF TRADE SECRET OR CONFIDENTIAL INFORMA-
18 TION.—

19 (1) IN GENERAL.—The Administrator, for a period of up to 5 years
20 after the development of information described in paragraph (2), may
21 provide appropriate protections against the dissemination of such infor-
22 mation, including exemption from subchapter II of chapter 5 of title
23 5.

24 (2) INFORMATION DESCRIBED.—Information referred to in para-
25 graph (1) is information that results from activities conducted under
26 an agreement entered into under subsections (e) and (f) of section
27 20113 of this title, and that would be a trade secret or commercial or
28 financial information that is privileged or confidential under the mean-
29 ing of section 552(b)(4) of title 5 if the information had been obtained
30 from a non-Federal party participating in such an agreement.

31 (c) COMMITTEES OF CONGRESS.—Nothing in this chapter authorizes the
32 withholding of information by the Administrator from the duly authorized
33 committees of Congress.

34 **§ 20132. Security requirements**

35 The Administrator shall establish such security requirements, restrictions,
36 and safeguards as the Administrator deems necessary in the interest of the
37 national security. The Administrator may arrange with the Director of the
38 Office of Personnel Management for the conduct of such security or other
39 personnel investigations of the Administration's officers, employees, and
40 consultants, and its contractors and subcontractors and their officers and
41 employees, actual or prospective, as the Administrator deems appropriate.

1 If any such investigation develops any data reflecting that the individual
2 who is the subject of the investigation is of questionable loyalty, the matter
3 shall be referred to the Federal Bureau of Investigation for the conduct of
4 a full field investigation, the results of which shall be furnished to the Ad-
5 ministrator.

6 **§ 20133. Permission to carry firearms**

7 As the Administrator deems necessary in the public interest, the Adminis-
8 trator may—

9 (1) direct officers and employees of the Administration to carry fire-
10 arms while in the conduct of their official duties; and

11 (2) authorize employees of contractors and subcontractors of the Ad-
12 ministration who are engaged in the protection of property owned by
13 the United States, and located at facilities owned by or contracted to
14 the United States, to carry firearms while in the conduct of their offi-
15 cial duties.

16 **§ 20134. Arrest authority**

17 Under regulations prescribed by the Administrator and approved by the
18 Attorney General, employees of the Administration and of its contractors
19 and subcontractors authorized to carry firearms under section 20133 of this
20 title may arrest without warrant for any offense against the United States
21 committed in their presence, or for any felony cognizable under the laws of
22 the United States if they have reasonable grounds to believe that the person
23 to be arrested has committed or is committing such felony. Persons granted
24 authority to make arrests by this section may exercise that authority only
25 while guarding and protecting property owned or leased by, or under the
26 control of, the United States under the administration and control of the
27 Administration or one of its contractors or subcontractors, at facilities
28 owned by or contracted to the Administration.

29 **§ 20135. Property rights in inventions**

30 (a) DEFINITIONS.—In this section:

31 (1) CONTRACT.—The term “contract” means any actual or proposed
32 contract, agreement, understanding, or other arrangement, and in-
33 cludes any assignment, substitution of parties, or subcontract executed
34 or entered into thereunder.

35 (2) MADE.—The term “made”, when used in relation to any inven-
36 tion, means the conception or first actual reduction to practice of such
37 invention.

38 (3) PERSON.—The term “person” means any individual, partnership,
39 corporation, association, institution, or other entity.

40 (b) EXCLUSIVE PROPERTY OF UNITED STATES.—

1 (1) IN GENERAL.—An invention shall be the exclusive property of the
2 United States if it is made in the performance of any work under any
3 contract of the Administration, and the Administrator determines
4 that—

5 (A) the person who made the invention was employed or as-
6 signed to perform research, development, or exploration work and
7 the invention is related to the work the person was employed or
8 assigned to perform, or was within the scope of the person’s em-
9 ployment duties, whether or not it was made during working
10 hours, or with a contribution by the Government of the use of
11 Government facilities, equipment, materials, allocated funds, infor-
12 mation proprietary to the Government, or services of Government
13 employees during working hours; or

14 (B) the person who made the invention was not employed or as-
15 signed to perform research, development, or exploration work, but
16 the invention is nevertheless related to the contract, or to the work
17 or duties the person was employed or assigned to perform, and
18 was made during working hours, or with a contribution from the
19 Government of the sort referred to in subparagraph (A).

20 (2) PATENT TO UNITED STATES.—If an invention is the exclusive
21 property of the United States under paragraph (1), and if such inven-
22 tion is patentable, a patent therefor shall be issued to the United
23 States upon application made by the Administrator, unless the Admin-
24 istrator waives all or any part of the rights of the United States to
25 such invention in conformity with the provisions of subsection (g).

26 (c) CONTRACT PROVISIONS FOR FURNISHING REPORTS OF INVENTIONS,
27 DISCOVERIES, IMPROVEMENTS, OR INNOVATIONS.—Each contract entered
28 into by the Administrator with any party for the performance of any work
29 shall contain effective provisions under which the party shall furnish
30 promptly to the Administrator a written report containing full and complete
31 technical information concerning any invention, discovery, improvement, or
32 innovation which may be made in the performance of any such work.

33 (d) PATENT APPLICATION.—No patent may be issued to any applicant
34 other than the Administrator for any invention which appears to the Under
35 Secretary of Commerce for Intellectual Property and Director of the United
36 States Patent and Trademark Office (hereafter in this section referred to
37 as the “Director”) to have significant utility in the conduct of aeronautical
38 and space activities unless the applicant files with the Director, with the ap-
39 plication or within 30 days after request therefor by the Director, a written
40 statement executed under oath setting forth the full facts concerning the
41 circumstances under which the invention was made and stating the relation-

1 ship (if any) of the invention to the performance of any work under any
2 contract of the Administration. Copies of each such statement and the appli-
3 cation to which it relates shall be transmitted forthwith by the Director to
4 the Administrator.

5 (e) ISSUANCE OF PATENT TO APPLICANT.—Upon any application as to
6 which any such statement has been transmitted to the Administrator, the
7 Director may, if the invention is patentable, issue a patent to the applicant
8 unless the Administrator, within 90 days after receipt of the application and
9 statement, requests that the patent be issued to the Administrator on behalf
10 of the United States. If, within such time, the Administrator files such a
11 request with the Director, the Director shall transmit notice thereof to the
12 applicant, and shall issue such patent to the Administrator unless the appli-
13 cant within 30 days after receipt of the notice requests a hearing before the
14 Board of Patent Appeals and Interferences on the question whether the Ad-
15 ministrator is entitled under this section to receive the patent. The Board
16 may hear and determine, in accordance with rules and procedures estab-
17 lished for interference cases, the question so presented, and its determina-
18 tion shall be subject to appeal by the applicant or by the Administrator to
19 the United States Court of Appeals for the Federal Circuit in accordance
20 with procedures governing appeals from decisions of the Board of Patent
21 Appeals and Interferences in other proceedings.

22 (f) SUBSEQUENT TRANSFER OF PATENT IN CASE OF FALSE REPRESENTA-
23 TIONS.—Whenever a patent has been issued to an applicant in conformity
24 with subsection (e), and the Administrator thereafter has reason to believe
25 that the statement filed by the applicant in connection with the patent con-
26 tained a false representation of a material fact, the Administrator, within
27 5 years after the date of issuance of the patent, may file with the Director
28 a request for the transfer to the Administrator of title to the patent on the
29 records of the Director. Notice of any such request shall be transmitted by
30 the Director to the owner of record of the patent, and title to the patent
31 shall be so transferred to the Administrator unless, within 30 days after re-
32 ceipt of notice, the owner of record requests a hearing before the Board of
33 Patent Appeals and Interferences on the question whether any such false
34 representation was contained in the statement filed in connection with the
35 patent. The question shall be heard and determined, and the determination
36 shall be subject to review, in the manner prescribed by subsection (e) for
37 questions arising thereunder. A request made by the Administrator under
38 this subsection for the transfer of title to a patent, and prosecution for the
39 violation of any criminal statute, shall not be barred by the failure of the
40 Administrator to make a request under subsection (e) for the issuance of
41 the patent to the Administrator, or by any notice previously given by the

1 Administrator stating that the Administrator had no objection to the
2 issuance of the patent to the applicant.

3 (g) WAIVER OF RIGHTS TO INVENTIONS.—Under such regulations in con-
4 formity with this subsection as the Administrator shall prescribe, the Ad-
5 ministrator may waive all or any part of the rights of the United States
6 under this section with respect to any invention or class of inventions made
7 or which may be made by any person or class of persons in the performance
8 of any work required by any contract of the Administration if the Adminis-
9 trator determines that the interests of the United States will be served
10 thereby. Any such waiver may be made upon such terms and under such
11 conditions as the Administrator shall determine to be required for the pro-
12 tection of the interests of the United States. Each such waiver made with
13 respect to any invention shall be subject to the reservation by the Adminis-
14 trator of an irrevocable, nonexclusive, nontransferable, royalty-free license
15 for the practice of such invention throughout the world by or on behalf of
16 the United States or any foreign government pursuant to any treaty or
17 agreement with the United States. Each proposal for any waiver under this
18 subsection shall be referred to an Inventions and Contributions Board which
19 shall be established by the Administrator within the Administration. Such
20 Board shall accord to each interested party an opportunity for hearing, and
21 shall transmit to the Administrator its findings of fact with respect to such
22 proposal and its recommendations for action to be taken with respect there-
23 to.

24 (h) PROTECTION OF TITLE.—The Administrator is authorized to take all
25 suitable and necessary steps to protect any invention or discovery to which
26 the Administrator has title, and to require contractors or persons who retain
27 title to inventions or discoveries under this section to protect the inventions
28 or discoveries to which the Administration has or may acquire a license of
29 use.

30 (i) ADMINISTRATION AS DEFENSE AGENCY.—The Administration shall be
31 considered a defense agency of the United States for the purpose of chapter
32 17 of title 35.

33 (j) OBJECTS INTENDED FOR LAUNCH, LAUNCHED, OR ASSEMBLED IN
34 OUTER SPACE.—Any object intended for launch, launched, or assembled in
35 outer space shall be considered a vehicle for the purpose of section 272 of
36 title 35.

37 (k) USE OR MANUFACTURE OF PATENTED INVENTIONS INCORPORATED
38 IN SPACE VEHICLES LAUNCHED FOR PERSONS OTHER THAN UNITED
39 STATES.—The use or manufacture of any patented invention incorporated
40 in a space vehicle launched by the United States Government for a person
41 other than the United States shall not be considered to be a use or manu-

1 facture by or for the United States within the meaning of section 1498(a)
2 of title 28, unless the Administration gives an express authorization or con-
3 sent for such use or manufacture.

4 **§ 20136. Contributions awards**

5 (a) APPLICATIONS.—Subject to the provisions of this section, the Admin-
6 istrator is authorized, on the Administrator’s own initiative or on applica-
7 tion of any person, to make a monetary award, in an amount and on terms
8 the Administrator determines to be warranted, to any person (as defined by
9 section 20135(a) of this title) for any scientific or technical contribution to
10 the Administration which is determined by the Administrator to have sig-
11 nificant value in the conduct of aeronautical and space activities. Each ap-
12 plication made for such an award shall be referred to the Inventions and
13 Contributions Board established under section 20135 of this title. Such
14 Board shall accord to each applicant an opportunity for hearing on the ap-
15 plication, and shall transmit to the Administrator its recommendation as to
16 the terms of the award, if any, to be made to the applicant for the contribu-
17 tion. In determining the terms and conditions of an award the Adminis-
18 trator shall take into account—

19 (1) the value of the contribution to the United States;

20 (2) the aggregate amount of any sums which have been expended by
21 the applicant for the development of the contribution;

22 (3) the amount of any compensation (other than salary received for
23 services rendered as an officer or employee of the Government) pre-
24 viously received by the applicant for or on account of the use of the
25 contribution by the United States; and

26 (4) any other factors the Administrator determines to be material.

27 (b) APPORTIONMENT OF AWARDS.—If more than one applicant under
28 subsection (a) claims an interest in the same contribution, the Adminis-
29 trator shall ascertain and determine the respective interests of the appli-
30 cants, and shall apportion any award to be made among the applicants in
31 amounts the Administrator determines to be equitable.

32 (c) SURRENDER OF OTHER CLAIMS.—No award may be made under sub-
33 section (a) unless the applicant surrenders, by means the Administrator de-
34 termines to be effective, all claims that the applicant may have to receive
35 any compensation (other than the award made under this section) for the
36 use of the contribution or any element thereof at any time by or on behalf
37 of the United States, or by or on behalf of any foreign government pursuant
38 to a treaty or agreement with the United States, within the United States
39 or at any other place.

40 (d) REPORT AND WAITING PERIOD.—No award may be made under sub-
41 section (a) in an amount exceeding \$100,000 unless the Administrator

1 transmits to the appropriate committees of Congress a full and complete re-
 2 port concerning the amount and terms of, and the basis for, the proposed
 3 award, and a period of 30 calendar days of regular session of Congress ex-
 4 pires after receipt of the report by the committees.

5 **§ 20137. Malpractice and negligence suits against United**
 6 **States**

7 (a) EXCLUSIVE REMEDY.—The remedy against the United States pro-
 8 vided by sections 1346(b) and 2672 of title 28, for damages for personal
 9 injury, including death, caused by the negligent or wrongful act or omission
 10 of any physician, dentist, nurse, pharmacist, or paramedical or other sup-
 11 porting personnel (including medical and dental technicians, nursing assist-
 12 ants, and therapists) of the Administration in the performance of medical,
 13 dental, or related health care functions (including clinical studies and inves-
 14 tigations) while acting within the scope of such person’s duties or employ-
 15 ment therein or therefor shall be exclusive of any other civil action or pro-
 16 ceeding by reason of the same subject matter against such person (or the
 17 estate of such person) whose act or omission gave rise to the action or pro-
 18 ceeding.

19 (b) ATTORNEY GENERAL TO DEFEND ANY CIVIL ACTION OR PRO-
 20 CEEDING FOR MALPRACTICE OR NEGLIGENCE.—The Attorney General shall
 21 defend any civil action or proceeding brought in any court against any per-
 22 son referred to in subsection (a) (or the estate of such person) for any such
 23 injury. Any such person against whom such civil action or proceeding is
 24 brought shall deliver within such time after date of service or knowledge of
 25 service as determined by the Attorney General, all process served upon such
 26 person or an attested true copy thereof to such person’s immediate superior
 27 or to whomever was designated by the Administrator to receive such papers.
 28 Such person shall promptly furnish copies of the pleading and process there-
 29 in to the United States Attorney for the district embracing the place where-
 30 in the proceeding is brought, to the Attorney General, and to the Adminis-
 31 trator.

32 (c) REMOVAL OF ACTIONS.—Upon a certification by the Attorney General
 33 that any person described in subsection (a) was acting in the scope of such
 34 person’s duties or employment at the time of the incident out of which the
 35 suit arose, any such civil action or proceeding commenced in a State court
 36 shall be removed without bond at any time before trial by the Attorney Gen-
 37 eral to the district court of the United States of the district and division
 38 embracing the place wherein it is pending and the proceeding deemed a tort
 39 action brought against the United States under the provisions of title 28,
 40 and all references thereto. Should a district court of the United States de-
 41 termine, on a hearing on a motion to remand held before a trial on the mer-

1 its, that the case so removed is one in which a remedy by suit within the
 2 meaning of subsection (a) is not available against the United States, the
 3 case shall be remanded to the State court.

4 (d) COMPROMISE OR SETTLEMENT OF CLAIMS.—The Attorney General
 5 may compromise or settle any claim asserted in such civil action or pro-
 6 ceeding in the manner provided in section 2677 of title 28, and with the
 7 same effect.

8 (e) APPLICABILITY OF OTHER PROVISIONS OF LAW.—For purposes of
 9 this section, the provisions of section 2680(h) of title 28 shall not apply to
 10 any cause of action arising out of a negligent or wrongful act or omission
 11 in the performance of medical, dental, or related health care functions (in-
 12 cluding clinical studies and investigations).

13 (f) LIABILITY INSURANCE FOR PERSONS ASSIGNED TO FOREIGN COUN-
 14 TRIES OR NON-FEDERAL AGENCIES.—The Administrator or the Adminis-
 15 trator’s designee may, to the extent that the Administrator or the designee
 16 deems appropriate, hold harmless or provide liability insurance for any per-
 17 son described in subsection (a) for damages for personal injury, including
 18 death, caused by such person’s negligent or wrongful act or omission in the
 19 performance of medical, dental, or related health care functions (including
 20 clinical studies and investigations) while acting within the scope of such per-
 21 son’s duties if such person is assigned to a foreign country or detailed for
 22 service with other than a Federal department, agency, or instrumentality or
 23 if the circumstances are such as are likely to preclude the remedies of third
 24 persons against the United States described in section 2679(b) of title 28,
 25 for such damage or injury.

26 **§ 20138. Insurance and indemnification**

27 (a) DEFINITIONS.—In this section:

28 (1) SPACE VEHICLE.—The term “space vehicle” means an object in-
 29 tended for launch, launched, or assembled in outer space, including the
 30 space shuttle and other components of a space transportation system,
 31 together with related equipment, devices, components, and parts.

32 (2) THIRD PARTY.—The term “third party” means any person who
 33 may institute a claim against a user for death, bodily injury, or loss
 34 of or damage to property.

35 (3) USER.—The term “user” includes anyone who enters into an
 36 agreement with the Administration for use of all or a portion of a space
 37 vehicle, who owns or provides property to be flown on a space vehicle,
 38 or who employs a person to be flown on a space vehicle.

39 (b) AUTHORIZATION.—The Administration is authorized on such terms
 40 and to the extent it may deem appropriate to provide liability insurance for
 41 any user of a space vehicle to compensate all or a portion of claims by third

1 parties for death, bodily injury, or loss of or damage to property resulting
 2 from activities carried on in connection with the launch, operations, or re-
 3 covery of the space vehicle. Appropriations available to the Administration
 4 may be used to acquire such insurance, but such appropriations shall be re-
 5 imbursement to the maximum extent practicable by the users under reimburse-
 6 ment policies established pursuant to section 20113 of this title.

7 (e) INDEMNIFICATION.—Under such regulations in conformity with this
 8 section as the Administrator shall prescribe taking into account the avail-
 9 ability, cost, and terms of liability insurance, any agreement between the
 10 Administration and a user of a space vehicle may provide that the United
 11 States will indemnify the user against claims (including reasonable expenses
 12 of litigation or settlement) by third parties for death, bodily injury, or loss
 13 of or damage to property resulting from activities carried on in connection
 14 with the launch, operations, or recovery of the space vehicle, but only to the
 15 extent that such claims are not compensated by liability insurance of the
 16 user. Such indemnification may be limited to claims resulting from other
 17 than the actual negligence or willful misconduct of the user.

18 (d) TERMS OF INDEMNIFICATION AGREEMENT.—An agreement made
 19 under subsection (c) that provides indemnification must also provide for—

- 20 (1) notice to the United States of any claim or suit against the user
- 21 for the death, bodily injury, or loss of or damage to the property; and
- 22 (2) control of or assistance in the defense by the United States, at
- 23 its election, of that suit or claim.

24 (e) CERTIFICATION OF JUST AND REASONABLE AMOUNT.—No payment
 25 may be made under subsection (c) unless the Administrator or the Adminis-
 26 trator’s designee certifies that the amount is just and reasonable.

27 (f) PAYMENTS.—Upon the approval by the Administrator, payments
 28 under subsection (c) may be made, at the Administrator’s election, either
 29 from funds available for research and development not otherwise obligated
 30 or from funds appropriated for such payments.

31 **§ 20139. Insurance for experimental aerospace vehicles**

32 (a) DEFINITIONS.—In this section:

33 (1) COOPERATING PARTY.—The term “cooperating party” means
 34 any person who enters into an agreement with the Administration for
 35 the performance of cooperative scientific, aeronautical, or space activi-
 36 ties to carry out the purposes of this chapter.

37 (2) DEVELOPER.—The term “developer” means a United States per-
 38 son (other than a natural person) who—

- 39 (A) is a party to an agreement with the Administration for the
- 40 purpose of developing new technology for an experimental aero-
- 41 space vehicle;

1 (B) owns or provides property to be flown or situated on that
2 vehicle; or

3 (C) employs a natural person to be flown on that vehicle.

4 (3) EXPERIMENTAL AEROSPACE VEHICLE.—The term “experimental
5 aerospace vehicle” means an object intended to be flown in, or launched
6 into, orbital or suborbital flight for the purpose of demonstrating tech-
7 nologies necessary for a reusable launch vehicle, developed under an
8 agreement between the Administration and a developer.

9 (4) RELATED ENTITY.—The term “related entity” includes a con-
10 tractor or subcontractor at any tier, a supplier, a grantee, and an in-
11 vestigator or detailee.

12 (b) IN GENERAL.—The Administrator may provide liability insurance for,
13 or indemnification to, the developer of an experimental aerospace vehicle de-
14 veloped or used in execution of an agreement between the Administration
15 and the developer.

16 (c) TERMS AND CONDITIONS.—

17 (1) IN GENERAL.—Except as otherwise provided in this section, the
18 insurance and indemnification provided by the Administration under
19 subsection (b) to a developer shall be provided on the same terms and
20 conditions as insurance and indemnification is provided by the Admin-
21 istration under section 20138 of this title to the user of a space vehicle.

22 (2) INSURANCE.—

23 (A) IN GENERAL.—A developer shall obtain liability insurance
24 or demonstrate financial responsibility in amounts to compensate
25 for the maximum probable loss from claims by—

26 (i) a third party for death, bodily injury, or property dam-
27 age, or loss resulting from an activity carried out in connec-
28 tion with the development or use of an experimental aero-
29 space vehicle; and

30 (ii) the United States Government for damage or loss to
31 Government property resulting from such an activity.

32 (B) MAXIMUM REQUIRED.—The Administrator shall determine
33 the amount of insurance required, but, except as provided in sub-
34 paragraph (C), that amount shall not be greater than the amount
35 required under section 50714(a)(3) of this title for a launch. The
36 Administrator shall publish notice of the Administrator’s deter-
37 mination and the applicable amount or amounts in the Federal
38 Register within 10 days after making the determination.

39 (C) INCREASE IN DOLLAR AMOUNTS.—The Administrator may
40 increase the dollar amounts set forth in section 50714(a)(3)(A) of
41 this title for the purpose of applying that section under this sec-

1 tion to a developer after consultation with the Comptroller General
2 and such experts and consultants as may be appropriate, and after
3 publishing notice of the increase in the Federal Register not less
4 than 180 days before the increase goes into effect. The Adminis-
5 trator shall make available for public inspection, not later than the
6 date of publication of such notice, a complete record of any cor-
7 respondence received by the Administration, and a transcript of
8 any meetings in which the Administration participated, regarding
9 the proposed increase.

10 (D) SAFETY REVIEW REQUIRED BEFORE ADMINISTRATOR PRO-
11 VIDES INSURANCE.—The Administrator may not provide liability
12 insurance or indemnification under subsection (b) unless the devel-
13 oper establishes to the satisfaction of the Administrator that ap-
14 propriate safety procedures and practices are being followed in the
15 development of the experimental aerospace vehicle.

16 (3) NO INDEMNIFICATION WITHOUT CROSS-WAIVER.—Notwith-
17 standing subsection (b), the Administrator may not indemnify a devel-
18 oper of an experimental aerospace vehicle under this section unless
19 there is an agreement between the Administration and the developer
20 described in subsection (d).

21 (4) APPLICATION OF CERTAIN PROCEDURES.—If the Administrator
22 requests additional appropriations to make payments under this sec-
23 tion, like the payments that may be made under section 20138(c) of
24 this title, then the request for those appropriations shall be made in
25 accordance with the procedures established by subsections (d) and (e)
26 of section 50715 of this title.

27 (d) CROSS-WAIVERS.—

28 (1) ADMINISTRATOR AUTHORIZED TO WAIVE.—The Administrator,
29 on behalf of the United States, and its departments, agencies, and in-
30 strumentalities, may reciprocally waive claims with a developer or co-
31 operating party and with the related entities of that developer or co-
32 operating party under which each party to the waiver agrees to be re-
33 sponsible, and agrees to ensure that its own related entities are respon-
34 sible, for damage or loss to its property for which it is responsible, or
35 for losses resulting from any injury or death sustained by its own em-
36 ployees or agents, as a result of activities connected to the agreement
37 or use of the experimental aerospace vehicle.

38 (2) LIMITATIONS.—

39 (A) CLAIMS.—A reciprocal waiver under paragraph (1) may not
40 preclude a claim by any natural person (including, but not limited
41 to, a natural person who is an employee of the United States, the

1 developer, the cooperating party, or their respective subcontractors) or that natural person's estate, survivors, or subrogees for
 2 injury or death, except with respect to a subrogee that is a party
 3 to the waiver or has otherwise agreed to be bound by the terms
 4 of the waiver.
 5

6 (B) LIABILITY FOR NEGLIGENCE.—A reciprocal waiver under
 7 paragraph (1) may not absolve any party of liability to any nat-
 8 ural person (including, but not limited to, a natural person who
 9 is an employee of the United States, the developer, the cooperating
 10 party, or their respective subcontractors) or such a natural per-
 11 son's estate, survivors, or subrogees for negligence, except with re-
 12 spect to a subrogee that is a party to the waiver or has otherwise
 13 agreed to be bound by the terms of the waiver.

14 (C) INDEMNIFICATION FOR DAMAGES.—A reciprocal waiver
 15 under paragraph (1) may not be used as the basis of a claim by
 16 the Administration, or the developer or cooperating party, for in-
 17 demnification against the other for damages paid to a natural per-
 18 son, or that natural person's estate, survivors, or subrogees, for
 19 injury or death sustained by that natural person as a result of ac-
 20 tivities connected to the agreement or use of the experimental
 21 aerospace vehicle.

22 (D) WILLFUL MISCONDUCT.—A reciprocal waiver under para-
 23 graph (1) may not relieve the United States, the developer, the co-
 24 operating party, or the related entities of the developer or cooper-
 25 ating party, of liability for damage or loss resulting from willful
 26 misconduct.

27 (3) EFFECT ON PREVIOUS WAIVERS.—This subsection applies to any
 28 waiver of claims entered into by the Administration without regard to
 29 the date on which the Administration entered into the waiver.

30 (e) RELATIONSHIP TO OTHER LAWS.—

31 (1) SECTION 20138.—This section does not apply to any object,
 32 transaction, or operation to which section 20138 of this title applies.

33 (2) SECTION 50719(g)(1).—The Administrator may not provide indem-
 34 nification to a developer under this section for launches subject to li-
 35 cense under section 50719(g)(1) of this title.

36 (f) TERMINATION.—

37 (1) IN GENERAL.—The provisions of this section shall terminate on
 38 December 31, 2010.

39 (2) EFFECT OF TERMINATION ON AGREEMENT.—The termination of
 40 this section shall not terminate or otherwise affect any cross-waiver
 41 agreement, insurance agreement, indemnification agreement, or other

1 agreement entered into under this section, except as may be provided
2 in that agreement.

3 **§ 20140. Appropriations**

4 (a) AUTHORIZATION.—

5 (1) IN GENERAL.—There are authorized to be appropriated such
6 sums as may be necessary to carry out this chapter, except that noth-
7 ing in this chapter shall authorize the appropriation of any amount
8 for—

9 (A) the acquisition or condemnation of any real property; or

10 (B) any other item of a capital nature (such as plant or facility
11 acquisition, construction, or expansion) which exceeds \$250,000.

12 (2) AVAILABILITY.—Sums appropriated pursuant to this subsection
13 for the construction of facilities, or for research and development activi-
14 ties, shall remain available until expended.

15 (b) USE OF FUNDS FOR EMERGENCY REPAIRS OF EXISTING FACILI-
16 TIES.—Any funds appropriated for the construction of facilities may be used
17 for emergency repairs of existing facilities when such existing facilities are
18 made inoperative by major breakdown, accident, or other circumstances and
19 such repairs are deemed by the Administrator to be of greater urgency than
20 the construction of new facilities.

21 (c) TERMINATION.—Notwithstanding any other provision of law, the au-
22 thorization of any appropriation to the Administration shall expire (unless
23 an earlier expiration is specifically provided) at the close of the third fiscal
24 year following the fiscal year in which the authorization was enacted, to the
25 extent that such appropriation has not theretofore actually been made.

26 **§ 20141. Misuse of agency name and initials**

27 (a) IN GENERAL.—No person (as defined by section 20135(a) of this
28 title) may knowingly use the words “National Aeronautics and Space Ad-
29 ministration” or the letters “NASA”, or any combination, variation, or
30 colorable imitation of those words or letters either alone or in combination
31 with other words or letters—

32 (1) as a firm or business name in a manner reasonably calculated
33 to convey the impression that the firm or business has some connection
34 with, endorsement of, or authorization from, the Administration which
35 does not, in fact, exist; or

36 (2) in connection with any product or service being offered or made
37 available to the public in a manner reasonably calculated to convey the
38 impression that the product or service has the authorization, support,
39 sponsorship, or endorsement of, or the development, use, or manufac-
40 ture by or on behalf of the Administration which does not, in fact,
41 exist.

1 (b) CIVIL PROCEEDING TO ENJOIN.—Whenever it appears to the Attor-
 2 ney General that any person is engaged in an act or practice which con-
 3 stitutes or will constitute conduct prohibited by subsection (a), the Attorney
 4 General may initiate a civil proceeding in a district court of the United
 5 States to enjoin such act or practice.

6 **§ 20142. Contracts regarding expendable launch vehicles**

7 (a) COMMITMENTS BEYOND AVAILABLE APPROPRIATIONS.—The Admin-
 8 istrator may enter into contracts for expendable launch vehicle services that
 9 are for periods in excess of the period for which funds are otherwise avail-
 10 able for obligation, provide for the payment for contingent liability which
 11 may accrue in excess of available appropriations in the event the Federal
 12 Government for its convenience terminates such contracts, and provide for
 13 advance payments reasonably related to launch vehicle and related equip-
 14 ment, fabrication, and acquisition costs, if any such contract limits the
 15 amount of the payments that the Government is allowed to make under
 16 such contract to amounts provided in advance in appropriation Acts. Such
 17 contracts may be limited to sources within the United States when the Ad-
 18 ministrator determines that such limitation is in the public interest.

19 (b) TERMINATION IF FUNDS NOT AVAILABLE.—If funds are not available
 20 to continue any such contract, the contract shall be terminated for the con-
 21 venience of the Government, and the costs of such contract shall be paid
 22 from appropriations originally available for performance of the contract,
 23 from other unobligated appropriations currently available for the procure-
 24 ment of launch services, or from funds appropriated for such payments.

25 **§ 20143. Full cost appropriations account structure**

26 (a) ACCOUNTS FOR APPROPRIATIONS.—

27 (1) DESIGNATION OF 3 ACCOUNTS.—Appropriations for the Adminis-
 28 tration shall be made in 3 accounts, “Science, Aeronautics, and Edu-
 29 cation”, “Exploration Systems and Space Operations”, and an account
 30 for amounts appropriated for the necessary expenses of the Office of
 31 the Inspector General.

32 (2) REPROGRAMMING.—Within the Exploration Systems and Space
 33 Operations account, no more than 10 percent of the funds for a fiscal
 34 year for Exploration Systems may be reprogrammed for Space Oper-
 35 ations, and no more than 10 percent of the funds for a fiscal year for
 36 Space Operations may be reprogrammed for Exploration Systems. This
 37 paragraph shall not apply to reprogramming for the purposes described
 38 in subsection (b)(2).

39 (3) AVAILABILITY.—Appropriations shall remain available for 2 fis-
 40 cal years, unless otherwise specified in law. Each account shall include
 41 the planned full costs of Administration activities.

1 (b) TRANSFERS AMONG ACCOUNTS.—

2 (1) IN GENERAL.—To ensure the safe, timely, and successful accom-
3 plishment of Administration missions, the Administration may transfer
4 among accounts as necessary, amounts for—

5 (A) Federal salaries and benefits;

6 (B) training, travel, and awards;

7 (C) facility and related costs;

8 (D) information technology services;

9 (E) publishing services;

10 (F) science, engineering, fabricating, and testing services; and

11 (G) other administrative services.

12 (2) DISASTER, ACT OF TERRORISM, EMERGENCY RESCUE.—The Ad-
13 ministration may also transfer amounts among accounts for the imme-
14 diate costs of recovering from damage caused by a major disaster (as
15 defined in section 102 of the Robert T. Stafford Disaster Relief and
16 Emergency Assistance Act (42 U.S.C. 5122)) or by an act of terrorism,
17 or for the immediate costs associated with an emergency rescue of as-
18 tronauts.

19 (c) TRANSFER OF UNEXPIRED BALANCES.—The unexpired balances of
20 prior appropriations to the Administration for activities authorized under
21 this chapter may be transferred to the new account established for such ac-
22 tivity in subsection (a). Balances so transferred may be merged with funds
23 in the newly established account and thereafter may be accounted for as one
24 fund under the same terms and conditions.

25 **§ 20144. Prize authority**

26 (a) IN GENERAL.—The Administration may carry out a program to com-
27 petitively award cash prizes to stimulate innovation in basic and applied re-
28 search, technology development, and prototype demonstration that have the
29 potential for application to the performance of the space and aeronautical
30 activities of the Administration. The Administration may carry out a pro-
31 gram to award prizes only in conformity with this section.

32 (b) TOPICS.—In selecting topics for prize competitions, the Administrator
33 shall consult widely both within and outside the Federal Government, and
34 may empanel advisory committees.

35 (c) ADVERTISING.—The Administrator shall widely advertise prize com-
36 petitions to encourage participation.

37 (d) REQUIREMENTS AND REGISTRATION.—For each prize competition,
38 the Administrator shall publish a notice in the Federal Register announcing
39 the subject of the competition, the rules for being eligible to participate in
40 the competition, the amount of the prize, and the basis on which a winner
41 will be selected.

1 (e) ELIGIBILITY.—To be eligible to win a prize under this section, an in-
2 dividual or entity—

3 (1) shall have registered to participate in the competition pursuant
4 to any rules promulgated by the Administrator under subsection (d);

5 (2) shall have complied with all the requirements under this section;

6 (3) in the case of a private entity, shall be incorporated in and main-
7 tain a primary place of business in the United States, and in the case
8 of an individual, whether participating singly or in a group, shall be
9 a citizen or permanent resident of the United States; and

10 (4) shall not be a Federal entity or Federal employee acting within
11 the scope of their employment.

12 (f) LIABILITY.—

13 (1) ASSUMPTION OF RISK.—Registered participants must agree to
14 assume any and all risks and waive claims against the Federal Govern-
15 ment and its related entities, except in the case of willful misconduct,
16 for any injury, death, damage, or loss of property, revenue, or profits,
17 whether direct, indirect, or consequential, arising from their participa-
18 tion in a competition, whether such injury, death, damage, or loss
19 arises through negligence or otherwise. For the purposes of this para-
20 graph, the term “related entity” means a contractor or subcontractor
21 at any tier, and a supplier, user, customer, cooperating party, grantee,
22 investigator, or detailee.

23 (2) LIABILITY INSURANCE.—Participants must obtain liability insur-
24 ance or demonstrate financial responsibility, in amounts determined by
25 the Administrator, for claims by—

26 (A) a third party for death, bodily injury, or property damage,
27 or loss resulting from an activity carried out in connection with
28 participation in a competition, with the Federal Government
29 named as an additional insured under the registered participant’s
30 insurance policy and registered participants agreeing to indemnify
31 the Federal Government against third party claims for damages
32 arising from or related to competition activities; and

33 (B) the Federal Government for damage or loss to Government
34 property resulting from such an activity.

35 (g) JUDGES.—For each competition, the Administration, either directly or
36 through an agreement under subsection (h), shall assemble a panel of quali-
37 fied judges to select the winner or winners of the prize competition on the
38 basis described pursuant to subsection (d). Judges for each competition
39 shall include individuals from outside the Administration, including from the
40 private sector. A judge may not—

1 (1) have personal or financial interests in, or be an employee, officer,
2 director, or agent of any entity that is a registered participant in a
3 competition; or

4 (2) have a familial or financial relationship with an individual who
5 is a registered participant.

6 (h) ADMINISTERING THE COMPETITION.—The Administrator may enter
7 into an agreement with a private, nonprofit entity to administer the prize
8 competition, subject to the provisions of this section.

9 (i) FUNDING.—

10 (1) SOURCES.—Prizes under this section may consist of Federal ap-
11 propriated funds and funds provided by the private sector for such cash
12 prizes. The Administrator may accept funds from other Federal agen-
13 cies for such cash prizes. The Administrator may not give any special
14 consideration to any private sector entity in return for a donation.

15 (2) AVAILABILITY.—

16 (A) DEFINITION OF PROVISIONS KNOWN AS THE ANTI-DEFI-
17 CIENCY ACT.—In this paragraph, the term “provisions known as
18 the Anti-Deficiency Act” means sections 1341, 1342, 1349(a),
19 1350, 1351, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518,
20 and 1519 of title 31.

21 (B) IN GENERAL.—Notwithstanding any other provision of law,
22 funds appropriated for prize awards under this section shall re-
23 main available until expended, and may be transferred, repro-
24 grammed, or expended for other purposes only after the expiration
25 of 10 fiscal years after the fiscal year for which the funds were
26 originally appropriated. No provision in this section permits obli-
27 gation or payment of funds in violation of the provisions known
28 as the Anti-Deficiency Act.

29 (3) APPROPRIATION OR COMMITMENT OF FUNDS REQUIRED BEFORE
30 ANNOUNCEMENT OF PRIZE OR INCREASE.—

31 (A) IN GENERAL.—No prize may be announced under sub-
32 section (d) until all the funds needed to pay out the announced
33 amount of the prize have been appropriated or committed in writ-
34 ing by a private source.

35 (B) INCREASE.—The Administrator may increase the amount of
36 a prize after an initial announcement is made under subsection (d)
37 if—

38 (i) notice of the increase is provided in the same manner
39 as the initial notice of the prize; and

1 (ii) the funds needed to pay out the announced amount of
2 the increase have been appropriated or committed in writing
3 by a private source.

4 (4) NOTICE TO COMMITTEES FOR PRIZE GREATER THAN
5 \$10,000,000.—No prize competition under this section may offer a prize
6 in an amount greater than \$10,000,000 unless 30 days have elapsed
7 after written notice has been transmitted to the Committee on Science
8 and Technology of the House of Representatives and the Committee on
9 Commerce, Science, and Transportation of the Senate.

10 (5) APPROVAL OF ADMINISTRATOR FOR PRIZE GREATER THAN
11 \$1,000,000.—No prize competition under this section may result in the
12 award of more than \$1,000,000 in cash prizes without the approval of
13 the Administrator.

14 (j) USE OF ADMINISTRATION NAME OR INSIGNIA.—A registered partici-
15 pant in a competition under this section may use the Administration’s
16 name, initials, or insignia only after prior review and written approval by
17 the Administration.

18 (k) COMPLIANCE WITH EXISTING LAW.—The Federal Government shall
19 not, by virtue of offering or providing a prize under this section, be respon-
20 sible for compliance by registered participants in a prize competition with
21 Federal law, including licensing, export control, and non-proliferation laws,
22 and related regulations.

23 **§ 20145. Enhanced-use lease of real property demonstration**

24 (a) IN GENERAL.—Notwithstanding any other provision of law, the Ad-
25 ministrator may enter into a lease under this section with any person or
26 entity (including another department or agency of the Federal Government
27 or an entity of a State or local government) with regard to any real property
28 under the jurisdiction of the Administrator at no more than 2 Administra-
29 tion centers.

30 (b) CONSIDERATION.—

31 (1) AMOUNT.—A person or entity entering into a lease under this
32 section shall provide consideration for the lease at fair market value as
33 determined by the Administrator, except that in the case of a lease to
34 another department or agency of the Federal Government, that depart-
35 ment or agency shall provide consideration for the lease equal to the
36 full costs to the Administration in connection with the lease.

37 (2) FORM.—Consideration under this subsection may take one or a
38 combination of the following forms:

39 (A) The payment of cash.

1 (B) The maintenance, construction, modification, or improve-
 2 ment of facilities on real property under the jurisdiction of the Ad-
 3 ministrator.

4 (C) The provision of services to the Administration, including
 5 launch services and payload processing services.

6 (D) The use by the Administration of facilities on the property.

7 (3) CASH CONSIDERATION.—

8 (A) UTILIZATION.—The Administrator may utilize amounts of
 9 cash consideration received under this subsection for a lease en-
 10 tered into under this section to cover the full costs to the Adminis-
 11 tration in connection with the lease. These funds shall remain
 12 available until expended.

13 (B) AMOUNTS NOT UTILIZED.—Any amounts of cash consider-
 14 ation received under this subsection that are not utilized in accord-
 15 ance with subparagraph (A) shall be deposited in a capital asset
 16 account to be established by the Administrator, shall be available
 17 for maintenance, capital revitalization, and improvements of the
 18 real property assets of the centers selected for this demonstration
 19 program, and shall remain available until expended.

20 (e) ADDITIONAL TERMS AND CONDITIONS.—The Administrator may re-
 21 quire such terms and conditions in connection with a lease under this sec-
 22 tion as the Administrator considers appropriate to protect the interests of
 23 the United States.

24 (d) RELATIONSHIP TO OTHER LEASE AUTHORITY.—The authority under
 25 this section to lease property of the Administration is in addition to any
 26 other authority to lease property of the Administration under law.

27 (e) LEASE RESTRICTIONS.—The Administration is not authorized to lease
 28 back property under this section during the term of the out-lease or enter
 29 into other contracts with the lessee respecting the property.

30 (f) PLAN AND REPORTING REQUIREMENTS.—At least 15 days prior to
 31 the Administrator entering into the first lease under this section, the Ad-
 32 ministrator shall submit a plan to Congress on the Administration’s pro-
 33 posed implementation of this demonstration. The Administrator shall submit
 34 an annual report by January 31 of each year regarding the status of the
 35 demonstration.

36 **§ 20146. Retrocession of jurisdiction**

37 (a) DEFINITION OF STATE.—In this section, the term “State” means any
 38 of the several States, the District of Columbia, the Commonwealth of Puerto
 39 Rico, the United States Virgin Islands, Guam, American Samoa, the North-
 40 ern Mariana Islands, and any other commonwealth, territory, or possession
 41 of the United States.

(b) RELINQUISHING LEGISLATIVE JURISDICTION.—Notwithstanding any other provision of law, the Administrator may relinquish to a State all or part of the legislative jurisdiction of the United States over lands or interests under the control of the Administrator in that State.

§ 20147. Recovery and disposition authority

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATION HUMAN SPACE FLIGHT VEHICLE.—The term “Administration human space flight vehicle” means a space vehicle, as defined in section 20138(a) of this title, that—

(A) is intended to transport one or more persons;

(B) is designed to operate in outer space; and

(C) is either—

(i) owned by the Administration; or

(ii) owned by an Administration contractor or cooperating party and operated as part of an Administration mission or a joint mission with the Administration.

(2) CREWMEMBER.—The term “crewmember” means an astronaut or other person assigned to an Administration human space flight vehicle.

(b) CONTROL OF REMAINS.—

(1) IN GENERAL.—Subject to paragraphs (2) and (3), when there is an accident or mishap resulting in the death of a crewmember of an Administration human space flight vehicle, the Administrator may take control over the remains of the crewmember and order autopsies and other scientific or medical tests.

(2) TREATMENT.—Each crewmember shall provide the Administrator with the crewmember’s preferences regarding the treatment accorded to the crewmember’s remains and the Administrator shall, to the extent possible, respect those stated preferences.

(3) CONSTRUCTION.—This section shall not be construed to permit the Administrator to interfere with any Federal investigation of a mishap or accident.

SUBCHAPTER IV—UPPER ATMOSPHERE RESEARCH

§ 20161. Congressional declaration of purpose and policy

(a) PURPOSE.—The purpose of this subchapter is to authorize and direct the Administration to develop and carry out a comprehensive program of research, technology, and monitoring of the phenomena of the upper atmosphere so as to provide for an understanding of and to maintain the chemical and physical integrity of the Earth’s upper atmosphere.

(b) POLICY.—Congress declares that it is the policy of the United States to undertake an immediate and appropriate research, technology, and moni-

1 toring program that will provide for understanding the physics and chem-
2 istry of the Earth’s upper atmosphere.

3 **§ 20162. Definition of upper atmosphere**

4 In this subchapter, the term “upper atmosphere” means that portion of
5 the Earth’s sensible atmosphere above the troposphere.

6 **§ 20163. Program authorized**

7 (a) IN GENERAL.—In order to carry out the purposes of this subchapter,
8 the Administration, in cooperation with other Federal agencies, shall initiate
9 and carry out a program of research, technology, monitoring, and other ap-
10 propriate activities directed to understand the physics and chemistry of the
11 upper atmosphere.

12 (b) ACTIVITIES.—In carrying out the provisions of this subchapter, the
13 Administration shall—

14 (1) arrange for participation by the scientific and engineering com-
15 munity, of both the Nation’s industrial organizations and institutions
16 of higher education, in planning and carrying out appropriate research,
17 in developing necessary technology, and in making necessary observa-
18 tions and measurements;

19 (2) provide, by way of grant, contract, scholarships, or other ar-
20 rangements, to the maximum extent practicable and consistent with
21 other laws, for the widest practicable and appropriate participation of
22 the scientific and engineering community in the program authorized by
23 this subchapter; and

24 (3) make all results of the program authorized by this subchapter
25 available to the appropriate regulatory agencies and provide for the
26 widest practicable dissemination of such results.

27 **§ 20164. International cooperation**

28 In carrying out the provisions of this subchapter, the Administration, sub-
29 ject to the direction of the President and after consultation with the Sec-
30 retary of State, shall make every effort to enlist the support and cooperation
31 of appropriate scientists and engineers of other countries and international
32 organizations.

33 **CHAPTER 203—RESPONSIBILITIES AND VISION**

Sec.

20301. General responsibilities.

20302. Vision for space exploration.

34 **§ 20301. General responsibilities**

35 (a) PROGRAMS.—The Administrator shall ensure that the Administration
36 carries out a balanced set of programs that shall include, at a minimum,
37 programs in—

38 (1) human space flight, in accordance with section 20302 of this
39 title;

- 1 (2) aeronautics research and development; and
- 2 (3) scientific research, which shall include, at a minimum—
- 3 (A) robotic missions to study the Moon and other planets and
- 4 their moons, and to deepen understanding of astronomy, astro-
- 5 physics, and other areas of science that can be productively stud-
- 6 ied from space;
- 7 (B) Earth science research and research on the Sun-Earth con-
- 8 nection through the development and operation of research sat-
- 9 ellites and other means;
- 10 (C) support of university research in space science, Earth
- 11 science, and microgravity science; and
- 12 (D) research on microgravity, including research that is not di-
- 13 rectly related to human exploration.
- 14 (b) CONSULTATION AND COORDINATION.—In carrying out the programs
- 15 of the Administration, the Administrator shall—
- 16 (1) consult and coordinate to the extent appropriate with other rel-
- 17 evant Federal agencies, including through the National Science and
- 18 Technology Council;
- 19 (2) work closely with the private sector, including by—
- 20 (A) encouraging the work of entrepreneurs who are seeking to
- 21 develop new means to launch satellites, crew, or cargo;
- 22 (B) contracting with the private sector for crew and cargo serv-
- 23 ices, including to the International Space Station, to the extent
- 24 practicable;
- 25 (C) using commercially available products (including software)
- 26 and services to the extent practicable to support all Administration
- 27 activities; and
- 28 (D) encouraging commercial use and development of space to
- 29 the greatest extent practicable; and
- 30 (3) involve other nations to the extent appropriate.

31 **§ 20302. Vision for space exploration**

- 32 (a) IN GENERAL.—The Administrator shall establish a program to de-
- 33 velop a sustained human presence on the Moon, including a robust pre-
- 34 cursor program, to promote exploration, science, commerce, and United
- 35 States preeminence in space, and as a stepping-stone to future exploration
- 36 of Mars and other destinations. The Administrator is further authorized to
- 37 develop and conduct appropriate international collaborations in pursuit of
- 38 these goals.
- 39 (b) MILESTONES.—The Administrator shall manage human space flight
- 40 programs to strive to achieve the following milestones (in conformity with
- 41 section 70502 of this title):

- 1 (1) Returning Americans to the Moon no later than 2020.
- 2 (2) Launching the Crew Exploration Vehicle as close to 2010 as possible.
- 3
- 4 (3) Increasing knowledge of the impacts of long duration stays in
- 5 space on the human body using the most appropriate facilities available,
- 6 including the International Space Station.
- 7 (4) Enabling humans to land on and return from Mars and other
- 8 destinations on a timetable that is technically and fiscally possible.

9 **Subtitle III—Administrative Provisions**

Chapter	Sec.
301. Appropriations, Budgets, and Accounting	30101
303. Contracting and Procurement	30301
305. Management and Review	30501
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10 **CHAPTER 301—APPROPRIATIONS, BUDGETS, AND**
 11 **ACCOUNTING**

Sec.
30101. Prior authorization of appropriations required.
30102. Authorization of appropriations.
30103. Working capital fund.
30104. Budgets.
30105. Baselines and cost controls.
30106. International Space Station Research.

12 **§ 30101. Prior authorization of appropriations required**

13 Notwithstanding the provisions of any other law, no appropriation may
 14 be made to the Administration unless previously authorized by legislation
 15 enacted by Congress.

16 **§ 30102. Authorization of appropriations**

17 (a) FISCAL YEAR 2007.—There are authorized to be appropriated to the
 18 Administration for fiscal year 2007 \$17,932,000,000 as follows:

19 (1) SCIENCE, AERONAUTICS, AND EDUCATION.—For Science, Aero-
 20 nautics, and Education (including amounts for construction of facili-
 21 ties), \$7,136,800,000, of which \$962,000,000 shall be for Aeronautics.

22 (2) EXPLORATION SYSTEMS AND SPACE OPERATIONS.—For Explo-
 23 ration Systems and Space Operations (including amounts for construc-
 24 tion of facilities), \$10,761,700,000, of which \$6,618,600,000 shall be
 25 for Space Operations.

26 (3) OFFICE OF INSPECTOR GENERAL.—For the Office of Inspector
 27 General, \$33,500,000.

28 (b) FISCAL YEAR 2008.—There are authorized to be appropriated to the
 29 Administration for fiscal year 2008 \$18,686,300,000 as follows:

1 (1) SCIENCE, AERONAUTICS, AND EDUCATION.—For Science, Aero-
 2 nautics, and Education (including amounts for construction of facili-
 3 ties), \$7,747,800,000, of which \$990,000,000 shall be for Aeronautics.

4 (2) EXPLORATION SYSTEMS AND SPACE OPERATIONS.—For Explo-
 5 ration Systems and Space Operations (including amounts for construc-
 6 tion of facilities), \$10,903,900,000, of which \$6,546,600,000 shall be
 7 for Space Operations.

8 (3) OFFICE OF INSPECTOR GENERAL.—For the Office of Inspector
 9 General, \$34,600,000.

10 **§ 30103. Working capital fund**

11 (a) ESTABLISHMENT.—There is hereby established in the United States
 12 Treasury an Administration working capital fund.

13 (b) AVAILABILITY OF AMOUNTS.—

14 (1) IN GENERAL.—Amounts in the fund are available for financing
 15 activities, services, equipment, information, and facilities as authorized
 16 by law to be provided—

17 (A) within the Administration;

18 (B) to other agencies or instrumentalities of the United States;

19 (C) to any State, territory, or possession or political subdivision
 20 thereof;

21 (D) to other public or private agencies; or

22 (E) to any person, firm, association, corporation, or educational
 23 institution on a reimbursable basis.

24 (2) CAPITAL REPAIRS.—The fund shall also be available for the pur-
 25 pose of funding capital repairs, renovations, rehabilitation,
 26 sustainment, demolition, or replacement of Administration real prop-
 27 erty, on a reimbursable basis within the Administration.

28 (3) NO FISCAL YEAR LIMITATION.—Amounts in the fund are avail-
 29 able without regard to fiscal year limitation.

30 (c) CONTENTS.—The capital of the fund consists of—

31 (1) amounts appropriated to the fund;

32 (2) the reasonable value of stocks of supplies, equipment, and other
 33 assets and inventories on order that the Administrator transfers to the
 34 fund, less the related liabilities and unpaid obligations; and

35 (3) payments received for loss or damage to property of the fund.

36 (d) REIMBURSEMENT.—The fund shall be reimbursed, in advance, for
 37 supplies and services at rates that will approximate the expenses of oper-
 38 ation, such as the accrual of annual leave, depreciation of plant, property,
 39 and equipment, and overhead.

1 **§ 30104. Budgets**

2 (a) CATEGORIES.—The proposed budget for the Administration submitted
3 by the President for each fiscal year shall be accompanied by documents
4 showing—

5 (1) by program—

6 (A) the budget for space operations, including the International
7 Space Station and the space shuttle;

8 (B) the budget for exploration systems;

9 (C) the budget for aeronautics;

10 (D) the budget for space science;

11 (E) the budget for Earth science;

12 (F) the budget for microgravity science;

13 (G) the budget for education;

14 (H) the budget for safety oversight; and

15 (I) the budget for public relations;

16 (2) the budget for technology transfer programs;

17 (3) the budget for the Integrated Enterprise Management Program,
18 by individual element;

19 (4) the budget for the Independent Technical Authority, both total
20 and by center;

21 (5) the total budget for the prize program under section 20144 of
22 this title, and the administrative budget for that program; and

23 (6) the comparable figures for at least the 2 previous fiscal years for
24 each item in the proposed budget.

25 (b) ADDITIONAL BUDGET INFORMATION UPON REQUEST BY COMMIT-
26 TEES.—The Administration shall make available, upon request from the
27 Committee on Science and Technology of the House of Representatives or
28 the Committee on Commerce, Science, and Transportation of the Senate—

29 (1) information on corporate and center general and administrative
30 costs and service pool costs, including—

31 (A) the total amount of funds being allocated for those purposes
32 for any fiscal year for which the President has submitted an an-
33 nual budget request to Congress;

34 (B) the amount of funds being allocated for those purposes for
35 each center, for headquarters, and for each directorate; and

36 (C) the major activities included in each cost category; and

37 (2) the figures on the amount of unobligated funds and unexpended
38 funds, by appropriations account—

39 (A) that remained at the end of the fiscal year prior to the fis-
40 cal year in which the budget is being presented that were carried
41 over into the fiscal year in which the budget is being presented;

1 (B) that are estimated will remain at the end of the fiscal year
 2 in which the budget is being presented that are proposed to be
 3 carried over into the fiscal year for which the budget is being pre-
 4 sented; and

5 (C) that are estimated will remain at the end of the fiscal year
 6 for which the budget is being presented.

7 **§ 30105. Baselines and cost controls**

8 (a) DEFINITIONS.—In this section:

9 (1) DEVELOPMENT.—The term “development” means the phase of
 10 a program following the formulation phase and beginning with the ap-
 11 proval to proceed to implementation, as defined in the Administration’s
 12 Procedural Requirements 7120.5c, dated March 22, 2005.

13 (2) DEVELOPMENT COST.—The term “development cost” means the
 14 total of all costs, including construction of facilities and civil servant
 15 costs, from the period beginning with the approval to proceed to imple-
 16 mentation through the achievement of operational readiness, without
 17 regard to funding source or management control, for the life of the pro-
 18 gram.

19 (3) LIFE-CYCLE COST.—The term “life-cycle cost” means the total
 20 of the direct, indirect, recurring, and nonrecurring costs, including the
 21 construction of facilities and civil servant costs, and other related ex-
 22 penses incurred or estimated to be incurred in the design, development,
 23 verification, production, operation, maintenance, support, and retire-
 24 ment of a program over its planned lifespan, without regard to funding
 25 source or management control.

26 (4) MAJOR PROGRAM.—The term “major program” means an activ-
 27 ity approved to proceed to implementation that has an estimated life-
 28 cycle cost of more than \$250,000,000.

29 (b) CONDITIONS FOR DEVELOPMENT.—

30 (1) IN GENERAL.—The Administration shall not enter into a con-
 31 tract for the development of a major program unless the Administrator
 32 determines that—

33 (A) the technical, cost, and schedule risks of the program are
 34 clearly identified and the program has developed a plan to manage
 35 those risks;

36 (B) the technologies required for the program have been dem-
 37 onstrated in a relevant laboratory or test environment; and

38 (C) the program complies with all relevant policies, regulations,
 39 and directives of the Administration.

40 (2) REPORT.—The Administrator shall transmit a report describing
 41 the basis for the determination required under paragraph (1) to the

1 Committee on Science and Technology of the House of Representatives
2 and the Committee on Commerce, Science, and Transportation of the
3 Senate at least 30 days before entering into a contract for development
4 under a major program.

5 (3) NONDELEGATION.—The Administrator may not delegate the de-
6 termination requirement under this subsection, except in cases in which
7 the Administrator has a conflict of interest.

8 (c) MAJOR PROGRAM ANNUAL REPORTS.—

9 (1) REQUIREMENT.—Annually, at the same time as the President’s
10 annual budget submission to Congress, the Administrator shall trans-
11 mit to the Committee on Science and Technology of the House of Rep-
12 resentatives and the Committee on Commerce, Science, and Transpor-
13 tation of the Senate a report that includes the information required by
14 this section for each major program for which the Administration pro-
15 poses to expend funds in the subsequent fiscal year. Reports under this
16 paragraph shall be known as Major Program Annual Reports.

17 (2) BASELINE REPORT.—The first Major Program Annual Report
18 for each major program shall include a Baseline Report that shall, at
19 a minimum, include—

20 (A) the purposes of the program and key technical characteris-
21 tics necessary to fulfill those purposes;

22 (B) an estimate of the life-cycle cost for the program, with a
23 detailed breakout of the development cost, program reserves, and
24 an estimate of the annual costs until development is completed;

25 (C) the schedule for development, including key program mile-
26 stones;

27 (D) the plan for mitigating technical, cost, and schedule risks
28 identified in accordance with subsection (b)(1)(A); and

29 (E) the name of the person responsible for making notifications
30 under subsection (d), who shall be an individual whose primary re-
31 sponsibility is overseeing the program.

32 (3) INFORMATION UPDATES.—For major programs for which a
33 Baseline Report has been submitted, each subsequent Major Program
34 Annual Report shall describe any changes to the information that had
35 been provided in the Baseline Report, and the reasons for those
36 changes.

37 (d) NOTIFICATION.—

38 (1) REQUIREMENT.—The individual identified under subsection
39 (c)(2)(E) shall immediately notify the Administrator any time that in-
40 dividual has reasonable cause to believe that, for the major program
41 for which he or she is responsible—

1 (A) the development cost of the program is likely to exceed the
 2 estimate provided in the Baseline Report of the program by 15
 3 percent or more; or

4 (B) a milestone of the program is likely to be delayed by 6
 5 months or more from the date provided for it in the Baseline Re-
 6 port of the program.

7 (2) REASONS.—Not later than 30 days after the notification required
 8 under paragraph (1), the individual identified under subsection
 9 (c)(2)(E) shall transmit to the Administrator a written notification ex-
 10 plaining the reasons for the change in the cost or milestone of the pro-
 11 gram for which notification was provided under paragraph (1).

12 (3) NOTIFICATION OF CONGRESS.—Not later than 15 days after the
 13 Administrator receives a written notification under paragraph (2), the
 14 Administrator shall transmit the notification to the Committee on
 15 Science and Technology of the House of Representatives and the Com-
 16 mittee on Commerce, Science, and Transportation of the Senate.

17 (e) FIFTEEN PERCENT THRESHOLD.—

18 (1) DETERMINATION, REPORT, AND INITIATION OF ANALYSIS.—Not
 19 later than 30 days after receiving a written notification under sub-
 20 section (d)(2), the Administrator shall determine whether the develop-
 21 ment cost of the program is likely to exceed the estimate provided in
 22 the Baseline Report of the program by 15 percent or more, or whether
 23 a milestone is likely to be delayed by 6 months or more. If the deter-
 24 mination is affirmative, the Administrator shall—

25 (A) transmit to the Committee on Science and Technology of
 26 the House of Representatives and the Committee on Commerce,
 27 Science, and Transportation of the Senate, not later than 15 days
 28 after making the determination, a report that includes—

29 (i) a description of the increase in cost or delay in schedule
 30 and a detailed explanation for the increase or delay;

31 (ii) a description of actions taken or proposed to be taken
 32 in response to the cost increase or delay; and

33 (iii) a description of any impacts the cost increase or sched-
 34 ule delay, or the actions described under clause (ii), will have
 35 on any other program within the Administration; and

36 (B) if the Administrator intends to continue with the program,
 37 promptly initiate an analysis of the program, which shall include,
 38 at a minimum—

39 (i) the projected cost and schedule for completing the pro-
 40 gram if current requirements of the program are not modi-
 41 fied;

1 (ii) the projected cost and the schedule for completing the
 2 program after instituting the actions described under sub-
 3 paragraph (A)(ii); and

4 (iii) a description of, and the projected cost and schedule
 5 for, a broad range of alternatives to the program.

6 (2) COMPLETION OF ANALYSIS AND TRANSMITTAL TO COMMIT-
 7 TEES.—The Administration shall complete an analysis initiated under
 8 paragraph (1)(B) not later than 6 months after the Administrator
 9 makes a determination under this subsection. The Administrator shall
 10 transmit the analysis to the Committee on Science and Technology of
 11 the House of Representatives and Committee on Commerce, Science,
 12 and Transportation of the Senate not later than 30 days after its com-
 13 pletion.

14 (f) THIRTY PERCENT THRESHOLD.—If the Administrator determines
 15 under subsection (e) that the development cost of a program will exceed the
 16 estimate provided in the Baseline Report of the program by more than 30
 17 percent, then, beginning 18 months after the date the Administrator trans-
 18 mits a report under subsection (e)(1)(A), the Administrator shall not expend
 19 any additional funds on the program, other than termination costs, unless
 20 Congress has subsequently authorized continuation of the program by law.
 21 An appropriation for the specific program enacted subsequent to a report
 22 being transmitted shall be considered an authorization for purposes of this
 23 subsection. If the program is continued, the Administrator shall submit a
 24 new Baseline Report for the program no later than 90 days after the date
 25 of enactment of the Act under which Congress has authorized continuation
 26 of the program.

27 **§ 30106. International Space Station Research**

28 The Administrator shall allocate at least 15 percent of the funds budg-
 29 eted for International Space Station research to ground-based, free-flyer,
 30 and International Space Station life and microgravity science research that
 31 is not directly related to supporting the human exploration program, con-
 32 sistent with section 40704 of this title.

33 **CHAPTER 303—CONTRACTING AND PROCUREMENT**

Sec.

- 30301. Guaranteed customer base.
- 30302. Quality assurance personnel.
- 30303. Tracking and data relay satellite services.
- 30304. Award of contracts to small businesses and disadvantaged individuals.
- 30305. Small business contracting.
- 30306. Requirement for independent cost analysis.
- 30307. Cost effectiveness calculations.
- 30308. Use of abandoned and underutilized buildings, grounds, and facilities.

1 **§ 30301. Guaranteed customer base**

2 No amount appropriated to the Administration may be used to fund
3 grants, contracts, or other agreements with an expected duration of more
4 than one year, when a primary effect of the grant, contract, or agreement
5 is to provide a guaranteed customer base for or establish an anchor tenancy
6 in new commercial space hardware or services unless an appropriations Act
7 specifies the new commercial space hardware or services to be developed or
8 used, or the grant, contract, or agreement is otherwise identified in such
9 Act.

10 **§ 30302. Quality assurance personnel**

11 (a) EXCLUSION OF ADMINISTRATION PERSONNEL.—A person providing
12 articles to the Administration under a contract entered into after December
13 9, 1991, may not exclude Administration quality assurance personnel from
14 work sites except as provided in a contract provision that has been sub-
15 mitted to Congress as provided in subsection (b).

16 (b) CONTRACT PROVISIONS.—The Administration shall not enter into any
17 contract which permits the exclusion of Administration quality assurance
18 personnel from work sites unless the Administrator has submitted a copy
19 of the provision permitting such exclusion to Congress at least 60 days be-
20 fore entering into the contract.

21 **§ 30303. Tracking and data relay satellite services**

22 (a) CONTRACTS.—The Administration is authorized, when so provided in
23 an appropriation Act, to enter into and to maintain a contract for tracking
24 and data relay satellite services. Such services shall be furnished to the Ad-
25 ministration in accordance with applicable authorization and appropriations
26 Acts. The Government shall incur no costs under such contract prior to the
27 furnishing of such services except that the contract may provide for the pay-
28 ment for contingent liability of the Government which may accrue in the
29 event the Government should decide for its convenience to terminate the
30 contract before the end of the period of the contract. Facilities which may
31 be required in the performance of the contract may be constructed on Gov-
32 ernment-owned lands if there is included in the contract a provision under
33 which the Government may acquire title to the facilities, under terms and
34 conditions agreed upon in the contract, upon termination of the contract.

35 (b) REPORTS TO CONGRESS.—The Administrator shall in January of
36 each year report to the Committee on Science and Technology and the Com-
37 mittee on Appropriations of the House of Representatives and the Com-
38 mittee on Commerce, Science, and Transportation and the Committee on
39 Appropriations of the Senate the projected aggregate contingent liability of
40 the Government under termination provisions of any contract authorized in
41 this section through the next fiscal year. The authority of the Administra-

1 tion to enter into and to maintain the contract authorized hereunder shall
 2 remain in effect unless repealed by legislation enacted by Congress.

3 **§ 30304. Award of contracts to small businesses and dis-**
 4 **advantaged individuals**

5 The Administrator shall annually establish a goal of at least 8 percent
 6 of the total value of prime and subcontracts awarded in support of author-
 7 ized programs, including the space station by the time operational status
 8 is obtained, which funds will be made available to small business concerns
 9 or other organizations owned or controlled by socially and economically dis-
 10 advantaged individuals (within the meaning of paragraphs (5) and (6) of
 11 section 8(a) of the Small Business Act (15 U.S.C. 637(a))), including His-
 12 torically Black Colleges and Universities that are part B institutions (as de-
 13 fined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C.
 14 1061(2))), Hispanic-serving institutions (as defined in section 502(a)(5) of
 15 that Act (20 U.S.C. 1101a(a)(5))), Tribal Colleges or Universities (as de-
 16 fined in section 316(b)(3) of that Act (20 U.S.C. 1059e(b)(3))), Alaska Na-
 17 tive-serving institutions (as defined in section 317(b)(2) of that Act (20
 18 U.S.C. 1059d(b)(2))), Native Hawaiian-serving institutions (as defined in
 19 section 317(b)(4) of that Act (20 U.S.C. 1059d(b)(4))), and minority edu-
 20 cational institutions (as defined by the Secretary of Education pursuant to
 21 the General Education Provisions Act (20 U.S.C. 1221 et seq.)).

22 **§ 30305. Small business contracting**

23 (a) PLAN.—In consultation with the Small Business Administration, the
 24 Administrator shall develop a plan to maximize the number and amount of
 25 contracts awarded to small business concerns (within the meaning given
 26 that term in section 3 of the Small Business Act (15 U.S.C. 632)) and to
 27 meet established contracting goals for such concerns.

28 (b) PRIORITY.—The Administrator shall establish as a priority meeting
 29 the contracting goals developed in conjunction with the Small Business Ad-
 30 ministration to maximize the amount of prime contracts, as measured in
 31 dollars, awarded in each fiscal year by the Administration to small business
 32 concerns (within the meaning given that term in section 3 of the Small
 33 Business Act (15 U.S.C. 632)).

34 **§ 30306. Requirement for independent cost analysis**

35 (a) DEFINITION OF IMPLEMENTATION.—In this section, the term “imple-
 36 mentation” means all activity in the life cycle of a project after preliminary
 37 design, independent assessment of the preliminary design, and approval to
 38 proceed into implementation, including critical design, development, certifi-
 39 cation, launch, operations, disposal of assets, and, for technology programs,
 40 development, testing, analysis, and communication of the results.

(b) REQUIREMENT.—Before any funds may be obligated for implementation of a project that is projected to cost more than \$250,000,000 in total project costs, the Administrator shall conduct and consider an independent life-cycle cost analysis of the project and shall report the results to Congress. In developing cost accounting and reporting standards for carrying out this section, the Administrator shall, to the extent practicable and consistent with other laws, solicit the advice of experts outside of the Administration.

§ 30307. Cost effectiveness calculations

(a) DEFINITIONS.—In this section:

(1) COMMERCIAL PROVIDER.—The term “commercial provider” means any person providing space transportation services or other space-related activities, the primary control of which is held by persons other than a Federal, State, local, or foreign government.

(2) STATE.—The term “State” means each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States.

(b) IN GENERAL.—Except as otherwise required by law, in calculating the cost effectiveness of the cost of the Administration engaging in an activity as compared to a commercial provider, the Administrator shall compare the cost of the Administration engaging in the activity using full cost accounting principles with the price the commercial provider will charge for such activity.

§ 30308. Use of abandoned and underutilized buildings, grounds, and facilities

(a) DEFINITION OF DEPRESSED COMMUNITIES.—In this section, the term “depressed communities” means rural and urban communities that are relatively depressed, in terms of age of housing, extent of poverty, growth of per capita income, extent of unemployment, job lag, or surplus labor.

(b) IN GENERAL.—In any case in which the Administrator considers the purchase, lease, or expansion of a facility to meet requirements of the Administration, the Administrator shall consider whether those requirements could be met by the use of one of the following:

(1) Abandoned or underutilized buildings, grounds, and facilities in depressed communities that can be converted to Administration usage at a reasonable cost, as determined by the Administrator.

(2) Any military installation that is closed or being closed, or any facility at such an installation.

1 (3) Any other facility or part of a facility that the Administrator de-
2 termines to be—

3 (A) owned or leased by the United States for the use of another
4 agency of the Federal Government; and

5 (B) considered by the head of the agency involved to be—

6 (i) excess to the needs of that agency; or

7 (ii) underutilized by that agency.

8 **CHAPTER 305—MANAGEMENT AND REVIEW**

Sec.

30501. Lessons learned and best practices.

30502. Whistleblower protection.

30503. Performance assessments.

30504. Assessment of science mission extensions.

30505. Coordination with the National Oceanic and Atmospheric Administration.

9 **§ 30501. Lessons learned and best practices**

10 (a) IN GENERAL.—The Administrator shall transmit to the Committee on
11 Science and Technology of the House of Representatives and the Committee
12 on Commerce, Science, and Transportation of the Senate an implementation
13 plan describing the Administration’s approach for obtaining, implementing,
14 and sharing lessons learned and best practices for its major programs and
15 projects not later than 180 days after December 30, 2005. The implementa-
16 tion plan shall be updated and maintained to ensure that it is current and
17 consistent with the burgeoning culture of learning and safety that is emerg-
18 ing at the Administration.

19 (b) REQUIRED CONTENT.—The implementation plan shall contain at a
20 minimum the lessons learned and best practices requirements for the Ad-
21 ministration, the organizations or positions responsible for enforcement of
22 the requirements, the reporting structure, and the objective performance
23 measures indicating the effectiveness of the activity.

24 (c) INCENTIVES.—The Administrator shall provide incentives to encour-
25 age sharing and implementation of lessons learned and best practices by em-
26 ployees, projects, and programs, as well as penalties for programs and
27 projects that are determined not to have demonstrated use of those re-
28 sources.

29 **§ 30502. Whistleblower protection**

30 (a) IN GENERAL.—Not later than 1 year after December 30, 2005, the
31 Administrator shall transmit to the Committee on Science and Technology
32 of the House of Representatives and the Committee on Commerce, Science,
33 and Transportation of the Senate a plan describing steps to be taken by
34 the Administration to protect from retaliation Administration employees
35 who raise concerns about substantial and specific dangers to public health
36 and safety or about substantial and specific factors that could threaten the
37 success of a mission. The plan shall be designed to ensure that Administra-

1 tion employees have the full protection required by law. The Administrator
2 shall implement the plan not more than 1 year after its transmittal.

3 (b) GOAL.—The Administrator shall ensure that the plan describes a sys-
4 tem that will protect employees who wish to raise or have raised concerns
5 described in subsection (a).

6 (c) PLAN.—At a minimum, the plan shall include, consistent with Federal
7 law—

8 (1) a reporting structure that ensures that the officials who are the
9 subject of a whistleblower’s complaint will not learn the identity of the
10 whistleblower;

11 (2) a single point to which all complaints can be made without fear
12 of retribution;

13 (3) procedures to enable the whistleblower to track the status of the
14 case;

15 (4) activities to educate employees about their rights as whistle-
16 blowers and how they are protected by law;

17 (5) activities to educate employees about their obligations to report
18 concerns and their accountability before and after receiving the results
19 of the investigations into their concerns; and

20 (6) activities to educate all appropriate Administration Human Re-
21 sources professionals, and all Administration managers and super-
22 visors, regarding personnel laws, rules, and regulations.

23 (d) REPORT.—Not later than February 15 of each year beginning Feb-
24 ruary 15, 2007, the Administrator shall transmit a report to the Committee
25 on Science and Technology of the House of Representatives and the Com-
26 mittee on Commerce, Science, and Transportation of the Senate on the con-
27 cerns described in subsection (a) that were raised during the previous fiscal
28 year. At a minimum, the report shall provide—

29 (1) the number of concerns that were raised, divided into the cat-
30 egories of safety and health, mission assurance, and mismanagement,
31 and the disposition of those concerns, including whether any employee
32 was disciplined as a result of a concern having been raised; and

33 (2) any recommendations for reforms to further prevent retribution
34 against employees who raise concerns.

35 **§ 30503. Performance assessments**

36 (a) IN GENERAL.—The performance of each division in the Science direc-
37 torate of the Administration shall be reviewed and assessed by the National
38 Academy of Sciences at 5-year intervals.

39 (b) TIMING.—Beginning with the first fiscal year following December 30,
40 2005, the Administrator shall select at least one division for review under
41 this section. The Administrator shall select divisions so that all disciplines

1 will have received their first review within 6 fiscal years of December 30,
2 2005.

3 (c) REPORTS.—Not later than March 1 of each year, beginning with the
4 first fiscal year after December 30, 2005, the Administrator shall transmit
5 a report to the Committee on Science and Technology of the House of Rep-
6 resentatives and the Committee on Commerce, Science, and Transportation
7 of the Senate—

8 (1) setting forth in detail the results of any external review under
9 subsection (a);

10 (2) setting forth in detail actions taken by the Administration in re-
11 sponse to any external review; and

12 (3) including a summary of findings and recommendations from any
13 other relevant external reviews of the Administration’s science mission
14 priorities and programs.

15 **§ 30504. Assessment of science mission extensions**

16 (a) ASSESSMENT.—The Administrator shall carry out biennial reviews
17 within each of the Science divisions to assess the cost and benefits of ex-
18 tending the date of the termination of data collection for those missions that
19 have exceeded their planned mission lifetime.

20 (b) CONSULTATION AND CONSIDERATION OF POTENTIAL BENEFITS OF
21 INSTRUMENTS ON MISSIONS.—For those missions that have an operational
22 component, the National Oceanic and Atmospheric Administration or any
23 other affected agency shall be consulted and the potential benefits of instru-
24 ments on missions that are beyond their planned mission lifetime taken into
25 account.

26 **§ 30505. Coordination with the National Oceanic and Atmos-
27 pheric Administration**

28 (a) JOINT WORKING GROUP.—The Administrator and the Administrator
29 of the National Oceanic and Atmospheric Administration shall appoint a
30 Joint Working Group, which shall review and monitor missions of the two
31 agencies to ensure maximum coordination in the design, operation, and
32 transition of missions where appropriate. The Joint Working Group shall
33 also prepare the plans required by subsection (c).

34 (b) COORDINATION REPORT.—Not later than February 15 of each year,
35 beginning with the first fiscal year after December 30, 2005, the Adminis-
36 trator and the Administrator of the National Oceanic and Atmospheric Ad-
37 ministration shall jointly transmit a report to the Committee on Science and
38 Technology of the House of Representatives and the Committee on Com-
39 merce, Science, and Transportation of the Senate on how the Earth science
40 programs of the Administration and the National Oceanic and Atmospheric

1 Administration will be coordinated during the fiscal year following the fiscal
2 year in which the report is transmitted.

3 (c) COORDINATION OF TRANSITION PLANNING AND REPORTING.—The
4 Administrator, in conjunction with the Administrator of the National Ocea-
5 nic and Atmospheric Administration and in consultation with other rel-
6 evant agencies, shall evaluate relevant Administration science missions for
7 their potential operational capabilities and shall prepare transition plans for
8 the existing and future Earth observing systems found to have potential
9 operational capabilities.

10 (d) LIMITATION.—The Administrator shall not transfer any Administra-
11 tion Earth science mission or Earth observing system to the National Ocea-
12 nic and Atmospheric Administration until the plan required under sub-
13 section (c) has been approved by the Administrator and the Administrator
14 of the National Oceanic and Atmospheric Administration and until financial
15 resources have been identified to support the transition or transfer in the
16 President’s budget request for the National Oceanic and Atmospheric Ad-
17 ministration.

18 **CHAPTER 307—INTERNATIONAL COOPERATION AND**
19 **COMPETITION**

Sec.

30701. Competitiveness and international cooperation.

30702. Foreign contract limitation.

30703. Foreign launch vehicles.

30704. Offshore performance of contracts for the procurement of goods and services.

20 **§ 30701. Competitiveness and international cooperation**

21 (a) LIMITATION.—

22 (1) SOLICITATION OF COMMENT.—As part of the evaluation of the
23 costs and benefits of entering into an obligation to conduct a space
24 mission in which a foreign entity will participate as a supplier of the
25 spacecraft, spacecraft system, or launch system, the Administrator
26 shall solicit comment on the potential impact of such participation
27 through notice published in Commerce Business Daily at least 45 days
28 before entering into such an obligation.

29 (2) AGREEMENTS WITH PEOPLE’S REPUBLIC OF CHINA.—The Ad-
30 ministrator shall certify to Congress at least 15 days in advance of any
31 cooperative agreement with the People’s Republic of China, or any
32 company owned by the People’s Republic of China or incorporated
33 under the laws of the People’s Republic of China, involving spacecraft,
34 spacecraft systems, launch systems, or scientific or technical informa-
35 tion, that—

36 (A) the agreement is not detrimental to the United States space
37 launch industry; and

1 (B) the agreement, including any indirect technical benefit that
2 could be derived from the agreement, will not improve the missile
3 or space launch capabilities of the People’s Republic of China.

4 (3) ANNUAL AUDIT.—The Inspector General of the Administration,
5 in consultation with appropriate agencies, shall conduct an annual
6 audit of the policies and procedures of the Administration with respect
7 to the export of technologies and the transfer of scientific and technical
8 information, to assess the extent to which the Administration is car-
9 rying out its activities in compliance with Federal export control laws
10 and with paragraph (2).

11 (b) NATIONAL INTERESTS.—

12 (1) DEFINITION OF UNITED STATES COMMERCIAL PROVIDER.—In
13 this subsection, the term “United States commercial provider” means
14 a commercial provider (as defined in section 30307(a) of this title), or-
15 ganized under the laws of the United States or of a State (as defined
16 in section 30307(a) of this title), which is—

17 (A) more than 50 percent owned by United States nationals; or

18 (B) a subsidiary of a foreign company and the Secretary of

19 Commerce finds that—

20 (i) such subsidiary has in the past evidenced a substantial
21 commitment to the United States market through—

22 (I) investments in the United States in long-term re-
23 search, development, and manufacturing (including the
24 manufacture of major components and subassemblies);
25 and

26 (II) significant contributions to employment in the
27 United States; and

28 (ii) the country or countries in which such foreign company
29 is incorporated or organized, and, if appropriate, in which it
30 principally conducts its business, affords reciprocal treatment
31 to companies described in subparagraph (A) comparable to
32 that afforded to such foreign company’s subsidiary in the
33 United States, as evidenced by—

34 (I) providing comparable opportunities for companies
35 described in subparagraph (A) to participate in Govern-
36 ment sponsored research and development similar to that
37 authorized under this section, section 30306, 30307,
38 30308, or 30702 of this title, or the National Aero-
39 nautics and Space Administration Authorization Act of
40 2000 (Public Law 106–391, 114 Stat. 1577);

1 (II) providing no barriers to companies described in
 2 subparagraph (A) with respect to local investment oppor-
 3 tunities that are not provided to foreign companies in the
 4 United States; and

5 (III) providing adequate and effective protection for
 6 the intellectual property rights of companies described in
 7 subparagraph (A).

8 (2) IN GENERAL.—Before entering into an obligation described in
 9 subsection (a), the Administrator shall consider the national interests
 10 of the United States described in paragraph (3) of this subsection.

11 (3) DESCRIPTION OF NATIONAL INTERESTS.—International coopera-
 12 tion in space exploration and science activities most effectively serves
 13 the United States national interest when it—

14 (A)(i) reduces the cost of undertaking missions the United
 15 States Government would pursue unilaterally;

16 (ii) enables the United States to pursue missions that it could
 17 not otherwise afford to pursue unilaterally; or

18 (iii) enhances United States capabilities to use and develop
 19 space for the benefit of United States citizens;

20 (B) is undertaken in a manner that is sensitive to the desire
 21 of United States commercial providers to develop or explore space
 22 commercially;

23 (C) is consistent with the need for Federal agencies to use space
 24 to complete their missions; and

25 (D) is carried out in a manner consistent with United States
 26 export control laws.

27 **§ 30702. Foreign contract limitation**

28 The Administration shall not enter into any agreement or contract with
 29 a foreign government that grants the foreign government the right to re-
 30 cover profit in the event that the agreement or contract is terminated.

31 **§ 30703. Foreign launch vehicles**

32 (a) ACCORD WITH SPACE TRANSPORTATION POLICY.—The Administra-
 33 tion shall not launch a payload on a foreign launch vehicle except in accord-
 34 ance with the Space Transportation Policy announced by the President on
 35 December 21, 2004. This subsection shall not be construed to prevent the
 36 President from waiving the Space Transportation Policy.

37 (b) INTERAGENCY COORDINATION.—The Administration shall not launch
 38 a payload on a foreign launch vehicle unless the Administration commenced
 39 the interagency coordination required by the Space Transportation Policy
 40 announced by the President on December 21, 2004, at least 90 days before
 41 entering into a development contract for the payload.

(c) APPLICATION.—This section shall not apply to any payload for which development has begun prior to December 30, 2005, including the James Webb Space Telescope.

§ 30704. Offshore performance of contracts for the procurement of goods and services

The Administrator shall submit to Congress, not later than 120 days after the end of each fiscal year beginning with the first fiscal year after December 30, 2005, a report on the contracts and subcontracts performed overseas and the amount of purchases directly or indirectly by the Administration from foreign entities in that fiscal year. The report shall separately indicate—

(1) the contracts and subcontracts and their dollar values for which the Administrator determines that essential goods or services under the contract are available only from a source outside the United States; and

(2) the items and their dollar values for which the Buy American Act (41 U.S.C. 10a et seq.) was waived pursuant to obligations of the United States under international agreements.

CHAPTER 309—AWARDS

Sec.

30901. Congressional Space Medal of Honor.

30902. Charles “Pete” Conrad Astronomy Awards.

§ 30901. Congressional Space Medal of Honor

(a) AUTHORITY TO AWARD.—The President may award, and present in the name of Congress, a medal of appropriate design, which shall be known as the Congressional Space Medal of Honor, to any astronaut who in the performance of the astronaut’s duties has distinguished himself or herself by exceptionally meritorious efforts and contributions to the welfare of the Nation and of humankind.

(b) APPROPRIATIONS.—There is authorized to be appropriated from time to time such sums of money as may be necessary to carry out the purposes of this section.

§ 30902. Charles “Pete” Conrad Astronomy Awards

(a) SHORT TITLE.—This section may be cited as the “Charles ‘Pete’ Conrad Astronomy Awards Act”.

(b) DEFINITIONS.—In this section:

(1) AMATEUR ASTRONOMER.—The term “amateur astronomer” means an individual whose employer does not provide any funding, payment, or compensation to the individual for the observation of asteroids and other celestial bodies, and does not include any individual employed as a professional astronomer.

1 (2) MINOR PLANET CENTER.—The term “Minor Planet Center”
2 means the Minor Planet Center of the Smithsonian Astrophysical Ob-
3 servatory.

4 (3) NEAR-EARTH ASTEROID.—The term “near-Earth asteroid”
5 means an asteroid with a perihelion distance of less than 1.3 Astro-
6 nomical Units from the Sun.

7 (4) PROGRAM.—The term “Program” means the Charles “Pete”
8 Conrad Astronomy Awards Program established under subsection (c).

9 (c) CHARLES “PETE” CONRAD ASTRONOMY AWARDS PROGRAM.—

10 (1) IN GENERAL.—The Administrator shall establish the Charles
11 “Pete” Conrad Astronomy Awards Program.

12 (2) AWARDS.—The Administrator shall make awards under the Pro-
13 gram based on the recommendations of the Minor Planet Center.

14 (3) AWARD CATEGORIES.—The Administrator shall make one annual
15 award, unless there are no eligible discoveries or contributions, for each
16 of the following categories:

17 (A) DISCOVERY OF BRIGHTEST NEAR-EARTH ASTEROID.—The
18 amateur astronomer or group of amateur astronomers who in the
19 preceding calendar year discovered the intrinsically brightest near-
20 Earth asteroid among the near-Earth asteroids that were discov-
21 ered during that year by amateur astronomers or groups of ama-
22 teur astronomers.

23 (B) GREATEST CONTRIBUTION TO CATALOGUING NEAR-EARTH
24 ASTEROIDS.—The amateur astronomer or group of amateur as-
25 tronomers who made the greatest contribution to the Minor Planet
26 Center’s mission of cataloguing near-Earth asteroids during the
27 preceding year.

28 (4) AWARD AMOUNT.—An award under the Program shall be in the
29 amount of \$3,000.

30 (5) GUIDELINES.—

31 (A) CITIZEN OR PERMANENT RESIDENT.—No individual who is
32 not a citizen or permanent resident of the United States at the
33 time of the individual’s discovery or contribution may receive an
34 award under this section.

35 (B) FINALITY.—The decisions of the Administrator in making
36 awards under this section are final.

37 **CHAPTER 311—SAFETY**

Sec.
31101. Aerospace Safety Advisory Panel.
31102. Drug and alcohol testing.

1 **§ 31101. Aerospace Safety Advisory Panel**

2 (a) ESTABLISHMENT AND MEMBERS.—There is established an Aerospace
3 Safety Advisory Panel consisting of a maximum of 9 members who shall be
4 appointed by the Administrator for terms of 6 years each. Not more than
5 4 such members shall be chosen from among the officers and employees of
6 the Administration.

7 (b) CHAIRMAN.—One member shall be designated by the Panel as its
8 Chairman.

9 (c) DUTIES.—The Panel shall—

10 (1) review safety studies and operations plans referred to it, includ-
11 ing evaluating the Administration’s compliance with the return-to-flight
12 and continue-to-fly recommendations of the Columbia Accident Inves-
13 tigation Board, and make reports thereon;

14 (2) advise the Administrator and Congress with respect to—

15 (A) the hazards of proposed or existing facilities and proposed
16 operations;

17 (B) the adequacy of proposed or existing safety standards; and

18 (C) management and culture related to safety; and

19 (3) perform such other duties as the Administrator may request.

20 (d) COMPENSATION AND EXPENSES.—

21 (1) COMPENSATION.—

22 (A) FEDERAL OFFICERS AND EMPLOYEES.—A member of the
23 Panel who is an officer or employee of the Federal Government
24 shall receive no compensation for the member’s services as such.

25 (B) MEMBERS APPOINTED FROM OUTSIDE THE FEDERAL GOV-
26 ERNMENT.—A member of the Panel appointed from outside the
27 Federal Government shall receive compensation, at a rate not to
28 exceed the per diem rate equivalent to the maximum rate payable
29 under section 5376 of title 5, for each day the member is engaged
30 in the actual performance of duties vested in the Panel.

31 (2) EXPENSES.—A member of the Panel shall be allowed necessary
32 travel expenses (or in the alternative, mileage for use of a privately
33 owned vehicle and a per diem in lieu of subsistence not to exceed the
34 rate and amount prescribed in sections 5702 and 5704 of title 5), and
35 other necessary expenses incurred by the member in the performance
36 of duties vested in the Panel, without regard to the provisions of sub-
37 chapter I of chapter 57 of title 5, the Standardized Government Travel
38 Regulations, or section 5731 of title 5.

39 (e) ANNUAL REPORT.—The Panel shall submit an annual report to the
40 Administrator and to Congress. In the first annual report submitted after
41 December 30, 2005, the Panel shall include an evaluation of the Adminis-

1 tration’s management and culture related to safety. Each annual report
2 shall include an evaluation of the Administration’s compliance with the rec-
3 ommendations of the Columbia Accident Investigation Board through retire-
4 ment of the space shuttle.

5 **§ 31102. Drug and alcohol testing**

6 (a) FINDINGS.—Congress finds that—

7 (1) alcohol abuse and illegal drug use pose significant dangers to the
8 safety and welfare of the Nation;

9 (2) the success of the United States civil space program is contin-
10 gent upon the safe and successful development and deployment of the
11 many varied components of that program;

12 (3) the greatest efforts must be expended to eliminate the abuse of
13 alcohol and use of illegal drugs, whether on duty or off duty, by those
14 individuals who are involved in the positions affecting safety, security,
15 and national security;

16 (4) the use of alcohol and illegal drugs has been demonstrated to ad-
17 versely affect the performance of individuals, and has been proven to
18 have been a critical factor in accidents in the workplace;

19 (5) the testing of uniformed personnel of the Armed Forces has
20 shown that the most effective deterrent to abuse of alcohol and use of
21 illegal drugs is increased testing, including random testing;

22 (6) adequate safeguards can be implemented to ensure that testing
23 for abuse of alcohol or use of illegal drugs is performed in a manner
24 that protects an individual’s right of privacy, ensures that no individual
25 is harassed by being treated differently from other individuals, and en-
26 sures that no individual’s reputation or career development is unduly
27 threatened or harmed; and

28 (7) rehabilitation is a critical component of any testing program for
29 abuse of alcohol or use of illegal drugs, and should be made available
30 to individuals, as appropriate.

31 (b) DEFINITION OF CONTROLLED SUBSTANCE.—In this section, the term
32 “controlled substance” means any substance under section 102(6) of the
33 Controlled Substances Act (21 U.S.C. 802(6)) specified by the Adminis-
34 trator.

35 (c) TESTING PROGRAM.—

36 (1) EMPLOYEES OF ADMINISTRATION.—The Administrator shall es-
37 tablish a program applicable to employees of the Administration whose
38 duties include responsibility for safety-sensitive, security, or national
39 security functions. Such program shall provide for preemployment, rea-
40 sonable suspicion, random, and post-accident testing for use, in viola-
41 tion of applicable law or Federal regulation, of alcohol or a controlled

1 substance. The Administrator may also prescribe regulations, as the
2 Administrator considers appropriate in the interest of safety, security,
3 and national security, for the conduct of periodic recurring testing of
4 such employees for such use in violation of applicable law or Federal
5 regulation.

6 (2) EMPLOYEES OF CONTRACTORS.—The Administrator shall, in the
7 interest of safety, security, and national security, prescribe regulations.
8 Such regulations shall establish a program that requires Administration
9 contractors to conduct preemployment, reasonable suspicion, random,
10 and post-accident testing of contractor employees responsible for safe-
11 ty-sensitive, security, or national security functions (as determined by
12 the Administrator) for use, in violation of applicable law or Federal
13 regulation, of alcohol or a controlled substance. The Administrator may
14 also prescribe regulations, as the Administrator considers appropriate
15 in the interest of safety, security, and national security, for the conduct
16 of periodic recurring testing of such employees for such use in violation
17 of applicable law or Federal regulation.

18 (3) SUSPENSION, DISQUALIFICATION, OR DISMISSAL.—In prescribing
19 regulations under the programs required by this subsection, the Admin-
20 istrator shall require, as the Administrator considers appropriate, the
21 suspension, disqualification, or dismissal of any employee to which
22 paragraph (1) or (2) applies, in accordance with the provisions of this
23 section, in any instance where a test conducted and confirmed under
24 this section indicates that such employee has used, in violation of appli-
25 cable law or Federal regulation, alcohol or a controlled substance.

26 (d) PROHIBITION ON SERVICE.—

27 (1) PROHIBITION UNLESS PROGRAM OF REHABILITATION COM-
28 PLETED.—No individual who is determined by the Administrator under
29 this section to have used, in violation of applicable law or Federal regu-
30 lation, alcohol or a controlled substance after December 9, 1991, shall
31 serve as an Administration employee with responsibility for safety-sen-
32 sitive, security, or national security functions (as determined by the
33 Administrator), or as an Administration contractor employee with such
34 responsibility, unless such individual has completed a program of reha-
35 bilitation described in subsection (e).

36 (2) UNCONDITIONAL PROHIBITION.—Any such individual determined
37 by the Administrator under this section to have used, in violation of
38 applicable law or Federal regulation, alcohol or a controlled substance
39 after December 9, 1991, shall not be permitted to perform the duties
40 that the individual performed prior to the date of the determination,
41 if the individual—

- 1 (A) engaged in such use while on duty;
2 (B) prior to such use had undertaken or completed a rehabilita-
3 tion program described in subsection (e);
4 (C) following such determination refuses to undertake such a re-
5 habilitation program; or
6 (D) following such determination fails to complete such a reha-
7 bilitation program.

8 (e) PROGRAM FOR REHABILITATION.—

9 (1) REGULATIONS AND AVAILABILITY OF PROGRAM FOR CON-
10 TRACTOR EMPLOYEES.—The Administrator shall prescribe regulations
11 setting forth requirements for rehabilitation programs which at a min-
12 imum provide for the identification and opportunity for treatment of
13 employees referred to in subsection (e) in need of assistance in resolv-
14 ing problems with the use, in violation of applicable law or Federal reg-
15 ulation, of alcohol or a controlled substance. Each contractor is encour-
16 aged to make such a program available to all of its employees in addi-
17 tion to those employees referred to in subsection (e)(2). The Adminis-
18 trator shall determine the circumstances under which such employees
19 shall be required to participate in such a program. Nothing in this sub-
20 section shall preclude any Administration contractor from establishing
21 a program under this subsection in cooperation with any other such
22 contractor.

23 (2) ESTABLISHMENT AND MAINTENANCE OF PROGRAM FOR ADMINIS-
24 TRATION EMPLOYEES.—The Administrator shall establish and maintain
25 a rehabilitation program which at a minimum provides for the identi-
26 fication and opportunity for treatment of those employees of the Ad-
27 ministration whose duties include responsibility for safety-sensitive, se-
28 curity, or national security functions who are in need of assistance in
29 resolving problems with the use of alcohol or controlled substances.

30 (f) PROCEDURES FOR TESTING.—In establishing the programs required
31 under subsection (e), the Administrator shall develop requirements which
32 shall—

33 (1) promote, to the maximum extent practicable, individual privacy
34 in the collection of specimen samples;

35 (2) with respect to laboratories and testing procedures for controlled
36 substances, incorporate the Department of Health and Human Services
37 scientific and technical guidelines dated April 11, 1988, and any subse-
38 quent amendments thereto, including mandatory guidelines which—

39 (A) establish comprehensive standards for all aspects of labora-
40 tory controlled substances testing and laboratory procedures to be
41 applied in carrying out this section, including standards which re-

1 quire the use of the best available technology for ensuring the full
2 reliability and accuracy of controlled substances tests and strict
3 procedures governing the chain of custody of specimen samples
4 collected for controlled substances testing;

5 (B) establish the minimum list of controlled substances for
6 which individuals may be tested; and

7 (C) establish appropriate standards and procedures for periodic
8 review of laboratories and criteria for certification and revocation
9 of certification of laboratories to perform controlled substances
10 testing in carrying out this section;

11 (3) require that all laboratories involved in the controlled substances
12 testing of any individual under this section shall have the capability
13 and facility, at such laboratory, of performing screening and confirma-
14 tion tests;

15 (4) provide that all tests which indicate the use, in violation of appli-
16 cable law or Federal regulation, of alcohol or a controlled substance by
17 any individual shall be confirmed by a scientifically recognized method
18 of testing capable of providing quantitative data regarding alcohol or
19 a controlled substance;

20 (5) provide that each specimen sample be subdivided, secured, and
21 labelled in the presence of the tested individual and that a portion
22 thereof be retained in a secure manner to prevent the possibility of
23 tampering, so that in the event the individual's confirmation test re-
24 sults are positive the individual has an opportunity to have the retained
25 portion assayed by a confirmation test done independently at a second
26 certified laboratory if the individual requests the independent test with-
27 in 3 days after being advised of the results of the initial confirmation
28 test;

29 (6) ensure appropriate safeguards for testing to detect and quantify
30 alcohol in breath and body fluid samples, including urine and blood,
31 through the development of regulations as may be necessary and in
32 consultation with the Department of Health and Human Services;

33 (7) provide for the confidentiality of test results and medical infor-
34 mation of employees; and

35 (8) ensure that employees are selected for tests by nondiscriminatory
36 and impartial methods, so that no employee is harassed by being treat-
37 ed differently from other employees in similar circumstances.

38 (g) EFFECT ON OTHER LAWS AND REGULATIONS.—

39 (1) CONSISTENCY WITH FEDERAL REGULATION.—No State or local
40 government shall adopt or have in effect any law, rule, regulation, ordi-

1 nance, standard, or order that is inconsistent with the regulations pro-
 2 mulgated under this section.

3 (2) CONTINUANCE OF REGULATIONS ISSUED BEFORE DECEMBER 9,
 4 1991.—Nothing in this section shall be construed to restrict the discre-
 5 tion of the Administrator to continue in force, amend, or further sup-
 6 plement any regulations issued before December 9, 1991, that govern
 7 the use of alcohol and controlled substances by Administration employ-
 8 ees with responsibility for safety-sensitive, security, and national secu-
 9 rity functions (as determined by the Administrator), or by Administra-
 10 tion contractor employees with such responsibility.

11 **CHAPTER 313—MISCELLANEOUS**

- Sec.
 31301. Peaceful uses of space station.
 31302. Orbital debris.
 31303. Healthcare program.

12 **§ 31301. Peaceful uses of space station**

13 No civil space station authorized under section 103(a)(1) of the National
 14 Aeronautics and Space Administration Authorization Act, Fiscal Year 1991
 15 (Public Law 101–611, 104 Stat. 3190) may be used to carry or place in
 16 orbit any nuclear weapon or any other weapon of mass destruction, to in-
 17 stall any such weapon on any celestial body, or to station any such weapon
 18 in space in any other manner. This civil space station may be used only
 19 for peaceful purposes.

20 **§ 31302. Orbital debris**

21 The Administrator, in conjunction with the heads of other Federal agen-
 22 cies, shall take steps to develop or acquire technologies that will enable the
 23 Administration to decrease the risks associated with orbital debris.

24 **§ 31303. Healthcare program**

25 The Administrator shall develop a plan to better understand the longitu-
 26 dinal health effects of space flight on humans. In the development of the
 27 plan, the Administrator shall consider the need for the establishment of a
 28 lifetime healthcare program for Administration astronauts and their families
 29 or other methods to obtain needed health data from astronauts and retired
 30 astronauts.

31 **Subtitle IV—Aeronautics and Space Research and**
 32 **Education**

Chapter	Sec.
401. Aeronautics	40101
403. National Space Grant College and Fellowship Program	40301
405. Biomedical Research in Space	40501
407. Miscellaneous	40701

33 **CHAPTER 401—AERONAUTICS**

SUBCHAPTER I—GENERAL

- Sec.
 40101. Definition of institution of higher education.

40102. Governmental interest in aeronautics research and development.

SUBCHAPTER II—HIGH PRIORITY AERONAUTICS RESEARCH AND
DEVELOPMENT PROGRAMS

40111. Fundamental research program.

40112. Research and technology programs.

40113. Airspace systems research.

40114. Aviation safety and security research.

40115. Aviation weather research.

40116. Assessment of wake turbulence research and development program.

40117. University-based Centers for Research on Aviation Training.

SUBCHAPTER III—SCHOLARSHIPS

40131. Aeronautics scholarships.

SUBCHAPTER IV—DATA REQUESTS

40141. Aviation data requests.

SUBCHAPTER I—GENERAL

§ 40101. Definition of institution of higher education

In this chapter, the term “institution of higher education” has the meaning given the term by section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

§ 40102. Governmental interest in aeronautics research and development

Congress reaffirms the national commitment to aeronautics research made in chapter 201 of this title. Aeronautics research and development remains a core mission of the Administration. The Administration is the lead agency for civil aeronautics research. Further, the government of the United States shall promote aeronautics research and development that will expand the capacity, ensure the safety, and increase the efficiency of the Nation’s air transportation system, promote the security of the Nation, protect the environment, and retain the leadership of the United States in global aviation.

SUBCHAPTER II—HIGH PRIORITY AERONAUTICS RESEARCH
AND DEVELOPMENT PROGRAMS

§ 40111. Fundamental research program

(a) OBJECTIVE.—In order to ensure that the Nation maintains needed capabilities in fundamental areas of aeronautics research, the Administrator shall establish a program of long-term fundamental research in aeronautical sciences and technologies that is not tied to specific development projects.

(b) OPERATION.—The Administrator shall conduct the program under this section, in part by awarding grants to institutions of higher education. The Administrator shall encourage the participation of institutions of higher education located in States that participate in the Experimental Program to Stimulate Competitive Research. All grants to institutions of higher education under this section shall be awarded through merit review.

(c) ASSESSMENT.—The Administrator shall enter into an arrangement with the National Research Council for an assessment of the Nation’s fu-

1 ture requirements for fundamental aeronautics research and whether the
 2 Nation will have a skilled research workforce and research facilities com-
 3 mensurate with those requirements. The assessment shall include an identi-
 4 fication of any projected gaps, and recommendations for what steps should
 5 be taken by the Federal Government to eliminate those gaps.

6 (d) REPORT.—The Administrator shall transmit the assessment, along
 7 with the Administration’s response to the assessment, to Congress not later
 8 than 2 years after December 30, 2005.

9 **§ 40112. Research and technology programs**

10 (a) ENVIRONMENTAL AIRCRAFT RESEARCH AND DEVELOPMENT.—The
 11 Administrator may establish an initiative with the objective of developing,
 12 and demonstrating in a relevant environment, technologies to enable the fol-
 13 lowing commercial aircraft performance characteristics:

14 (1) NOISE.—Noise levels on takeoff and on airport approach and
 15 landing that do not exceed ambient noise levels in the absence of flight
 16 operations in the vicinity of airports from which such commercial air-
 17 craft would normally operate.

18 (2) ENERGY CONSUMPTION.—Twenty-five percent reduction in the
 19 energy required for medium- to long-range flights, compared to aircraft
 20 in commercial service as of December 30, 2005.

21 (3) EMISSIONS.—Nitrogen oxides on take-off and landing that are
 22 significantly reduced, without adversely affecting hydrocarbons and
 23 smoke, relative to aircraft in commercial service as of December 30,
 24 2005.

25 (b) SUPERSONIC TRANSPORT RESEARCH AND DEVELOPMENT.—The Ad-
 26 ministrator may establish an initiative with the objective of developing and
 27 demonstrating, in a relevant environment, airframe and propulsion tech-
 28 nologies to enable efficient, economical overland flight of supersonic civil
 29 transport aircraft with no significant impact on the environment.

30 (c) ROTORCRAFT AND OTHER RUNWAY-INDEPENDENT AIR VEHICLES.—
 31 The Administrator may establish a rotorcraft and other runway-independent
 32 air vehicles initiative with the objective of developing and demonstrating im-
 33 proved safety, noise, and environmental impact in a relevant environment.

34 (d) HYPERSONICS RESEARCH.—The Administrator may establish a
 35 hypersonics research program with the objective of exploring the science and
 36 technology of hypersonic flight using air-breathing propulsion concepts,
 37 through a mix of theoretical work, basic and applied research, and develop-
 38 ment of flight research demonstration vehicles. The program may also in-
 39 clude the transition to the hypersonic range of Mach 3 to Mach 5.

40 (e) REVOLUTIONARY AERONAUTICAL CONCEPTS.—The Administrator
 41 may establish a research program which covers a unique range of subsonic,

1 fixed wing vehicles and propulsion concepts. This research is intended to
2 push technology barriers beyond current subsonic technology. Propulsion
3 concepts include advanced materials, morphing engines, hybrid engines, and
4 fuel cells.

5 (f) FUEL CELL-POWERED AIRCRAFT RESEARCH.—

6 (1) OBJECTIVE.—The Administrator may establish a fuel cell-pow-
7 ered aircraft research program whose objective shall be to develop and
8 test concepts to enable a hydrogen fuel cell-powered aircraft that would
9 have no hydrocarbon or nitrogen oxide emissions into the environment.

10 (2) APPROACH.—The Administrator may establish a program of
11 competitively awarded grants available to teams of researchers that
12 may include the participation of individuals from universities, industry,
13 and government for the conduct of this research.

14 (g) MARS AIRCRAFT RESEARCH.—

15 (1) OBJECTIVE.—The Administrator may establish a Mars Aircraft
16 project whose objective shall be to develop and test concepts for an
17 uncrewed aircraft that could operate for sustained periods in the at-
18 mosphere of Mars.

19 (2) APPROACH.—The Administrator may establish a program of
20 competitively awarded grants available to teams of researchers that
21 may include the participation of individuals from universities, industry,
22 and government for the conduct of this research.

23 **§ 40113. Airspace systems research**

24 (a) OBJECTIVE.—The Airspace Systems Research program shall pursue
25 research and development to enable revolutionary improvements to and mod-
26 ernization of the National Airspace System, as well as to enable the intro-
27 duction of new systems for vehicles that can take advantage of an improved,
28 modern air transportation system.

29 (b) ALIGNMENT.—Not later than 1 year after December 30, 2005, the
30 Administrator shall align the projects of the Airspace Systems Research
31 program so that they directly support the objectives of the Joint Planning
32 and Development Office’s Next Generation Air Transportation System Inte-
33 grated Plan.

34 **§ 40114. Aviation safety and security research**

35 (a) OBJECTIVE.—The Aviation Safety and Security Research program
36 shall pursue research and development activities that directly address the
37 safety and security needs of the National Airspace System and the aircraft
38 that fly in it. The program shall develop prevention, intervention, and miti-
39 gation technologies aimed at causal, contributory, or circumstantial factors
40 of aviation accidents.

1 (b) ALIGNMENT.—Not later than 1 year after December 30, 2005, the
2 Administrator shall align the projects of the Aviation Safety and Security
3 Research program so that they directly support the objectives of the Joint
4 Planning and Development Office’s Next Generation Air Transportation
5 System Integrated Plan.

6 **§ 40115. Aviation weather research**

7 The Administrator may carry out a program of collaborative research
8 with the National Oceanic and Atmospheric Administration on convective
9 weather events, with the goal of significantly improving the reliability of 2-
10 hour to 6-hour aviation weather forecasts.

11 **§ 40116. Assessment of wake turbulence research and devel-**
12 **opment program**

13 (a) ASSESSMENT.—The Administrator shall enter into an arrangement
14 with the National Research Council for an assessment of Federal wake tur-
15 bulence research and development programs. The assessment shall address
16 at least the following questions:

17 (1) Are the Federal research and development goals and objectives
18 well defined?

19 (2) Are there any deficiencies in the Federal research and develop-
20 ment goals and objectives?

21 (3) What roles should be played by each of the relevant Federal
22 agencies, such as the Administration, the Federal Aviation Administra-
23 tion, and the National Oceanic and Atmospheric Administration, in
24 wake turbulence research and development?

25 (b) REPORT.—A report containing the results of the assessment con-
26 ducted pursuant to subsection (a) shall be provided to Congress not later
27 than 2 years after December 30, 2005.

28 **§ 40117. University-based Centers for Research on Aviation**
29 **Training**

30 (a) IN GENERAL.—The Administrator may award grants to institutions
31 of higher education (or consortia thereof) to establish one or more Centers
32 for Research on Aviation Training under cooperative agreements with ap-
33 propriate Administration Centers.

34 (b) PURPOSE.—The purpose of the Centers for Research on Aviation
35 Training shall be to investigate the impact of new technologies and proce-
36 dures, particularly those related to the aircraft flight deck and to the air
37 traffic management functions, on training requirements for pilots and air
38 traffic controllers.

39 (c) APPLICATION.—An institution of higher education (or a consortium
40 of such institutions) seeking funding under this section shall submit an ap-
41 plication to the Administrator at such time, in such manner, and containing

1 such information as the Administrator may require, including, at a min-
2 imum, a 5-year research plan.

3 (d) AWARD DURATION.—An award made by the Administrator under this
4 section shall be for a period of 5 years and may be renewed on the basis
5 of—

6 (1) satisfactory performance in meeting the goals of the research
7 plan proposed in the application submitted under subsection (c); and

8 (2) other requirements as specified by the Administrator.

9 SUBCHAPTER III—SCHOLARSHIPS

10 **§ 40131. Aeronautics scholarships**

11 (a) ESTABLISHMENT.—The Administrator shall establish a program of
12 scholarships for full-time graduate students who are United States citizens
13 and are enrolled in, or have been accepted by and have indicated their inten-
14 tion to enroll in, accredited Masters degree programs in aeronautical engi-
15 neering or equivalent programs at institutions of higher education. Each
16 such scholarship shall cover the costs of room, board, tuition, and fees, and
17 may be provided for a maximum of 2 years.

18 (b) IMPLEMENTATION.—Not later than 180 days after December 30,
19 2005, the Administrator shall publish regulations governing the scholarship
20 program under this section.

21 (c) COOPERATIVE TRAINING OPPORTUNITIES.—Students who have been
22 awarded a scholarship under this section shall have the opportunity for paid
23 employment at one of the Administration Centers engaged in aeronautics re-
24 search and development during the summer prior to the first year of the
25 student's Masters program, and between the first and second year, if appli-
26 cable.

27 SUBCHAPTER IV—DATA REQUESTS

28 **§ 40141. Aviation data requests**

29 The Administrator shall make available upon request satellite imagery
30 and aerial photography of remote terrain that the Administration owns at
31 the time of the request to the Administrator of the Federal Aviation Admin-
32 istration or the Director of the Five Star Medallion Program, to assist and
33 train pilots in navigating challenging topographical features of such terrain.

34 **CHAPTER 403—NATIONAL SPACE GRANT COLLEGE AND**
35 **FELLOWSHIP PROGRAM**

Sec.

- 40301. Congressional statement of findings.
- 40302. Congressional statement of purposes.
- 40303. Definitions.
- 40304. National space grant college and fellowship program.
- 40305. Grants or contracts.
- 40306. Specific national needs.
- 40307. Space grant college and space grant regional consortium.
- 40308. Space grant fellowship program.
- 40309. Space grant review panel.

40310. Availability of other Federal personnel and data.

40311. Designation or award to be on competitive basis.

1 **§ 40301. Congressional statement of findings**

2 Congress finds that—

3 (1) the vitality of the Nation and the quality of life of the citizens
4 of the Nation depend increasingly on the understanding, assessment,
5 development, and utilization of space resources;

6 (2) research and development of space science, space technology, and
7 space commercialization will contribute to the quality of life, national
8 security, and the enhancement of commerce;

9 (3) the understanding and development of the space frontiers require
10 a broad commitment and an intense involvement on the part of the
11 Federal Government in partnership with State and local governments,
12 private industry, universities, organizations, and individuals concerned
13 with the exploration and utilization of space;

14 (4) the Administration, through the national space grant college and
15 fellowship program, offers the most suitable means for such commit-
16 ment and involvement through the promotion of activities that will re-
17 sult in greater understanding, assessment, development, and utilization;
18 and

19 (5) Federal support of the establishment, development, and operation
20 of programs and projects by space grant colleges, space grant regional
21 consortia, institutions of higher education, institutes, laboratories, and
22 other appropriate public and private entities is the most cost-effective
23 way to promote such activities.

24 **§ 40302. Congressional statement of purposes**

25 The purposes of this chapter are to—

26 (1) increase the understanding, assessment, development, and utiliza-
27 tion of space resources by promoting a strong educational base, respon-
28 sive research and training activities, and broad and prompt dissemina-
29 tion of knowledge and techniques;

30 (2) utilize the abilities and talents of the universities of the Nation
31 to support and contribute to the exploration and development of the
32 resources and opportunities afforded by the space environment;

33 (3) encourage and support, within the university community of the
34 Nation, the existence of interdisciplinary and multidisciplinary pro-
35 grams of space research that—

36 (A) engage in integrated activities of training, research, and
37 public service;

38 (B) have cooperative programs with industry; and

39 (C) are coordinated with the overall program of the Administra-
40 tion;

1 (4) encourage and support the existence of consortia, made up of
 2 university and industry members, in order to advance the exploration
 3 and development of space resources in cases in which national objec-
 4 tives can be better fulfilled through such consortia than through the
 5 programs of single universities;

6 (5) encourage and support Federal funding for graduate fellowships
 7 in fields related to space; and

8 (6) support activities in colleges and universities generally for the
 9 purpose of creating and operating a network of institutional programs
 10 that will enhance achievements resulting from efforts under this chap-
 11 ter.

12 § 40303. Definitions

13 In this chapter:

14 (1) AERONAUTICAL AND SPACE ACTIVITIES.—The term “aero-
 15 nautical and space activities” has the meaning given the term in sec-
 16 tion 20103 of this title.

17 (2) FIELD RELATED TO SPACE.—The term “field related to space”
 18 means any academic discipline or field of study (including the physical,
 19 natural, and biological sciences, and engineering, space technology, edu-
 20 cation, economics, sociology, communications, planning, law, inter-
 21 national affairs, and public administration) which is concerned with or
 22 likely to improve the understanding, assessment, development, and uti-
 23 lization of space.

24 (3) PANEL.—The term “panel” means the space grant review panel
 25 established pursuant to section 40309 of this title.

26 (4) PERSON.—The term “person” means any individual, any public
 27 or private corporation, partnership, or other association or entity (in-
 28 cluding any space grant college, space grant regional consortium, insti-
 29 tution of higher education, institute, or laboratory), or any State, polit-
 30 ical subdivision of a State, or agency or officer of a State or political
 31 subdivision of a State.

32 (5) SPACE ENVIRONMENT.—The term “space environment” means
 33 the environment beyond the sensible atmosphere of the Earth.

34 (6) SPACE GRANT COLLEGE.—The term “space grant college” means
 35 any public or private institution of higher education which is designated
 36 as such by the Administrator pursuant to section 40307 of this title.

37 (7) SPACE GRANT PROGRAM.—The term “space grant program”
 38 means any program that—

39 (A) is administered by any space grant college, space grant re-
 40 gional consortium, institution of higher education, institute, lab-
 41 oratory, or State or local agency; and

1 (B) includes 2 or more projects involving education and one or
2 more of the following activities in the fields related to space:

- 3 (i) Research.
4 (ii) Training.
5 (iii) Advisory services.

6 (8) SPACE GRANT REGIONAL CONSORTIUM.—The term “space grant
7 regional consortium” means any association or other alliance that is
8 designated as a space grant regional consortium by the Administrator
9 pursuant to section 40307 of this title.

10 (9) SPACE RESOURCE.—The term “space resource” means any tan-
11 gible or intangible benefit which can be realized only from—

- 12 (A) aeronautical and space activities; or
13 (B) advancements in any field related to space.

14 (10) STATE.—The term “State” means any State of the United
15 States, the District of Columbia, the Commonwealth of Puerto Rico,
16 the Virgin Islands, Guam, American Samoa, the Commonwealth of the
17 Northern Mariana Islands, or any other territory or possession of the
18 United States.

19 **§ 40304. National space grant college and fellowship pro-**
20 **gram**

21 (a) ESTABLISHMENT.—The Administrator shall establish and maintain,
22 within the Administration, a program to be known as the national space
23 grant college and fellowship program. The national space grant college and
24 fellowship program shall consist of the financial assistance and other activi-
25 ties provided for in this chapter. The Administrator shall establish long-
26 range planning guidelines and priorities, and adequately evaluate the pro-
27 gram.

28 (b) FUNCTIONS.—Within the Administration, the program shall—

- 29 (1) apply the long-range planning guidelines and the priorities estab-
30 lished by the Administrator under subsection (a);
31 (2) advise the Administrator with respect to the expertise and capa-
32 bilities which are available through the national space grant college and
33 fellowship program, and make such expertise available to the Adminis-
34 tration as directed by the Administrator;
35 (3) evaluate activities conducted under grants and contracts awarded
36 pursuant to sections 40305 and 40306 of this title to ensure that the
37 purposes set forth in section 40302 of this title are implemented;
38 (4) encourage other Federal departments, agencies, and instrumen-
39 talities to use and take advantage of the expertise and capabilities
40 which are available through the national space grant college and fellow-
41 ship program, on a cooperative or other basis;

1 (5) encourage cooperation and coordination with other Federal pro-
2 grams concerned with the development of space resources and fields re-
3 lated to space;

4 (6) advise the Administrator on the designation of recipients sup-
5 ported by the national space grant college and fellowship program and,
6 in appropriate cases, on the termination or suspension of any such des-
7 ignation; and

8 (7) encourage the formation and growth of space grant and fellow-
9 ship programs.

10 (c) GENERAL AUTHORITIES.—To carry out the provisions of this chapter,
11 the Administrator may—

12 (1) accept conditional or unconditional gifts or donations of services,
13 money, or property, real, personal or mixed, tangible or intangible;

14 (2) accept and use funds from other Federal departments, agencies,
15 and instrumentalities to pay for fellowships, grants, contracts, and
16 other transactions; and

17 (3) issue such rules and regulations as may be necessary and appro-
18 priate.

19 **§ 40305. Grants or contracts**

20 (a) AUTHORITY OF ADMINISTRATOR.—The Administrator may make
21 grants and enter into contracts or other transactions under this subsection
22 to assist any space grant and fellowship program or project if the Adminis-
23 trator finds that the program or project will carry out the purposes set forth
24 in section 40302 of this title. The total amount paid pursuant to a grant
25 or contract may equal not more than 66 percent of the total cost of the
26 space grant and fellowship program or project involved, except in the case
27 of grants or contracts paid for with funds accepted by the Administrator
28 pursuant to section 40304(c)(2) of this title.

29 (b) SPECIAL GRANTS.—The Administrator may make special grants
30 under this subsection to carry out the purposes set forth in section 40302
31 of this title. The amount of a special grant may equal up to 100 percent
32 of the total cost of the project involved. A special grant may be made under
33 this subsection only if the Administrator finds that—

34 (1) no reasonable means is available through which the applicant can
35 meet the matching requirement for a grant under subsection (a);

36 (2) the probable benefit of the project outweighs the public interest
37 in the matching requirement; and

38 (3) the same or equivalent benefit cannot be obtained through the
39 award of a contract or grant under subsection (a) or section 40306 of
40 this title.

1 (c) APPLICATION.—Any person may apply to the Administrator for a
 2 grant or contract under this section. Application shall be made in such form
 3 and manner, and with such content and other submissions, as the Adminis-
 4 trator shall by regulation prescribe.

5 (d) TERMS AND CONDITIONS.—

6 (1) IN GENERAL.—Any grant made, or contract entered into, under
 7 this section shall be subject to the limitations and provisions set forth
 8 in paragraphs (2) and (3) and to such other terms, conditions, and re-
 9 quirements as the Administrator considers necessary or appropriate.

10 (2) LIMITATIONS.—No payment under any grant or contract under
 11 this section may be applied to—

12 (A) the purchase of any land;

13 (B) the purchase, construction, preservation, or repair of any
 14 building; or

15 (C) the purchase or construction of any launch facility or launch
 16 vehicle.

17 (3) LEASES.—Notwithstanding paragraph (2), the items in subpara-
 18 graphs (A), (B), and (C) of such paragraph may be leased upon writ-
 19 ten approval of the Administrator.

20 (4) RECORDS.—Any person that receives or utilizes any proceeds of
 21 any grant or contract under this section shall keep such records as the
 22 Administrator shall by regulation prescribe as being necessary and ap-
 23 propriate to facilitate effective audit and evaluation, including records
 24 which fully disclose the amount and disposition by such recipient of
 25 such proceeds, the total cost of the program or project in connection
 26 with which such proceeds were used, and the amount, if any, of such
 27 cost which was provided through other sources. Such records shall be
 28 maintained for 3 years after the completion of such a program or
 29 project. The Administrator and the Comptroller General of the United
 30 States, or any of their duly authorized representatives, shall have ac-
 31 cess, for the purpose of audit and evaluation, to any books, documents,
 32 papers, and records of receipts which, in the opinion of the Adminis-
 33 trator or the Comptroller General, may be related or pertinent to such
 34 grants and contracts.

35 **§ 40306. Specific national needs**

36 (a) IDENTIFICATION OF SPECIFIC NEEDS AND GRANT-MAKING AND CON-
 37 TRACTING AUTHORITY.—The Administrator shall identify specific national
 38 needs and problems relating to space. The Administrator may make grants
 39 or enter into contracts under this section with respect to such needs or
 40 problems. The amount of any such grant or contract may equal up to 100
 41 percent of the total cost of the project involved.

1 (b) APPLICATIONS FOR GRANTS OR CONTRACTS.—Any person may apply
 2 to the Administrator for a grant or contract under this section. In addition,
 3 the Administrator may invite applications with respect to specific national
 4 needs or problems identified under subsection (a). Application shall be made
 5 in such form and manner, and with such content and other submissions,
 6 as the Administrator shall by regulation prescribe. Any grant made, or con-
 7 tract entered into, under this section shall be subject to the limitations and
 8 provisions set forth in paragraphs (2) and (4) of section 40305(d) of this
 9 title and to such other terms, conditions, and requirements as the Adminis-
 10 trator considers necessary or appropriate.

11 **§ 40307. Space grant college and space grant regional con-**
 12 **sortium**

13 (a) DESIGNATION AND QUALIFICATIONS.—

14 (1) AUTHORITY TO DESIGNATE.—The Administrator may des-
 15 ignate—

16 (A) any institution of higher education as a space grant college;
 17 and

18 (B) any association or other alliance of 2 or more persons, other
 19 than individuals, as a space grant regional consortium.

20 (2) SPACE GRANT COLLEGE REQUIREMENTS.—No institution of
 21 higher education may be designated as a space grant college unless the
 22 Administrator finds that such institution—

23 (A) is maintaining a balanced program of research, education,
 24 training, and advisory services in fields related to space;

25 (B) will act in accordance with such guidelines as are prescribed
 26 under subsection (b)(2); and

27 (C) meets such other qualifications as the Administrator con-
 28 siders necessary or appropriate.

29 (3) SPACE GRANT REGIONAL CONSORTIUM REQUIREMENTS.—No as-
 30 sociation or other alliance of 2 or more persons may be designated as
 31 a space grant regional consortium unless the Administrator finds that
 32 such association or alliance—

33 (A) is established for the purpose of sharing expertise, research,
 34 educational facilities or training facilities, and other capabilities in
 35 order to facilitate research, education, training, and advisory serv-
 36 ices in any field related to space;

37 (B) will encourage and follow a regional approach to solving
 38 problems or meeting needs relating to space, in cooperation with
 39 appropriate space grant colleges, space grant programs, and other
 40 persons in the region;

1 (C) will act in accordance with such guidelines as are prescribed
2 under subsection (b)(2); and

3 (D) meets such other qualifications as the Administrator con-
4 siders necessary or appropriate.

5 (b) QUALIFICATIONS AND GUIDELINES.—The Administrator shall by reg-
6 ulation prescribe—

7 (1) the qualifications required to be met under paragraphs (2)(C)
8 and (3)(D) of subsection (a); and

9 (2) guidelines relating to the activities and responsibilities of space
10 grant colleges and space grant regional consortia.

11 (c) SUSPENSION OR TERMINATION OF DESIGNATION.—The Administrator
12 may, for cause and after an opportunity for hearing, suspend or terminate
13 any designation under subsection (a).

14 **§ 40308. Space grant fellowship program**

15 (a) AWARD OF FELLOWSHIPS.—The Administrator shall support a space
16 grant fellowship program to provide educational and training assistance to
17 qualified individuals at the graduate level of education in fields related to
18 space. Such fellowships shall be awarded pursuant to guidelines established
19 by the Administrator. Space grant fellowships shall be awarded to individ-
20 uals at space grant colleges, space grant regional consortia, other colleges
21 and institutions of higher education, professional associations, and institutes
22 in such a manner as to ensure wide geographic and institutional diversity
23 in the pursuit of research under the fellowship program.

24 (b) LIMITATION ON AMOUNT PROVIDED.—The total amount which may
25 be provided for grants under the space grant fellowship program during any
26 fiscal year shall not exceed an amount equal to 50 percent of the total funds
27 appropriated for such year pursuant to this chapter.

28 (c) AUTHORITY TO SPONSOR OTHER RESEARCH FELLOWSHIP PROGRAMS
29 UNAFFECTED.—Nothing in this section shall be construed to prohibit the
30 Administrator from sponsoring any research fellowship program, including
31 any special emphasis program, which is established under an authority other
32 than this chapter.

33 **§ 40309. Space grant review panel**

34 (a) ESTABLISHMENT.—The Administrator shall establish an independent
35 committee known as the space grant review panel, which shall not be subject
36 to the provisions of the Federal Advisory Committee Act (5 App. U.S.C.).

37 (b) DUTIES.—The panel shall take such steps as may be necessary to re-
38 view, and shall advise the Administrator with respect to—

39 (1) applications or proposals for, and performance under, grants and
40 contracts awarded pursuant to sections 40305 and 40306 of this title;

41 (2) the space grant fellowship program;

1 (3) the designation and operation of space grant colleges and space
2 grant regional consortia, and the operation of space grant and fellow-
3 ship programs;

4 (4) the formulation and application of the planning guidelines and
5 priorities pursuant to subsections (a) and (b)(1) of section 40304 of
6 this title; and

7 (5) such other matters as the Administrator refers to the panel for
8 review and advice.

9 (c) PERSONNEL AND ADMINISTRATIVE SERVICES.—The Administrator
10 shall make available to the panel any information, personnel, and adminis-
11 trative services and assistance which is reasonable to carry out the duties
12 of the panel.

13 (d) MEMBERS.—

14 (1) APPOINTMENT.—The Administrator shall appoint the voting
15 members of the panel. A majority of the voting members shall be indi-
16 viduals who, by reason of knowledge, experience, or training, are espe-
17 cially qualified in one or more of the disciplines and fields related to
18 space. The other voting members shall be individuals who, by reason
19 of knowledge, experience, or training, are especially qualified in, or rep-
20 resentative of, education, extension services, State government, indus-
21 try, economics, planning, or any other activity related to efforts to en-
22 hance the understanding, assessment, development, or utilization of
23 space resources. The Administrator shall consider the potential conflict
24 of interest of any individual in making appointments to the panel.

25 (2) CHAIRMAN AND VICE CHAIRMAN.—The Administrator shall select
26 one voting member to serve as the Chairman and another voting mem-
27 ber to serve as the Vice Chairman. The Vice Chairman shall act as
28 Chairman in the absence or incapacity of the Chairman.

29 (3) REIMBURSEMENT FOR EXPENSES.—Voting members of the panel
30 who are not Federal employees shall be reimbursed for actual and rea-
31 sonable expenses incurred in the performance of such duties.

32 (4) MEETINGS.—The panel shall meet on a biannual basis and, at
33 any other time, at the call of the Chairman or upon the request of a
34 majority of the voting members or of the Administrator.

35 (5) POWERS.—The panel may exercise such powers as are reasonably
36 necessary in order to carry out the duties enumerated in subsection (b).

37 **§ 40310. Availability of other Federal personnel and data**

38 Each department, agency, or other instrumentality of the Federal Govern-
39 ment that is engaged in or concerned with, or that has authority over, mat-
40 ters relating to space—

1 (1) may, upon a written request from the Administrator, make avail-
 2 able, on a reimbursable basis or otherwise, any personnel (with their
 3 consent and without prejudice to their position and rating), service, or
 4 facility which the Administrator considers necessary to carry out any
 5 provision of this chapter;

6 (2) may, upon a written request from the Administrator, furnish any
 7 available data or other information which the Administrator considers
 8 necessary to carry out any provision of this chapter; and

9 (3) may cooperate with the Administration.

10 **§ 40311. Designation or award to be on competitive basis**

11 The Administrator shall not under this chapter designate any space grant
 12 college or space grant regional consortium or award any fellowship, grant,
 13 or contract unless such designation or award is made in accordance with
 14 the competitive, merit-based review process employed by the Administration
 15 on October 30, 1987.

16 **CHAPTER 405—BIOMEDICAL RESEARCH IN SPACE**

Sec.

40501. Findings.

40502. Biomedical research joint working group.

40503. Biomedical research grants.

40504. Biomedical research fellowships.

40505. Establishment of electronic data archive.

40506. Establishment of emergency medical service telemedicine capability.

17 **§ 40501. Findings**

18 Congress finds that—

19 (1) the space program can make significant contributions to selected
 20 areas of health-related research and should be an integral part of the
 21 Nation's health research and development program;

22 (2) the continuing development of trained scientists and engineers is
 23 essential to carrying out an effective and sustained program of bio-
 24 medical research in space and on the ground;

25 (3) the establishment and maintenance of an electronically accessible
 26 archive of data on space-related biomedical research is essential to ad-
 27 vancement of the field;

28 (4) cooperation with the republics of the former Soviet Union, in-
 29 cluding use of former Soviet orbital facilities, offers the potential for
 30 greatly enhanced biomedical research activities and progress; and

31 (5) the establishment and maintenance of an international telemedi-
 32 cine consultation satellite capability to support emergency medical serv-
 33 ice provision can provide an important aid to disaster relief efforts.

34 **§ 40502. Biomedical research joint working group**

35 (a) ESTABLISHMENT.—The Administrator and the Director of the Na-
 36 tional Institutes of Health shall jointly establish a working group to coordi-
 37 nate biomedical research activities in areas where a microgravity environ-

1 ment may contribute to significant progress in the understanding and treat-
2 ment of diseases and other medical conditions. The joint working group
3 shall formulate joint and complementary programs in such areas of re-
4 search.

5 (b) MEMBERSHIP.—The joint working group shall include equal represen-
6 tation from the Administration and the National Institutes of Health, and
7 shall include representation from National Institutes of Health councils, as
8 selected by the Director of the National Institutes of Health, and from the
9 National Aeronautics and Space Administration Advisory Council.

10 (c) ANNUAL BIOMEDICAL RESEARCH SYMPOSIA.—The joint working
11 group shall organize annual symposia on biomedical research described in
12 subsection (a) under the joint sponsorship of the Administration and the
13 National Institutes of Health.

14 (d) ANNUAL REPORTING REQUIREMENT.—The joint working group shall
15 report annually to Congress on its progress in carrying out this section.

16 **§ 40503. Biomedical research grants**

17 (a) ESTABLISHMENT OF PROGRAM.—The Administrator and the Director
18 of the National Institutes of Health shall establish a joint program of bio-
19 medical research grants in areas described in section 40502(a) of this title,
20 where such research requires access to a microgravity environment. Such
21 program shall be consistent with actions taken by the joint working group
22 under section 40502 of this title.

23 (b) RESEARCH OPPORTUNITY ANNOUNCEMENTS.—The grants program
24 established under subsection (a) shall annually issue joint research oppor-
25 tunity announcements under the sponsorship of the National Institutes of
26 Health and the Administration. Responses to the announcements shall be
27 evaluated by a peer review committee whose members shall be selected by
28 the Director of the National Institutes of Health and the Administrator,
29 and shall include individuals not employed by the Administration or the Na-
30 tional Institutes of Health.

31 **§ 40504. Biomedical research fellowships**

32 The Administrator and the Director of the National Institutes of Health
33 shall create a joint program of graduate research fellowships in biomedical
34 research described in section 40502(a) of this title. Fellowships under such
35 program may provide for participation in approved research conferences and
36 symposia.

37 **§ 40505. Establishment of electronic data archive**

38 The Administrator shall create and maintain a national electronic data
39 archive for biomedical research data obtained from space-based experiments.

1 **§ 40506. Establishment of emergency medical service tele-**
 2 **medicine capability**

3 The Administrator, the Administrator of the Federal Emergency Manage-
 4 ment Agency, the Director of the Office of Foreign Disaster Assistance, and
 5 the Surgeon General of the United States shall jointly create and maintain
 6 an international telemedicine satellite consultation capability to support
 7 emergency medical services in disaster-stricken areas.

8 **CHAPTER 407—MISCELLANEOUS**

Sec.

40701. Science, Space, and Technology Education Trust Fund.
 40702. National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust
 Fund.
 40703. Experimental Program to Stimulate Competitive Research—merit grant competition
 requirements.
 40704. Microgravity research.
 40705. Program to expand distance learning in rural underserved areas.
 40706. Equal access to the Administration's education programs.
 40707. Museums.
 40708. Continuation of certain education programs.
 40709. Compliance with title IX of Education Amendments of 1972.

9 **§ 40701. Science, Space, and Technology Education Trust**
 10 **Fund**

11 There is appropriated, by transfer from funds appropriated in the De-
 12 partment of Housing and Urban Development—Independent Agencies Ap-
 13 propriations Act, 1989 (Public Law 100–404, 102 Stat. 1014), for “Con-
 14 struction of facilities”, the sum of \$15,000,000 to the “Science, Space, and
 15 Technology Education Trust Fund”, which is hereby established in the
 16 Treasury of the United States. The Secretary of the Treasury shall invest
 17 these funds in the United States Treasury special issue securities, and inter-
 18 est shall be credited to the Trust Fund on a quarterly basis. Such interest
 19 shall be available for the purpose of making grants for programs directed
 20 at improving science, space, and technology education in the United States.
 21 The Administrator, after consultation with the Director of the National
 22 Science Foundation, shall review applications made for such grants and de-
 23 termine the distribution of available funds on a competitive basis. Grants
 24 shall be made available to any awardee only to the extent that the awardee
 25 provides matching funds from non-Federal sources to carry out the program
 26 for which grants from this Trust Fund are made. Of the funds made avail-
 27 able by this Trust Fund, \$250,000 shall be disbursed each calendar quarter
 28 to the Challenger Center for Space Science Education. The Administrator
 29 shall submit to Congress an annual report on the grants made pursuant to
 30 this section.

1 **§ 40702. National Aeronautics and Space Administration En-**
2 **deavor Teacher Fellowship Trust Fund**

3 (a) ESTABLISHMENT.—There is established in the Treasury of the United
4 States, in tribute to the dedicated crew of the Space Shuttle Challenger, a
5 trust fund to be known as the National Aeronautics and Space Administra-
6 tion Endeavor Teacher Fellowship Trust Fund (hereafter in this section re-
7 ferred to as the “Trust Fund”). The Trust Fund shall consist of amounts
8 which may from time to time, at the discretion of the Administrator, be
9 transferred from the National Aeronautics and Space Administration Gifts
10 and Donations Trust Fund.

11 (b) INVESTMENT OF TRUST FUND.—The Administrator shall direct the
12 Secretary of the Treasury to invest and reinvest funds in the Trust Fund
13 in public debt securities with maturities suitable for the needs of the Trust
14 Fund, and bearing interest at rates determined by the Secretary of the
15 Treasury, taking into consideration the current average market yield on out-
16 standing marketable obligations of the United States of comparable matu-
17 rities. Interest earned shall be credited to the Trust Fund.

18 (c) PURPOSE.—Income accruing from the Trust Fund principal shall be
19 used to create the National Aeronautics and Space Administration Endeavor
20 Teacher Fellowship Program, to the extent provided in advance in appro-
21 priation Acts. The Administrator is authorized to use such funds to award
22 fellowships to selected United States nationals who are undergraduate stu-
23 dents pursuing a course of study leading to certified teaching degrees in ele-
24 mentary education or in secondary education in mathematics, science, or
25 technology disciplines. Awards shall be made pursuant to standards estab-
26 lished for the fellowship program by the Administrator.

27 **§ 40703. Experimental Program to Stimulate Competitive**
28 **Research—merit grant competition requirements**

29 (a) DEFINITION OF ELIGIBLE STATE.—In this section, the term “eligible
30 State” means a State designated by the Administrator as eligible to compete
31 in the National Science Foundation’s Experimental Program to Stimulate
32 Competitive Research.

33 (b) COMPETITION.—Making use of the existing infrastructure established
34 in eligible States by the National Science Foundation, the Administrator
35 shall conduct a merit grant competition among the eligible States in areas
36 of research important to the mission of the Administration. With respect to
37 a grant application by an eligible State, the Administrator shall consider—

- 38 (1) the application’s merit and relevance to the mission of the Ad-
39 ministration;

1 (2) the potential for the grant to serve as a catalyst to enhance the
2 ability of researchers in the State to become more competitive for reg-
3 ular Administration funding;

4 (3) the potential for the grant to improve the environment for
5 science, mathematics, and engineering education in the State; and

6 (4) the need to ensure the maximum distribution of grants among
7 eligible States, consistent with merit.

8 (c) SUPPLEMENTAL GRANTS.—The Administrator shall endeavor, where
9 appropriate, to supplement grants made under subsection (b) with such
10 grants for fellowships, traineeships, equipment, or instrumentation as are
11 available.

12 **§ 40704. Microgravity research**

13 The Administrator shall—

14 (1) transmit the report required by section 70505 of this title;

15 (2) ensure the capacity to support ground-based research leading to
16 space-based basic and applied scientific research in a variety of dis-
17 ciplines with potential direct national benefits and applications that can
18 be advanced significantly from the uniqueness of microgravity and the
19 space environment; and

20 (3) carry out, to the maximum extent practicable, basic, applied, and
21 commercial International Space Station research in fields such as mo-
22 lecular crystal growth, animal research, basic fluid physics, combustion
23 research, cellular biotechnology, low-temperature physics, and cellular
24 research at a level that will sustain the existing United States scientific
25 expertise and research capability in microgravity research.

26 **§ 40705. Program to expand distance learning in rural un-**
27 **derserved areas**

28 (a) IN GENERAL.—The Administrator shall develop or expand programs
29 to extend science and space educational outreach to rural communities and
30 schools through video conferencing, interpretive exhibits, teacher education,
31 classroom presentations, and student field trips.

32 (b) PRIORITIES.—In carrying out subsection (a), the Administrator shall
33 give priority to existing programs, including Challenger Learning Centers—

34 (1) that utilize community-based partnerships in the field;

35 (2) that build and maintain video conference and exhibit capacity;

36 (3) that travel directly to rural communities and serve low-income
37 populations; and

38 (4) with a special emphasis on increasing the number of women and
39 minorities in the science and engineering professions.

1 **§ 40706. Equal access to the Administration’s education pro-**
2 **grams**

3 (a) IN GENERAL.—The Administrator shall strive to ensure equal access
4 for minority and economically disadvantaged students to the Administra-
5 tion’s education programs.

6 (b) REPORT.—Not later than 1 year after December 30, 2005, and every
7 2 years thereafter, the Administrator shall submit a report to the Com-
8 mittee on Science and Technology of the House of Representatives and the
9 Committee on Commerce, Science, and Transportation of the Senate de-
10 scribing the efforts by the Administrator to ensure equal access for minority
11 and economically disadvantaged students under this section and the results
12 of such efforts. As part of the report, the Administrator shall provide—

13 (1) data on minority participation in the Administration’s education
14 programs, at a minimum in the categories of—

15 (A) elementary and secondary education;

16 (B) undergraduate education; and

17 (C) graduate education; and

18 (2) the total value of grants the Administration made to Historically
19 Black Colleges and Universities and to Hispanic Serving Institutions
20 through education programs during the period covered by the report.

21 (c) PROGRAM.—The Administrator shall establish the Dr. Mae C.
22 Jemison Grant Program to work with Minority Serving Institutions to bring
23 more women of color into the field of space and aeronautics.

24 **§ 40707. Museums**

25 The Administrator may provide grants to, and enter into cooperative
26 agreements with, museums and planetariums to enable them to enhance
27 programs related to space exploration, aeronautics, space science, Earth
28 science, or microgravity.

29 **§ 40708. Continuation of certain education programs**

30 From amounts appropriated to the Administration for education pro-
31 grams, the Administrator shall ensure the continuation of the Space Grant
32 Program, the Experimental Program to Stimulate Competitive Research,
33 and, consistent with the results of the review under section 614 of the Na-
34 tional Aeronautics and Space Administration Authorization Act of 2005
35 (Public Law 109–155, 119 Stat. 2933), the Administration Explorer School
36 program, to motivate and develop the next generation of explorers.

37 **§ 40709. Compliance with title IX of Education Amendments**
38 **of 1972**

39 To comply with title IX of the Education Amendments of 1972 (20
40 U.S.C. 1681 et seq.), the Administrator shall conduct compliance reviews
41 of at least 2 grantees annually.

1 **Subtitle V—Programs Targeting Commercial**
 2 **Opportunities**

Chapter		Sec.
501.	Space Commerce	50101
503.	Commercial Reusable In-Space Transportation	50301
505.	Commercial Space Competitiveness	50501

3 **CHAPTER 501—SPACE COMMERCE**

SUBCHAPTER I—GENERAL

Sec.

50101. Definitions.

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50111. Commercialization of Space Station.
 50112. Promotion of United States Global Positioning System standards.
 50113. Acquisition of space science data.
 50114. Administration of commercial space centers.
 50115. Sources of Earth science data.
 50116. Commercial technology transfer program.

SUBCHAPTER III—FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES

50131. Requirement to procure commercial space transportation services.
 50132. Acquisition of commercial space transportation services.
 50133. Shuttle privatization.
 50134. Use of excess intercontinental ballistic missiles.
 50135. National launch capability study.

4 SUBCHAPTER I—GENERAL

5 **§ 50101. Definitions**

6 In this chapter:

7 (1) **COMMERCIAL PROVIDER.**—The term “commercial provider”
 8 means any person providing space transportation services or other
 9 space-related activities, primary control of which is held by persons
 10 other than Federal, State, local, and foreign governments.

11 (2) **PAYLOAD.**—The term “payload” means anything that a person
 12 undertakes to transport to, from, or within outer space, or in suborbital
 13 trajectory, by means of a space transportation vehicle, but does not in-
 14 clude the space transportation vehicle itself except for its components
 15 which are specifically designed or adapted for that payload.

16 (3) **SPACE-RELATED ACTIVITIES.**—The term “space-related activi-
 17 ties” includes research and development, manufacturing, processing,
 18 service, and other associated and support activities.

19 (4) **SPACE TRANSPORTATION SERVICES.**—The term “space transpor-
 20 tation services” means the preparation of a space transportation vehicle
 21 and its payloads for transportation to, from, or within outer space, or
 22 in suborbital trajectory, and the conduct of transporting a payload to,
 23 from, or within outer space, or in suborbital trajectory.

24 (5) **SPACE TRANSPORTATION VEHICLE.**—The term “space transpor-
 25 tation vehicle” means any vehicle constructed for the purpose of oper-
 26 ating in, or transporting a payload to, from, or within, outer space, or

1 in suborbital trajectory, and includes any component of such vehicle not
2 specifically designed or adapted for a payload.

3 (6) STATE.—The term “State” means each of the several States of
4 the Union, the District of Columbia, the Commonwealth of Puerto
5 Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth
6 of the Northern Mariana Islands, and any other commonwealth, terri-
7 tory, or possession of the United States.

8 (7) UNITED STATES COMMERCIAL PROVIDER.—The term “United
9 States commercial provider” means a commercial provider, organized
10 under the laws of the United States or of a State, that is—

11 (A) more than 50 percent owned by United States nationals; or

12 (B) a subsidiary of a foreign company and the Secretary of

13 Transportation finds that—

14 (i) such subsidiary has in the past evidenced a substantial
15 commitment to the United States market through—

16 (I) investments in the United States in long-term re-
17 search, development, and manufacturing (including the
18 manufacture of major components and subassemblies);
19 and

20 (II) significant contributions to employment in the
21 United States; and

22 (ii) the country or countries in which such foreign company
23 is incorporated or organized, and, if appropriate, in which it
24 principally conducts its business, affords reciprocal treatment
25 to companies described in subparagraph (A) comparable to
26 that afforded to such foreign company’s subsidiary in the
27 United States, as evidenced by—

28 (I) providing comparable opportunities for companies
29 described in subparagraph (A) to participate in Govern-
30 ment-sponsored research and development similar to that
31 authorized under this chapter;

32 (II) providing no barriers, to companies described in
33 subparagraph (A) with respect to local investment oppor-
34 tunities, that are not provided to foreign companies in
35 the United States; and

36 (III) providing adequate and effective protection for
37 the intellectual property rights of companies described in
38 subparagraph (A).

SUBCHAPTER II—PROMOTION OF COMMERCIAL SPACE
OPPORTUNITIES

§ 50111. Commercialization of Space Station

Congress declares that a priority goal of constructing the International Space Station is the economic development of Earth orbital space. Congress further declares that free and competitive markets create the most efficient conditions for promoting economic development, and should therefore govern the economic development of Earth orbital space. Congress further declares that the use of free market principles in operating, servicing, allocating the use of, and adding capabilities to the Space Station, and the resulting fullest possible engagement of commercial providers and participation of commercial users, will reduce Space Station operational costs for all partners and the Federal Government's share of the United States burden to fund operations.

§ 50112. Promotion of United States Global Positioning System standards

(a) FINDING.—Congress finds that the Global Positioning System, including satellites, signal equipment, ground stations, data links, and associated command and control facilities, has become an essential element in civil, scientific, and military space development because of the emergence of a United States commercial industry which provides Global Positioning System equipment and related services.

(b) INTERNATIONAL COOPERATION.—In order to support and sustain the Global Positioning System in a manner that will most effectively contribute to the national security, public safety, scientific, and economic interests of the United States, Congress encourages the President to—

(1) ensure the operation of the Global Positioning System on a continuous worldwide basis free of direct user fees;

(2) enter into international agreements that promote cooperation with foreign governments and international organizations to—

(A) establish the Global Positioning System and its augmentations as an acceptable international standard; and

(B) eliminate any foreign barriers to applications of the Global Positioning System worldwide; and

(3) provide clear direction and adequate resources to the Assistant Secretary of Commerce for Communications and Information so that on an international basis the Assistant Secretary can—

(A) achieve and sustain efficient management of the electromagnetic spectrum used by the Global Positioning System; and

(B) protect that spectrum from disruption and interference.

1 **§ 50113. Acquisition of space science data**

2 (a) DEFINITION OF SPACE SCIENCE DATA.—In this section, the term
3 “space science data” includes scientific data concerning—

- 4 (1) the elemental and mineralogical resources of the moon, asteroids,
5 planets and their moons, and comets;
6 (2) microgravity acceleration; and
7 (3) solar storm monitoring.

8 (b) ACQUISITION FROM COMMERCIAL PROVIDERS.—The Administrator
9 shall, to the extent possible and while satisfying the scientific or educational
10 requirements of the Administration, and where appropriate, of other Federal
11 agencies and scientific researchers, acquire, where cost effective, space
12 science data from a commercial provider.

13 (c) TREATMENT OF SPACE SCIENCE DATA AS COMMERCIAL ITEM UNDER
14 ACQUISITION LAWS.—Acquisitions of space science data by the Adminis-
15 trator shall be carried out in accordance with applicable acquisition laws
16 and regulations (including chapters 137 and 140 of title 10). For purposes
17 of such law and regulations, space science data shall be considered to be
18 a commercial item. Nothing in this subsection shall be construed to preclude
19 the United States from acquiring, through contracts with commercial pro-
20 viders, sufficient rights in data to meet the needs of the scientific and edu-
21 cational community or the needs of other government activities.

22 (d) SAFETY STANDARDS.—Nothing in this section shall be construed to
23 prohibit the Federal Government from requiring compliance with applicable
24 safety standards.

25 (e) LIMITATION.—This section does not authorize the Administration to
26 provide financial assistance for the development of commercial systems for
27 the collection of space science data.

28 **§ 50114. Administration of commercial space centers**

29 The Administrator shall administer the Commercial Space Center pro-
30 gram in a coordinated manner from Administration headquarters in Wash-
31 ington, D.C.

32 **§ 50115. Sources of Earth science data**

33 (a) ACQUISITION.—The Administrator shall, to the extent possible and
34 while satisfying the scientific or educational requirements of the Administra-
35 tion, and where appropriate, of other Federal agencies and scientific re-
36 searchers, acquire, where cost-effective, space-based and airborne Earth re-
37 mote sensing data, services, distribution, and applications from a commer-
38 cial provider.

39 (b) TREATMENT AS COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Ac-
40 quisitions by the Administrator of the data, services, distribution, and appli-
41 cations referred to in subsection (a) shall be carried out in accordance with

1 applicable acquisition laws and regulations (including chapters 137 and 140
 2 of title 10). For purposes of such law and regulations, such data, services,
 3 distribution, and applications shall be considered to be a commercial item.
 4 Nothing in this subsection shall be construed to preclude the United States
 5 from acquiring, through contracts with commercial providers, sufficient
 6 rights in data to meet the needs of the scientific and educational community
 7 or the needs of other government activities.

8 (c) SAFETY STANDARDS.—Nothing in this section shall be construed to
 9 prohibit the Federal Government from requiring compliance with applicable
 10 safety standards.

11 (d) ADMINISTRATION AND EXECUTION.—This section shall be carried out
 12 as part of the Commercial Remote Sensing Program at the Stennis Space
 13 Center.

14 **§ 50116. Commercial technology transfer program**

15 (a) IN GENERAL.—The Administrator shall execute a commercial tech-
 16 nology transfer program with the goal of facilitating the exchange of serv-
 17 ices, products, and intellectual property between the Administration and the
 18 private sector. This program shall place at least as much emphasis on en-
 19 couraging the transfer of Administration technology to the private sector
 20 (“spinning out”) as on encouraging use of private sector technology by the
 21 Administration. This program shall be maintained in a manner that pro-
 22 vides clear benefits for the Administration, the domestic economy, and the
 23 research community.

24 (b) PROGRAM STRUCTURE.—In carrying out the program described in
 25 subsection (a), the Administrator shall provide program participants with at
 26 least 45 days notice of any proposed changes to the structure of the Admin-
 27 istration’s technology transfer and commercialization organizations that is
 28 in effect as of December 30, 2005.

29 SUBCHAPTER III—FEDERAL ACQUISITION OF SPACE
 30 TRANSPORTATION SERVICES

31 **§ 50131. Requirement to procure commercial space trans-
 32 portation services**

33 (a) IN GENERAL.—Except as otherwise provided in this section, the Fed-
 34 eral Government shall acquire space transportation services from United
 35 States commercial providers whenever such services are required in the
 36 course of its activities. To the maximum extent practicable, the Federal
 37 Government shall plan missions to accommodate the space transportation
 38 services capabilities of United States commercial providers.

39 (b) EXCEPTIONS.—The Federal Government shall not be required to ac-
 40 quire space transportation services under subsection (a) if, on a case-by-case

1 basis, the Administrator or, in the case of a national security issue, the Sec-
2 retary of the Air Force, determines that—

3 (1) a payload requires the unique capabilities of the space shuttle;

4 (2) cost effective space transportation services that meet specific
5 mission requirements would not be reasonably available from United
6 States commercial providers when required;

7 (3) the use of space transportation services from United States com-
8 mercial providers poses an unacceptable risk of loss of a unique sci-
9 entific opportunity;

10 (4) the use of space transportation services from United States com-
11 mercial providers is inconsistent with national security objectives;

12 (5) the use of space transportation services from United States com-
13 mercial providers is inconsistent with international agreements for
14 international collaborative efforts relating to science and technology;

15 (6) it is more cost effective to transport a payload in conjunction
16 with a test or demonstration of a space transportation vehicle owned
17 by the Federal Government; or

18 (7) a payload can make use of the available cargo space on a space
19 shuttle mission as a secondary payload, and such payload is consistent
20 with the requirements of research, development, demonstration, sci-
21 entific, commercial, and educational programs authorized by the Ad-
22 ministrator.

23 (c) AGREEMENTS WITH FOREIGN ENTITIES.—Nothing in this section
24 shall prevent the Administrator from planning or negotiating agreements
25 with foreign entities for the launch of Federal Government payloads for
26 international collaborative efforts relating to science and technology.

27 (d) DELAYED EFFECT.—Subsection (a) shall not apply to space transpor-
28 tation services and space transportation vehicles acquired or owned by the
29 Federal Government before October 28, 1998, or with respect to which a
30 contract for such acquisition or ownership has been entered into before Oc-
31 tober 28, 1998.

32 (e) HISTORICAL PURPOSES.—This section shall not be construed to pro-
33 hibit the Federal Government from acquiring, owning, or maintaining space
34 transportation vehicles solely for historical display purposes.

35 **§ 50132. Acquisition of commercial space transportation**
36 **services**

37 (a) TREATMENT OF COMMERCIAL SPACE TRANSPORTATION SERVICES AS
38 COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Acquisitions of space
39 transportation services by the Federal Government shall be carried out in
40 accordance with applicable acquisition laws and regulations (including chap-

1 ters 137 and 140 of title 10). For purposes of such law and regulations,
2 space transportation services shall be considered to be a commercial item.

3 (b) SAFETY STANDARDS.—Nothing in this section shall be construed to
4 prohibit the Federal Government from requiring compliance with applicable
5 safety standards.

6 **§ 50133. Shuttle privatization**

7 The Administrator shall prepare for an orderly transition from the Fed-
8 eral operation, or Federal management of contracted operation, of space
9 transportation systems to the Federal purchase of commercial space trans-
10 portation services for all nonemergency space transportation requirements
11 for transportation to and from Earth orbit, including human, cargo, and
12 mixed payloads. In those preparations, the Administrator shall take into ac-
13 count the need for short-term economies, as well as the goal of restoring
14 the Administration's research focus and its mandate to promote the fullest
15 possible commercial use of space. As part of those preparations, the Admin-
16 istrator shall plan for the potential privatization of the space shuttle pro-
17 gram. Such plan shall keep safety and cost effectiveness as high priorities.
18 Nothing in this section shall prohibit the Administration from studying, de-
19 signing, developing, or funding upgrades or modifications essential to the
20 safe and economical operation of the space shuttle fleet.

21 **§ 50134. Use of excess intercontinental ballistic missiles**

22 (a) IN GENERAL.—The Federal Government shall not—

23 (1) convert any missile described in subsection (c) to a space trans-
24 portation vehicle configuration; or

25 (2) transfer ownership of any such missile to another person, except
26 as provided in subsection (b).

27 (b) AUTHORIZED FEDERAL USES.—

28 (1) IN GENERAL.—A missile described in subsection (c) may be con-
29 verted for use as a space transportation vehicle by the Federal Govern-
30 ment if, except as provided in paragraph (2) and at least 30 days be-
31 fore such conversion, the agency seeking to use the missile as a space
32 transportation vehicle transmits to the Committee on Armed Services
33 and the Committee on Science and Technology of the House of Rep-
34 resentatives, and to the Committee on Armed Services and the Com-
35 mittee on Commerce, Science, and Transportation of the Senate, a cer-
36 tification that the use of such missile—

37 (A) would result in cost savings to the Federal Government
38 when compared to the cost of acquiring space transportation serv-
39 ices from United States commercial providers;

40 (B) meets all mission requirements of the agency, including per-
41 formance, schedule, and risk requirements;

1 (C) is consistent with international obligations of the United
2 States; and

3 (D) is approved by the Secretary of Defense or the designee of
4 the Secretary of Defense.

5 (2) EXCEPTION TO REQUIREMENT THAT CERTIFICATION BE TRANS-
6 MITTED 30 DAYS BEFORE CONVERSION.—The requirement under para-
7 graph (1) that the certification described in that paragraph must be
8 transmitted at least 30 days before conversion of the missile shall not
9 apply if the Secretary of Defense determines that compliance with that
10 requirement would be inconsistent with meeting immediate national se-
11 curity requirements.

12 (c) MISSILES REFERRED TO.—The missiles referred to in this section are
13 missiles owned by the United States that—

14 (1) were formerly used by the Department of Defense for national
15 defense purposes as intercontinental ballistic missiles; and

16 (2) have been declared excess to United States national defense
17 needs and are in compliance with international obligations of the
18 United States.

19 **§ 50135. National launch capability study**

20 (a) FINDINGS.—Congress finds that a robust satellite and launch indus-
21 try in the United States serves the interest of the United States by—

22 (1) contributing to the economy of the United States;

23 (2) strengthening employment, technological, and scientific interests
24 of the United States; and

25 (3) serving the foreign policy and national security interests of the
26 United States.

27 (b) DEFINITIONS.—In this section:

28 (1) SECRETARY.—The term “Secretary” means the Secretary of De-
29 fense.

30 (2) TOTAL POTENTIAL NATIONAL MISSION MODEL.—The term “total
31 potential national mission model” means a model that—

32 (A) is determined by the Secretary, in consultation with the Ad-
33 ministrator, to assess the total potential space missions to be con-
34 ducted in the United States during a specified period of time; and

35 (B) includes all launches in the United States (including
36 launches conducted on or off a Federal range).

37 (c) REPORT.—

38 (1) IN GENERAL.—Not later than 180 days after October 28, 1998,
39 the Secretary shall, in consultation with the Administrator and appro-
40 priate representatives of the satellite and launch industry and the gov-
41 ernments of States and political subdivisions thereof—

1 (A) prepare a report that meets the requirements of this sub-
2 section; and

3 (B) submit that report to the Committee on Commerce, Science,
4 and Transportation of the Senate and the Committee on Science
5 and Technology of the House of Representatives.

6 (2) REQUIREMENTS FOR REPORT.—The report prepared under this
7 subsection shall—

8 (A) identify the total potential national mission model for the
9 period beginning on the date of the report and ending on Decem-
10 ber 31, 2007;

11 (B) identify the resources that are necessary or available to
12 carry out the total potential national mission model described in
13 subparagraph (A), including—

14 (i) launch property and services of the Department of De-
15 fense, the Administration, and non-Federal facilities; and

16 (ii) the ability to support commercial launch-on-demand on
17 short notification, taking into account Federal requirements,
18 at launch sites or test ranges in the United States;

19 (C) identify each deficiency in the resources referred to in sub-
20 paragraph (B); and

21 (D) with respect to the deficiencies identified under subpara-
22 graph (C), include estimates of the level of funding necessary to
23 address those deficiencies for the period described in subparagraph
24 (A).

25 (d) RECOMMENDATIONS.—Based on the report under subsection (c), the
26 Secretary, after consultation with the Secretary of Transportation, the Sec-
27 retary of Commerce, and representatives from interested private sector enti-
28 ties, States, and local governments, shall—

29 (1) identify opportunities for investment by non-Federal entities (in-
30 cluding States and political subdivisions thereof and private sector enti-
31 ties) to assist the Federal Government in providing launch capabilities
32 for the commercial space industry in the United States;

33 (2) identify one or more methods by which, if sufficient resources re-
34 ferred to in subsection (c)(2)(D) are not available to the Department
35 of Defense and the Administration, the control of the launch property
36 and launch services of the Department of Defense and the Administra-
37 tion may be transferred from the Department of Defense and the Ad-
38 ministration to—

39 (A) one or more other Federal agencies;

40 (B) one or more States (or subdivisions thereof);

41 (C) one or more private sector entities; or

- 1 (D) any combination of the entities described in subparagraphs
 2 (A) to (C); and
 3 (3) identify the technical, structural, and legal impediments associ-
 4 ated with making launch sites or test ranges in the United States via-
 5 ble and competitive.

6 **CHAPTER 503—COMMERCIAL REUSABLE IN-SPACE**
 7 **TRANSPORTATION**

Sec.

50301. Findings.

50302. Definitions.

50303. Loan guarantees for production of commercial reusable in-space transportation.

8 **§ 50301. Findings**

9 Congress makes the following findings:

10 (1) It is in the national interest to encourage the production of cost-
 11 effective, in-space transportation systems, which would be built and op-
 12 erated by the private sector on a commercial basis.

13 (2) The use of reusable in-space transportation systems will enhance
 14 performance levels of in-space operations, enhance efficient and safe
 15 disposal of satellites at the end of their useful lives, and increase the
 16 capability and reliability of existing ground-to-space launch vehicles.

17 (3) Commercial reusable in-space transportation systems will en-
 18 hance the economic well-being and national security of the United
 19 States by reducing space operations costs for commercial and national
 20 space programs and by adding new space capabilities to space oper-
 21 ations.

22 (4) Commercial reusable in-space transportation systems will provide
 23 new cost-effective space capabilities (including orbital transfers from
 24 low altitude orbits to high altitude orbits and return, the correction of
 25 erroneous satellite orbits, and the recovery, refurbishment, and refuel-
 26 ing of satellites) and the provision of upper stage functions to increase
 27 ground-to-orbit launch vehicle payloads to geostationary and other high
 28 energy orbits.

29 (5) Commercial reusable in-space transportation systems can en-
 30 hance and enable the space exploration of the United States by pro-
 31 viding lower cost trajectory injection from Earth orbit, transit trajec-
 32 tory control, and planet arrival deceleration to support potential Ad-
 33 ministration missions to Mars, Pluto, and other planets.

34 (6) Satellites stranded in erroneous Earth orbit due to deficiencies
 35 in their launch represent substantial economic loss to the United States
 36 and present substantial concerns for the current backlog of national
 37 space assets.

1 (7) Commercial reusable in-space transportation systems can provide
2 new options for alternative planning approaches and risk management
3 to enhance the mission assurance of national space assets.

4 (8) Commercial reusable in-space transportation systems developed
5 by the private sector can provide in-space transportation services to the
6 Administration, the Department of Defense, the National Reconnaissance
7 Office, and other agencies without the need for the United States
8 to bear the cost of production of such systems.

9 (9) The availability of loan guarantees, with the cost of credit risk
10 to the United States paid by the private sector, is an effective means
11 by which the United States can help qualifying private sector compa-
12 nies secure otherwise unattainable private financing for the production
13 of commercial reusable in-space transportation systems, while at the
14 same time minimizing Government commitment and involvement in the
15 development of such systems.

16 **§ 50302. Definitions**

17 In this chapter:

18 (1) **COMMERCIAL PROVIDER.**—The term “commercial provider”
19 means any person or entity providing commercial reusable in-orbit
20 space transportation services or systems, primary control of which is
21 held by persons other than the Federal Government, a State or local
22 government, or a foreign government.

23 (2) **IN-SPACE TRANSPORTATION SERVICES.**—The term “in-space
24 transportation services” means operations and activities involved in the
25 direct transportation or attempted transportation of a payload or object
26 from one orbit to another by means of an in-space transportation vehi-
27 cle.

28 (3) **IN-SPACE TRANSPORTATION SYSTEM.**—The term “in-space trans-
29 portation system” means the space and ground elements, including in-
30 space transportation vehicles and support space systems, and ground
31 administration and control facilities and associated equipment, nec-
32 essary for the provision of in-space transportation services.

33 (4) **IN-SPACE TRANSPORTATION VEHICLE.**—The term “in-space
34 transportation vehicle” means a vehicle designed—

35 (A) to be based and operated in space;

36 (B) to transport various payloads or objects from one orbit to
37 another orbit; and

38 (C) to be reusable and refueled in space.

39 (5) **SECRETARY.**—The term “Secretary” means the Secretary of De-
40 fense.

1 (6) UNITED STATES COMMERCIAL PROVIDER.—The term “United
2 States commercial provider” means any commercial provider organized
3 under the laws of the United States that is more than 50 percent
4 owned by United States nationals.

5 **§ 50303. Loan guarantees for production of commercial reusable in-space transportation**
6

7 (a) AUTHORITY TO MAKE LOAN GUARANTEES.—The Secretary may
8 guarantee loans made to eligible United States commercial providers for
9 purposes of producing commercial reusable in-space transportation services
10 or systems.

11 (b) ELIGIBLE UNITED STATES COMMERCIAL PROVIDERS.—The Secretary
12 shall prescribe requirements for the eligibility of United States commercial
13 providers for loan guarantees under this section. Such requirements shall
14 ensure that eligible providers are financially capable of undertaking a loan
15 guaranteed under this section.

16 (c) LIMITATION ON LOANS GUARANTEED.—The Secretary may not guar-
17 antee a loan for a United States commercial provider under this section un-
18 less the Secretary determines that credit would not otherwise be reasonably
19 available at the time of the guarantee for the commercial reusable in-space
20 transportation service or system to be produced utilizing the proceeds of the
21 loan.

22 (d) CREDIT SUBSIDY.—

23 (1) COLLECTION REQUIRED.—The Secretary shall collect from each
24 United States commercial provider receiving a loan guarantee under
25 this section an amount equal to the amount, as determined by the Sec-
26 retary, to cover the cost, as defined in section 502(5) of the Federal
27 Credit Reform Act of 1990 (2 U.S.C. 661a(5)), of the loan guarantee.

28 (2) PERIODIC DISBURSEMENTS.—In the case of a loan guarantee in
29 which proceeds of the loan are disbursed over time, the Secretary shall
30 collect the amount required under this subsection on a pro rata basis,
31 as determined by the Secretary, at the time of each disbursement.

32 (e) OTHER TERMS AND CONDITIONS.—

33 (1) PROHIBITION ON SUBORDINATION.—A loan guaranteed under
34 this section may not be subordinated to another debt contracted by the
35 United States commercial provider concerned, or to any other claims
36 against such provider.

37 (2) RESTRICTION ON INCOME.—A loan guaranteed under this section
38 may not—

39 (A) provide income which is excluded from gross income for
40 purposes of chapter 1 of the Internal Revenue Code of 1986 (26
41 U.S.C. 1 et seq.); or

1 (B) provide significant collateral or security, as determined by
2 the Secretary, for other obligations the income from which is so
3 excluded.

4 (3) TREATMENT OF GUARANTEE.—The guarantee of a loan under
5 this section shall be conclusive evidence of the following:

6 (A) That the guarantee has been properly obtained.

7 (B) That the loan qualifies for the guarantee.

8 (C) That, but for fraud or material misrepresentation by the
9 holder of the loan, the guarantee is valid, legal, and enforceable.

10 (4) OTHER TERMS AND CONDITIONS.—The Secretary may establish
11 any other terms and conditions for a guarantee of a loan under this
12 section as the Secretary considers appropriate to protect the financial
13 interests of the United States.

14 (f) ENFORCEMENT OF RIGHTS.—

15 (1) IN GENERAL.—The Attorney General may take any action the
16 Attorney General considers appropriate to enforce any right accruing
17 to the United States under a loan guarantee under this section.

18 (2) FORBEARANCE.—The Attorney General may, with the approval
19 of the parties concerned, forbear from enforcing any right of the
20 United States under a loan guaranteed under this section for the ben-
21 efit of a United States commercial provider if such forbearance will not
22 result in any cost, as defined in section 502(5) of the Federal Credit
23 Reform Act of 1990 (2 U.S.C. 661a(5)), to the United States.

24 (3) UTILIZATION OF PROPERTY.—Notwithstanding any other provi-
25 sion of law and subject to the terms of a loan guaranteed under this
26 section, upon the default of a United States commercial provider under
27 the loan, the Secretary may, at the election of the Secretary—

28 (A) assume control of the physical asset financed by the loan;
29 and

30 (B) complete, recondition, reconstruct, renovate, repair, main-
31 tain, operate, or sell the physical asset.

32 (g) CREDIT INSTRUMENTS.—

33 (1) AUTHORITY TO ISSUE INSTRUMENTS.—Notwithstanding any
34 other provision of law, the Secretary may, subject to such terms and
35 conditions as the Secretary considers appropriate, issue credit instru-
36 ments to United States commercial providers of in-space transportation
37 services or systems, with the aggregate cost (as determined under the
38 provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et
39 seq.)) of such instruments not to exceed \$1,500,000,000, but only to
40 the extent that new budget authority to cover such costs is provided

1 in subsequent appropriations Acts or authority is otherwise provided in
2 subsequent appropriations Acts.

3 (2) CREDIT SUBSIDY.—The Secretary shall provide a credit subsidy
4 for any credit instrument issued under this subsection in accordance
5 with the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C.
6 661 et seq.).

7 (3) CONSTRUCTION.—The eligibility of a United States commercial
8 provider of in-space transportation services or systems for a credit in-
9 strument under this subsection is in addition to any eligibility of such
10 provider for a loan guarantee under other provisions of this section.

11 **CHAPTER 505—COMMERCIAL SPACE COMPETITIVENESS**

Sec.

50501. Findings.

50502. Definitions.

50503. Launch voucher demonstration program.

50504. Anchor tenancy and termination liability.

50505. Use of Government facilities.

50506. Test facilities.

50507. Commercial Space Achievement Award.

12 **§ 50501. Findings**

13 Congress finds that—

14 (1) commercial activities of the private sector have substantially con-
15 tributed to the strength of both the United States space program and
16 the national economy;

17 (2) a robust United States space transportation capability remains
18 a vital cornerstone of the United States space program;

19 (3) the availability of commercial launch services is essential for the
20 continued growth of the United States commercial space sector;

21 (4) a timely extension of the excess third party claims payment pro-
22 visions of chapter 507 of this title is appropriate and necessary to en-
23 able the private sector to continue covering maximum probable liability
24 risks while protecting the private sector from uninsurable levels of li-
25 ability which could hinder international competitiveness;

26 (5) a program to demonstrate how recipients of Federal grants can
27 purchase launch services directly from the private sector has the poten-
28 tial to improve the capabilities of the United States commercial launch
29 industry;

30 (6) improvements and additions to the Nation's space transportation
31 infrastructure contribute to a robust and cost effective space transpor-
32 tation capability for both public sector and private sector users;

33 (7) private sector use of available Government facilities on a reim-
34 burable basis contributes to a stronger commercial space sector;

35 (8) the Federal Government should purchase space goods and serv-
36 ices which are commercially available, or could be made available com-

1 mercerially in response to a Government procurement request, whenever
2 such goods or services meet Government mission requirements in a cost
3 effective manner;

4 (9) it is appropriate for the Government to act as an anchor tenant
5 for commercial space development projects which have a reasonable po-
6 tential to develop non-Federal markets and which meet Federal needs
7 in a cost effective manner; and

8 (10) the provision of compensation to commercial providers of space
9 goods and services for termination of contracts at the convenience of
10 the Government assists in enabling the private sector to invest in space
11 activities which are initially dependent on Government purchases.

12 **§ 50502. Definitions**

13 In this chapter:

14 (1) AGENCY.—The term “agency” means an executive agency as de-
15 fined in section 105 of title 5.

16 (2) ANCHOR TENANCY.—The term “anchor tenancy” means an ar-
17 rangement in which the United States Government agrees to procure
18 sufficient quantities of a commercial space product or service needed
19 to meet Government mission requirements so that a commercial ven-
20 ture is made viable.

21 (3) COMMERCIAL.—The term “commercial” means having—

22 (A) private capital at risk; and

23 (B) primary financial and management responsibility for the ac-
24 tivity reside with the private sector.

25 (4) COST EFFECTIVE.—The term “cost effective” means costing no
26 more than the available alternatives, determined by a comparison of all
27 related direct and indirect costs including, in the case of Government
28 costs, applicable Government labor and overhead costs as well as con-
29 tractor charges, and taking into account the ability of each alternative
30 to accommodate mission requirements as well as the related factors of
31 risk, reliability, schedule, and technical performance.

32 (5) LAUNCH.—The term “launch” means to place, or attempt to
33 place, a launch vehicle and its payload, if any, in a suborbital trajec-
34 tory, in Earth orbit in outer space, or otherwise in outer space.

35 (6) LAUNCH SERVICES.—The term “launch services” means activi-
36 ties involved in the preparation of a launch vehicle and its payload for
37 launch and the conduct of a launch.

38 (7) LAUNCH SUPPORT FACILITIES.—The term “launch support fa-
39 cilities” means facilities located at launch sites or launch ranges that
40 are required to support launch activities, including launch vehicle as-

1 sembly, launch vehicle operations and control, communications, flight
2 safety functions, and payload operations, control, and processing.

3 (8) LAUNCH VEHICLE.—The term “launch vehicle” means any vehi-
4 cle constructed for the purpose of operating in or placing a payload in
5 outer space or in suborbital trajectories, and includes components of
6 that vehicle.

7 (9) PAYLOAD.—The term “payload” means an object which a person
8 undertakes to launch, and includes subcomponents of the launch vehicle
9 specifically designed or adapted for that object.

10 (10) PAYLOAD INTEGRATION SERVICES.—The term “payload inte-
11 gration services” means activities involved in integrating multiple pay-
12 loads into a single payload for launch or integrating a payload with a
13 launch vehicle.

14 (11) SPACE RECOVERY SUPPORT FACILITIES.—The term “space re-
15 covery support facilities” means facilities required to support activities
16 related to the recovery of payloads returned from space to a space re-
17 covery site, including operations and control, communications, flight
18 safety functions, and payload processing.

19 (12) SPACE TRANSPORTATION INFRASTRUCTURE.—The term “space
20 transportation infrastructure” means facilities, associated equipment,
21 and real property (including launch sites, launch support facilities,
22 space recovery sites, and space recovery support facilities) required to
23 perform launch or space recovery activities.

24 (13) STATE.—The term “State” means the several States, the Dis-
25 trict of Columbia, Puerto Rico, American Samoa, the United States
26 Virgin Islands, Guam, the Northern Mariana Islands, and any other
27 commonwealth, territory, or possession of the United States.

28 (14) UNITED STATES.—The term “United States” means the States,
29 collectively.

30 **§ 50503. Launch voucher demonstration program**

31 (a) REQUIREMENT TO ESTABLISH PROGRAM.—The Administrator shall
32 establish a demonstration program to award vouchers for the payment of
33 commercial launch services and payload integration services for the purpose
34 of launching payloads funded by the Administration.

35 (b) AWARD OF VOUCHERS.—The Administrator shall award vouchers
36 under subsection (a) to appropriate individuals as a part of grants adminis-
37 tered by the Administration for the launch of—

38 (1) payloads to be placed in suborbital trajectories; and

39 (2) small payloads to be placed in orbit.

40 (c) ASSISTANCE.—The Administrator may provide voucher award recipi-
41 ents with such assistance (including contract formulation and technical sup-

1 port during the proposal evaluation) as may be necessary to ensure the pur-
2 chase of cost effective and reasonably reliable commercial launch services
3 and payload integration services.

4 **§ 50504. Anchor tenancy and termination liability**

5 (a) ANCHOR TENANCY CONTRACTS.—Subject to appropriations, the Ad-
6 ministrator or the Administrator of the National Oceanic and Atmospheric
7 Administration may enter into multiyear anchor tenancy contracts for the
8 purchase of a good or service if the appropriate Administrator determines
9 that—

10 (1) the good or service meets the mission requirements of the Admin-
11 istration or the National Oceanic and Atmospheric Administration, as
12 appropriate;

13 (2) the commercially procured good or service is cost effective;

14 (3) the good or service is procured through a competitive process;

15 (4) existing or potential customers for the good or service other than
16 the United States Government have been specifically identified;

17 (5) the long-term viability of the venture is not dependent upon a
18 continued Government market or other nonreimbursable Government
19 support; and

20 (6) private capital is at risk in the venture.

21 (b) TERMINATION LIABILITY.—

22 (1) IN GENERAL.—Contracts entered into under subsection (a) may
23 provide for the payment of termination liability in the event that the
24 Government terminates such contracts for its convenience.

25 (2) FIXED SCHEDULE OF PAYMENTS AND LIMITATION ON LIABIL-
26 ITY.—Contracts that provide for the payment of termination liability,
27 as described in paragraph (1), shall include a fixed schedule of such
28 termination liability payments. Liability under such contracts shall not
29 exceed the total payments which the Government would have made
30 after the date of termination to purchase the good or service if the con-
31 tract were not terminated.

32 (3) USE OF FUNDS.—Subject to appropriations, funds available for
33 such termination liability payments may be used for purchase of the
34 good or service upon successful delivery of the good or service pursuant
35 to the contract. In such case, sufficient funds shall remain available to
36 cover any remaining termination liability.

37 (c) LIMITATIONS.—

38 (1) DURATION.—Contracts entered into under this section shall not
39 exceed 10 years in duration.

40 (2) FIXED PRICE.—Such contracts shall provide for delivery of the
41 good or service on a firm, fixed price basis.

1 (3) PERFORMANCE SPECIFICATIONS.—To the extent practicable, rea-
2 sonable performance specifications shall be used to define technical re-
3 quirements in such contracts.

4 (4) FAILURE TO PERFORM.—In any such contract, the appropriate
5 Administrator shall reserve the right to completely or partially termi-
6 nate the contract without payment of such termination liability because
7 of the contractor’s actual or anticipated failure to perform its contrac-
8 tual obligations.

9 **§ 50505. Use of Government facilities**

10 (a) AUTHORITY.—

11 (1) IN GENERAL.—Federal agencies, including the Administration
12 and the Department of Defense, may allow non-Federal entities to use
13 their space-related facilities on a reimbursable basis if the Adminis-
14 trator, the Secretary of Defense, or the appropriate agency head deter-
15 mines that—

16 (A) the facilities will be used to support commercial space activi-
17 ties;

18 (B) such use can be supported by existing or planned Federal
19 resources;

20 (C) such use is compatible with Federal activities;

21 (D) equivalent commercial services are not available on reason-
22 able terms; and

23 (E) such use is consistent with public safety, national security,
24 and international treaty obligations.

25 (2) CONSULTATION.—In carrying out paragraph (1)(E), each agency
26 head shall consult with appropriate Federal officials.

27 (b) REIMBURSEMENT PAYMENT.—

28 (1) AMOUNT.—The reimbursement referred to in subsection (a) may
29 be an amount equal to the direct costs (including salaries of United
30 States civilian and contractor personnel) incurred by the United States
31 as a result of the use of such facilities by the private sector. For the
32 purposes of this paragraph, the term “direct costs” means the actual
33 costs that can be unambiguously associated with such use, and would
34 not be borne by the United States Government in the absence of such
35 use.

36 (2) CREDIT TO APPROPRIATION.—The amount of any payment re-
37 ceived by the United States for use of facilities under this subsection
38 shall be credited to the appropriation from which the cost of providing
39 such facilities was paid.

§ 50506. Test facilities

(a) CHARGES.—The Administrator shall establish a policy of charging users of the Administration’s test facilities for the costs associated with their tests at a level that is competitive with alternative test facilities. The Administrator shall not implement a policy of seeking full cost recovery for a facility until at least 30 days after transmitting a notice to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(b) FUNDING ACCOUNT.—In planning and budgeting, the Administrator shall establish a funding account that shall be used for all test facilities. The account shall be sufficient to maintain the viability of test facilities during periods of low utilization.

§ 50507. Commercial Space Achievement Award

(a) ESTABLISHMENT.—There is established a Commercial Space Achievement Award. The award shall consist of a medal, which shall be of such design and materials and bear such inscriptions as determined by the Secretary of Commerce. A cash prize may also be awarded if funding for the prize is available under subsection (d).

(b) CRITERIA FOR AWARD.—The Secretary of Commerce shall periodically make awards under this section to individuals, corporations, corporate divisions, or corporate subsidiaries substantially engaged in commercial space activities that in the opinion of the Secretary of Commerce best meet the following criteria:

(1) NON-GOVERNMENTAL REVENUE.—For corporate entities, at least half of the revenues from the space-related activities of the corporation, division, or subsidiary is derived from sources other than the United States Government.

(2) SUBSTANTIAL CONTRIBUTION.—The activities and achievements of the individual, corporation, division, or subsidiary have substantially contributed to the United States gross national product and the stature of United States industry in international markets, with due consideration for both the economic magnitude and the technical quality of the activities and achievements.

(3) SUBSTANTIAL ADVANCEMENT OF TECHNOLOGY.—The individual, corporation, division, or subsidiary has substantially advanced space technology and space applications directly related to commercial space activities.

(c) LIMITATIONS.—No individual or corporate entity may receive an award under this section more than once every 5 years.

(d) FUNDING FOR AWARD.—The Secretary of Commerce may seek and accept gifts of money from public and private sources for the purpose of

1 making cash prize awards under this section. Such money may be used only
 2 for that purpose, and only such money may be used for that purpose. The
 3 Secretary of Commerce shall make publicly available an itemized list of the
 4 sources of such funding.

5 **Subtitle VI—Land Remote Sensing Policy**
 6 **Programs**

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7 **CHAPTER 601—LAND REMOTE SENSING POLICY**

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8 **SUBCHAPTER I—FINDINGS AND DEFINITIONS**

9 **§ 60101. Findings**

10 Congress finds and declares the following:

- 11 (1) The continuous collection and utilization of land remote sensing
 12 data from space are of major benefit in studying and understanding
 13 human impacts on the global environment, in managing the Earth's
 14 natural resources, in carrying out national security functions, and in
 15 planning and conducting many other activities of scientific, economic,
 16 and social importance.

1 (2) The Federal Government's Landsat system established the
2 United States as the world leader in land remote sensing technology.

3 (3) The national interest of the United States lies in maintaining
4 international leadership in satellite land remote sensing and in broadly
5 promoting the beneficial use of remote sensing data.

6 (4) The cost of Landsat data has impeded the use of such data for
7 scientific purposes, such as for global environmental change research,
8 as well as for other public sector applications.

9 (5) Given the importance of the Landsat program to the United
10 States, urgent actions, including expedited procurement procedures, are
11 required to ensure data continuity.

12 (6) Full commercialization of the Landsat program cannot be
13 achieved within the foreseeable future, and thus should not serve as the
14 near-term goal of national policy on land remote sensing; however, com-
15 mercialization of land remote sensing should remain a long-term goal
16 of United States policy.

17 (7) Despite the success and importance of the Landsat system, fund-
18 ing and organizational uncertainties over the past several years have
19 placed its future in doubt and have jeopardized United States leader-
20 ship in land remote sensing.

21 (8) Recognizing the importance of the Landsat program in helping
22 to meet national and commercial objectives, the President approved, on
23 February 11, 1992, a National Space Policy Directive which was devel-
24 oped by the National Space Council and commits the United States to
25 ensuring the continuity of Landsat coverage into the 21st century.

26 (9) Because Landsat data are particularly important for national se-
27 curity purposes and global environmental change research, management
28 responsibilities for the program should be transferred from the Depart-
29 ment of Commerce to an integrated program management involving the
30 Department of Defense and the Administration.

31 (10) Regardless of management responsibilities for the Landsat pro-
32 gram, the Nation's broad civilian, national security, commercial, and
33 foreign policy interests in remote sensing will best be served by ensur-
34 ing that Landsat remains an unclassified program that operates ac-
35 cording to the principles of open skies and nondiscriminatory access.

36 (11) Technological advances aimed at reducing the size and weight
37 of satellite systems hold the potential for dramatic reductions in the
38 cost, and substantial improvements in the capabilities, of future land
39 remote sensing systems, but such technological advances have not been
40 demonstrated for land remote sensing and therefore cannot be relied

1 upon as the sole means of achieving data continuity for the Landsat
2 program.

3 (12) A technology demonstration program involving advanced remote
4 sensing technologies could serve a vital role in determining the design
5 of a follow-on spacecraft to Landsat 7, while also helping to determine
6 whether such a spacecraft should be funded by the United States Gov-
7 ernment, by the private sector, or by an international consortium.

8 (13) To maximize the value of the Landsat program to the American
9 public, unenhanced Landsat 4 through 6 data should be made avail-
10 able, at a minimum, to United States Government agencies, to global
11 environmental change researchers, and to other researchers that are fi-
12 nancially supported by the United States Government, at the cost of
13 fulfilling user requests, and unenhanced Landsat 7 data should be
14 made available to all users at the cost of fulfilling user requests.

15 (14) To stimulate development of the commercial market for
16 unenhanced data and value-added services, the United States Govern-
17 ment should adopt a data policy for Landsat 7 which allows competi-
18 tion within the private sector for distribution of unenhanced data and
19 value-added services.

20 (15) Development of the remote sensing market and the provision of
21 commercial value-added services based on remote sensing data should
22 remain exclusively the function of the private sector.

23 (16) It is in the best interest of the United States to maintain a per-
24 manent, comprehensive Government archive of global Landsat and
25 other land remote sensing data for long-term monitoring and study of
26 the changing global environment.

27 **§ 60102. Definitions**

28 In this chapter:

29 (1) **COST OF FULFILLING USER REQUESTS.**—The term “cost of ful-
30 filling user requests” means the incremental costs associated with pro-
31 viding product generation, reproduction, and distribution of
32 unenhanced data in response to user requests and shall not include any
33 acquisition, amortization, or depreciation of capital assets originally
34 paid for by the United States Government or other costs not specifi-
35 cally attributable to fulfilling user requests.

36 (2) **DATA CONTINUITY.**—The term “data continuity” means the con-
37 tinued acquisition and availability of unenhanced data which are, from
38 the point of view of the user—

39 (A) sufficiently consistent (in terms of acquisition geometry,
40 coverage characteristics, and spectral characteristics) with previous

1 Landsat data to allow comparisons for global and regional change
2 detection and characterization; and

3 (B) compatible with such data and with methods used to receive
4 and process such data.

5 (3) DATA PREPROCESSING.—The term “data preprocessing”—

6 (A) may include—

7 (i) rectification of system and sensor distortions in land re-
8 mote sensing data as it is received directly from the satellite
9 in preparation for delivery to a user;

10 (ii) registration of such data with respect to features of the
11 Earth; and

12 (iii) calibration of spectral response with respect to such
13 data; but

14 (B) does not include conclusions, manipulations, or calculations
15 derived from such data, or a combination of such data with other
16 data.

17 (4) LAND REMOTE SENSING.—The term “land remote sensing”
18 means the collection of data which can be processed into imagery of
19 surface features of the Earth from an unclassified satellite or satellites,
20 other than an operational United States Government weather satellite.

21 (5) LANDSAT PROGRAM MANAGEMENT.—The term “Landsat Pro-
22 gram Management” means the integrated program management struc-
23 ture—

24 (A) established by, and responsible to, the Administrator and
25 the Secretary of Defense pursuant to section 60111(a) of this
26 title; and

27 (B) consisting of appropriate officers and employees of the Ad-
28 ministration, the Department of Defense, and any other United
29 States Government agencies the President designates as respon-
30 sible for the Landsat program.

31 (6) LANDSAT SYSTEM.—The term “Landsat system” means
32 Landsats 1, 2, 3, 4, 5, and 6, and any follow-on land remote sensing
33 system operated and owned by the United States Government, along
34 with any related ground equipment, systems, and facilities owned by
35 the United States Government.

36 (7) LANDSAT 6 CONTRACTOR.—The term “Landsat 6 contractor”
37 means the private sector entity which was awarded the contract for
38 spacecraft construction, operations, and data marketing rights for the
39 Landsat 6 spacecraft.

40 (8) LANDSAT 7.—The term “Landsat 7” means the follow-on sat-
41 ellite to Landsat 6.

1 (9) NATIONAL SATELLITE LAND REMOTE SENSING DATA ARCHIVE.—

2 The term “National Satellite Land Remote Sensing Data Archive”
3 means the archive established by the Secretary of the Interior pursuant
4 to the archival responsibilities defined in section 60142 of this title.

5 (10) NONCOMMERCIAL PURPOSES.—The term “noncommercial pur-
6 poses” means activities undertaken by individuals or entities on the
7 condition, upon receipt of unenhanced data, that—

8 (A) such data shall not be used in connection with any bid for
9 a commercial contract, development of a commercial product, or
10 any other non-United States Government activity that is expected,
11 or has the potential, to be profitmaking;

12 (B) the results of such activities are disclosed in a timely and
13 complete fashion in the open technical literature or other method
14 of public release, except when such disclosure by the United States
15 Government or its contractors would adversely affect the national
16 security or foreign policy of the United States or violate a provi-
17 sion of law or regulation; and

18 (C) such data shall not be distributed in competition with
19 unenhanced data provided by the Landsat 6 contractor.

20 (11) SECRETARY.—The term “Secretary” means the Secretary of
21 Commerce.

22 (12) UNENHANCED DATA.—The term “unenhanced data” means
23 land remote sensing signals or imagery products that are unprocessed
24 or subject only to data preprocessing.

25 (13) UNITED STATES GOVERNMENT AND ITS AFFILIATED USERS.—
26 The term “United States Government and its affiliated users” means—

27 (A) United States Government agencies;

28 (B) researchers involved with the United States Global Change
29 Research Program and its international counterpart programs;
30 and

31 (C) other researchers and international entities that have signed
32 with the United States Government a cooperative agreement in-
33 volving the use of Landsat data for noncommercial purposes.

34 SUBCHAPTER II—LANDSAT

35 § 60111. Landsat Program Management

36 (a) ESTABLISHMENT.—The Administrator and the Secretary of Defense
37 shall be responsible for management of the Landsat program. Such respon-
38 sibility shall be carried out by establishing an integrated program manage-
39 ment structure for the Landsat system.

40 (b) MANAGEMENT PLAN.—The Administrator, the Secretary of Defense,
41 and any other United States Government official the President designates

1 as responsible for part of the Landsat program shall establish, through a
2 management plan, the roles, responsibilities, and funding expectations for
3 the Landsat program of the appropriate United States Government agen-
4 cies. The management plan shall—

5 (1) specify that the fundamental goal of the Landsat Program Man-
6 agement is the continuity of unenhanced Landsat data through the ac-
7 quisition and operation of a Landsat 7 satellite as quickly as prac-
8 ticable which is, at a minimum, functionally equivalent to the Landsat
9 6 satellite, with the addition of a tracking and data relay satellite com-
10 munications capability;

11 (2) include a baseline funding profile that—

12 (A) is mutually acceptable to the Administration and the De-
13 partment of Defense for the period covering the development and
14 operation of Landsat 7; and

15 (B) provides for total funding responsibility of the Administra-
16 tion and the Department of Defense, respectively, to be approxi-
17 mately equal to the funding responsibility of the other as spread
18 across the development and operational life of Landsat 7;

19 (3) specify that any improvements over the Landsat 6 functional
20 equivalent capability for Landsat 7 will be funded by a specific spon-
21 soring agency or agencies, in a manner agreed to by the Landsat Pro-
22 gram Management, if the required funding exceeds the baseline funding
23 profile required by paragraph (2), and that additional improvements
24 will be sought only if the improvements will not jeopardize data con-
25 tinuity; and

26 (4) provide for a technology demonstration program whose objective
27 shall be the demonstration of advanced land remote sensing tech-
28 nologies that may potentially yield a system which is less expensive to
29 build and operate, and more responsive to data users, than is the cur-
30 rent Landsat system.

31 (c) RESPONSIBILITIES.—The Landsat Program Management shall be re-
32 sponsible for—

33 (1) Landsat 7 procurement, launch, and operations;

34 (2) ensuring that the operation of the Landsat system is responsive
35 to the broad interests of the civilian, national security, commercial, and
36 foreign users of the Landsat system;

37 (3) ensuring that all unenhanced Landsat data remain unclassified
38 and that, except as provided in subsections (a) and (b) of section
39 60146 of this title, no restrictions are placed on the availability of
40 unenhanced data;

1 (4) ensuring that land remote sensing data of high priority locations
 2 will be acquired by the Landsat 7 system as required to meet the needs
 3 of the United States Global Change Research Program, as established
 4 in the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.),
 5 and to meet the needs of national security users;

6 (5) Landsat data responsibilities pursuant to this chapter;

7 (6) oversight of Landsat contracts entered into under sections 102
 8 and 103 of the Land Remote Sensing Policy Act of 1992 (Public Law
 9 102–555, 106 Stat. 4168);

10 (7) coordination of a technology demonstration program pursuant to
 11 section 60133 of this title; and

12 (8) ensuring that copies of data acquired by the Landsat system are
 13 provided to the National Satellite Land Remote Sensing Data Archive.

14 (d) AUTHORITY TO CONTRACT.—The Landsat Program Management
 15 may, subject to appropriations and only under the existing contract author-
 16 ity of the United States Government agencies that compose the Landsat
 17 Program Management, enter into contracts with the private sector for serv-
 18 ices such as satellite operations and data preprocessing.

19 (e) LANDSAT ADVISORY PROCESS.—

20 (1) ADVICE AND COMMENTS.—The Landsat Program Management
 21 shall seek impartial advice and comments regarding the status, effec-
 22 tiveness, and operation of the Landsat system, using existing advisory
 23 committees and other appropriate mechanisms. Such advice shall be
 24 sought from individuals who represent—

25 (A) a broad range of perspectives on basic and applied science
 26 and operational needs with respect to land remote sensing data;

27 (B) the full spectrum of users of Landsat data, including rep-
 28 resentatives from United States Government agencies, State and
 29 local government agencies, academic institutions, nonprofit organi-
 30 zations, value-added companies, the agricultural, mineral extrac-
 31 tion, and other user industries, and the public; and

32 (C) a broad diversity of age groups, sexes, and races.

33 (2) REPORTS.—The Landsat Program Management shall prepare
 34 and submit biennially a report to Congress which—

35 (A) reports the public comments received pursuant to paragraph
 36 (1); and

37 (B) includes—

38 (i) a response to the public comments received pursuant to
 39 paragraph (1);

40 (ii) information on the volume of use, by category, of data
 41 from the Landsat system; and

1 (iii) any recommendations for policy or programmatic
 2 changes to improve the utility and operation of the Landsat
 3 system.

4 **§ 60112. Transfer of Landsat 6 program responsibilities**

5 The responsibilities of the Secretary with respect to Landsat 6 shall be
 6 transferred to the Landsat Program Management, as agreed to between the
 7 Secretary and the Landsat Program Management, pursuant to section
 8 60111 of this title.

9 **§ 60113. Data policy for Landsat 7**

10 (a) LANDSAT 7 DATA POLICY.—The Landsat Program Management, in
 11 consultation with other appropriate United States Government agencies,
 12 shall develop a data policy for Landsat 7 which should—

13 (1) ensure that unenhanced data are available to all users at the cost
 14 of fulfilling user requests;

15 (2) ensure timely and dependable delivery of unenhanced data to the
 16 full spectrum of civilian, national security, commercial, and foreign
 17 users and the National Satellite Land Remote Sensing Data Archive;

18 (3) ensure that the United States retains ownership of all
 19 unenhanced data generated by Landsat 7;

20 (4) support the development of the commercial market for remote
 21 sensing data;

22 (5) ensure that the provision of commercial value-added services
 23 based on remote sensing data remains exclusively the function of the
 24 private sector; and

25 (6) to the extent possible, ensure that the data distribution system
 26 for Landsat 7 is compatible with the Earth Observing System Data
 27 and Information System.

28 (b) ADDITIONAL DATA POLICY CONSIDERATIONS.—In addition, the data
 29 policy for Landsat 7 may provide for—

30 (1) United States private sector entities to operate ground receiving
 31 stations in the United States for Landsat 7 data;

32 (2) other means for direct access by private sector entities to
 33 unenhanced data from Landsat 7; and

34 (3) the United States Government to charge a per image fee, license
 35 fee, or other such fee to entities operating ground receiving stations or
 36 distributing Landsat 7 data.

37 SUBCHAPTER III—LICENSING OF PRIVATE REMOTE SENSING
 38 SPACE SYSTEMS

39 **§ 60121. General licensing authority**

40 (a) LICENSING AUTHORITY OF SECRETARY.—

1 (1) IN GENERAL.—In consultation with other appropriate United
2 States Government agencies, the Secretary is authorized to license pri-
3 vate sector parties to operate private remote sensing space systems for
4 such period as the Secretary may specify and in accordance with the
5 provisions of this subchapter.

6 (2) LIMITATION WITH RESPECT TO SYSTEM USED FOR OTHER PUR-
7 POSSES.—In the case of a private space system that is used for remote
8 sensing and other purposes, the authority of the Secretary under this
9 subchapter shall be limited only to the remote sensing operations of
10 such space system.

11 (b) COMPLIANCE WITH LAW, REGULATIONS, INTERNATIONAL OBLIGA-
12 TIONS, AND NATIONAL SECURITY.—

13 (1) IN GENERAL.—No license shall be granted by the Secretary un-
14 less the Secretary determines in writing that the applicant will comply
15 with the requirements of this chapter, any regulations issued pursuant
16 to this chapter, and any applicable international obligations and na-
17 tional security concerns of the United States.

18 (2) LIST OF REQUIREMENTS FOR COMPLETE APPLICATION.—The
19 Secretary shall publish in the Federal Register a complete and specific
20 list of all information required to comprise a complete application for
21 a license under this subchapter. An application shall be considered
22 complete when the applicant has provided all information required by
23 the list most recently published in the Federal Register before the date
24 the application was first submitted. Unless the Secretary has, within
25 30 days after receipt of an application, notified the applicant of infor-
26 mation necessary to complete an application, the Secretary may not
27 deny the application on the basis of the absence of any such infor-
28 mation.

29 (c) DEADLINE FOR ACTION ON APPLICATION.—The Secretary shall re-
30 view any application and make a determination thereon within 120 days of
31 the receipt of such application. If final action has not occurred within such
32 time, the Secretary shall inform the applicant of any pending issues and of
33 actions required to resolve them.

34 (d) IMPROPER BASIS FOR DENIAL.—The Secretary shall not deny such
35 license in order to protect any existing licensee from competition.

36 (e) REQUIREMENT TO PROVIDE UNENHANCED DATA.—

37 (1) DESIGNATION OF DATA.—The Secretary, in consultation with
38 other appropriate United States Government agencies and pursuant to
39 paragraph (2), shall designate in a license issued pursuant to this sub-
40 chapter any unenhanced data required to be provided by the licensee
41 under section 60122(b)(3) of this title.

1 (2) PRELIMINARY DETERMINATION.—The Secretary shall make a
2 designation under paragraph (1) after determining that—

3 (A) such data are generated by a system for which all or a sub-
4 stantial part of the development, fabrication, launch, or operations
5 costs have been or will be directly funded by the United States
6 Government; or

7 (B) it is in the interest of the United States to require such
8 data to be provided by the licensee consistent with section
9 60122(b)(3) of this title, after considering the impact on the li-
10 censee and the importance of promoting widespread access to re-
11 mote sensing data from United States and foreign systems.

12 (3) CONSISTENCY WITH CONTRACT OR OTHER ARRANGEMENT.—A
13 designation made by the Secretary under paragraph (1) shall not be
14 inconsistent with any contract or other arrangement entered into be-
15 tween a United States Government agency and the licensee.

16 **§ 60122. Conditions for operation**

17 (a) LICENSE REQUIRED FOR OPERATION.—No person that is subject to
18 the jurisdiction or control of the United States may, directly or through any
19 subsidiary or affiliate, operate any private remote sensing space system
20 without a license pursuant to section 60121 of this title.

21 (b) LICENSING REQUIREMENTS.—Any license issued pursuant to this
22 subchapter shall specify that the licensee shall comply with all of the re-
23 quirements of this chapter and shall—

24 (1) operate the system in such manner as to preserve the national
25 security of the United States and to observe the international obliga-
26 tions of the United States in accordance with section 60146 of this
27 title;

28 (2) make available to the government of any country (including the
29 United States) unenhanced data collected by the system concerning the
30 territory under the jurisdiction of such government as soon as such
31 data are available and on reasonable terms and conditions;

32 (3) make unenhanced data designated by the Secretary in the license
33 pursuant to section 60121(e) of this title available in accordance with
34 section 60141 of this title;

35 (4) upon termination of operations under the license, make disposi-
36 tion of any satellites in space in a manner satisfactory to the President;

37 (5) furnish the Secretary with complete orbit and data collection
38 characteristics of the system, and inform the Secretary immediately of
39 any deviation; and

1 (6) notify the Secretary of any significant or substantial agreement
2 the licensee intends to enter with a foreign nation, entity, or consor-
3 tium involving foreign nations or entities.

4 (e) ADDITIONAL LICENSING REQUIREMENTS FOR LANDSAT 6 CON-
5 TRACTOR.—In addition to the requirements of subsection (b), any license
6 issued pursuant to this subchapter to the Landsat 6 contractor shall specify
7 that the Landsat 6 contractor shall—

8 (1) notify the Secretary of any value added activities (as defined by
9 the Secretary by regulation) that will be conducted by the Landsat 6
10 contractor or by a subsidiary or affiliate; and

11 (2) if such activities are to be conducted, provide the Secretary with
12 a plan for compliance with section 60141 of this title.

13 **§ 60123. Administrative authority of Secretary**

14 (a) FUNCTIONS.—In order to carry out the responsibilities specified in
15 this subchapter, the Secretary may—

16 (1) grant, condition, or transfer licenses under this chapter;

17 (2) seek an order of injunction or similar judicial determination from
18 a district court of the United States with personal jurisdiction over the
19 licensee to terminate, modify, or suspend licenses under this subchapter
20 and to terminate licensed operations on an immediate basis, if the Sec-
21 retary determines that the licensee has substantially failed to comply
22 with any provisions of this chapter, with any terms, conditions, or re-
23 strictions of such license, or with any international obligations or na-
24 tional security concerns of the United States;

25 (3) provide penalties for noncompliance with the requirements of li-
26 censes or regulations issued under this subchapter, including civil pen-
27 alties not to exceed \$10,000 (each day of operation in violation of such
28 licenses or regulations constituting a separate violation);

29 (4) compromise, modify, or remit any such civil penalty;

30 (5) issue subpoenas for any materials, documents, or records, or for
31 the attendance and testimony of witnesses for the purpose of con-
32 ducting a hearing under this section;

33 (6) seize any object, record, or report pursuant to a warrant from
34 a magistrate based on a showing of probable cause to believe that such
35 object, record, or report was used, is being used, or is likely to be used
36 in violation of this chapter or the requirements of a license or regula-
37 tion issued thereunder; and

38 (7) make investigations and inquiries and administer to or take from
39 any person an oath, affirmation, or affidavit concerning any matter re-
40 lating to the enforcement of this chapter.

(b) REVIEW OF AGENCY ACTION.—Any applicant or licensee that makes a timely request for review of an adverse action pursuant to paragraph (1), (3), (5), or (6) of subsection (a) shall be entitled to adjudication by the Secretary on the record after an opportunity for any agency hearing with respect to such adverse action. Any final action by the Secretary under this subsection shall be subject to judicial review under chapter 7 of title 5.

§ 60124. Regulatory authority of Secretary

The Secretary may issue regulations to carry out this subchapter. Such regulations shall be promulgated only after public notice and comment in accordance with the provisions of section 553 of title 5.

§ 60125. Agency activities

(a) LICENSE APPLICATION AND ISSUANCE.—A private sector party may apply for a license to operate a private remote sensing space system which utilizes, on a space-available basis, a civilian United States Government satellite or vehicle as a platform for such system. The Secretary, pursuant to this subchapter, may license such system if it meets all conditions of this subchapter and—

(1) the system operator agrees to reimburse the Government in a timely manner for all related costs incurred with respect to such utilization, including a reasonable and proportionate share of fixed, platform, data transmission, and launch costs; and

(2) such utilization would not interfere with or otherwise compromise intended civilian Government missions, as determined by the agency responsible for such civilian platform.

(b) ASSISTANCE.—The Secretary may offer assistance to private sector parties in finding appropriate opportunities for such utilization.

(c) AGREEMENTS.—To the extent provided in advance by appropriation Acts, any United States Government agency may enter into agreements for such utilization if such agreements are consistent with such agency's mission and statutory authority, and if such remote sensing space system is licensed by the Secretary before commencing operation.

(d) APPLICABILITY.—This section does not apply to activities carried out under subchapter IV.

(e) EFFECT ON FCC AUTHORITY.—Nothing in this subchapter shall affect the authority of the Federal Communications Commission pursuant to the Communications Act of 1934 (47 U.S.C. 151 et seq.).

SUBCHAPTER IV—RESEARCH, DEVELOPMENT, AND
DEMONSTRATION

§ 60131. Continued Federal research and development

(a) ROLES OF ADMINISTRATION AND DEPARTMENT OF DEFENSE.—

1 (1) IN GENERAL.—The Administrator and the Secretary of Defense
2 are directed to continue and to enhance programs of remote sensing
3 research and development.

4 (2) ADMINISTRATION ACTIVITIES AUTHORIZED AND ENCOURAGED.—
5 The Administrator is authorized and encouraged to—

6 (A) conduct experimental space remote sensing programs (in-
7 cluding applications demonstration programs and basic research at
8 universities);

9 (B) develop remote sensing technologies and techniques, includ-
10 ing those needed for monitoring the Earth and its environment;
11 and

12 (C) conduct such research and development in cooperation with
13 other United States Government agencies and with public and pri-
14 vate research entities (including private industry, universities, non-
15 profit organizations, State and local governments, foreign govern-
16 ments, and international organizations) and to enter into arrange-
17 ments (including joint ventures) which will foster such coopera-
18 tion.

19 (b) ROLES OF DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF
20 THE INTERIOR.—

21 (1) IN GENERAL.—In order to enhance the ability of the United
22 States to manage and utilize its renewable and nonrenewable resources,
23 the Secretary of Agriculture and the Secretary of the Interior are au-
24 thorized and encouraged to conduct programs of research and develop-
25 ment in the applications of remote sensing using funds appropriated
26 for such purposes.

27 (2) ACTIVITIES THAT MAY BE INCLUDED.—Such programs may in-
28 clude basic research at universities, demonstrations of applications, and
29 cooperative activities involving other Government agencies, private sec-
30 tor parties, and foreign and international organizations.

31 (c) ROLE OF OTHER FEDERAL AGENCIES.—Other United States Govern-
32 ment agencies are authorized and encouraged to conduct research and devel-
33 opment on the use of remote sensing in the fulfillment of their authorized
34 missions, using funds appropriated for such purposes.

35 **§ 60132. Availability of federally gathered unenhanced data**

36 (a) IN GENERAL.—All unenhanced land remote sensing data gathered
37 and owned by the United States Government, including unenhanced data
38 gathered under the technology demonstration program carried out pursuant
39 to section 60133 of this title, shall be made available to users in a timely
40 fashion.

1 (b) PROTECTION FOR COMMERCIAL DATA DISTRIBUTOR.—The President
 2 shall seek to ensure that unenhanced data gathered under the technology
 3 demonstration program carried out pursuant to section 60133 of this title
 4 shall, to the extent practicable, be made available on terms that would not
 5 adversely affect the commercial market for unenhanced data gathered by
 6 the Landsat 6 spacecraft.

7 **§ 60133. Technology demonstration program**

8 (a) ESTABLISHMENT.—As a fundamental component of a national land
 9 remote sensing strategy, the President shall establish, through appropriate
 10 United States Government agencies, a technology demonstration program.
 11 The goals of the program shall be to—

12 (1) seek to launch advanced land remote sensing system components
 13 within 5 years after October 28, 1992;

14 (2) demonstrate within such 5-year period advanced sensor capabili-
 15 ties suitable for use in the anticipated land remote sensing program;
 16 and

17 (3) demonstrate within such 5-year period an advanced land remote
 18 sensing system design that could be less expensive to procure and oper-
 19 ate than the Landsat system projected to be in operation through the
 20 year 2000, and that therefore holds greater potential for private sector
 21 investment and control.

22 (b) EXECUTION OF PROGRAM.—In executing the technology demonstra-
 23 tion program, the President shall seek to apply technologies associated with
 24 United States National Technical Means of intelligence gathering, to the ex-
 25 tent that such technologies are appropriate for the technology demonstration
 26 and can be declassified for such purposes without causing adverse harm to
 27 United States national security interests.

28 (c) BROAD APPLICATION.—To the greatest extent practicable, the tech-
 29 nology demonstration program established under subsection (a) shall be de-
 30 signed to be responsive to the broad civilian, national security, commercial,
 31 and foreign policy needs of the United States.

32 (d) PRIVATE SECTOR FUNDING.—The technology demonstration program
 33 under this section may be carried out in part with private sector funding.

34 (e) LANDSAT PROGRAM MANAGEMENT COORDINATION.—The Landsat
 35 Program Management shall have a coordinating role in the technology dem-
 36 onstration program carried out under this section.

37 **§ 60134. Preference for private sector land remote sensing**
 38 **system**

39 (a) IN GENERAL.—If a successor land remote sensing system to Landsat
 40 7 can be funded and managed by the private sector while still achieving the
 41 goals stated in subsection (b) without jeopardizing the domestic, national se-

1 ecurity, and foreign policy interests of the United States, preference should
 2 be given to the development of such a system by the private sector without
 3 competition from the United States Government.

4 (b) GOALS.—The goals referred to in subsection (a) are—

5 (1) to encourage the development, launch, and operation of a land
 6 remote sensing system that adequately serves the civilian, national se-
 7 curity, commercial, and foreign policy interests of the United States;

8 (2) to encourage the development, launch, and operation of a land
 9 remote sensing system that maintains data continuity with the Landsat
 10 system; and

11 (3) to incorporate system enhancements, including any such enhance-
 12 ments developed under the technology demonstration program under
 13 section 60133 of this title, which may potentially yield a system that
 14 is less expensive to build and operate, and more responsive to data
 15 users, than is the Landsat system otherwise projected to be in oper-
 16 ation in the future.

17 SUBCHAPTER V—GENERAL PROVISIONS

18 **§ 60141. Nondiscriminatory data availability**

19 (a) IN GENERAL.—Except as provided in subsection (b), any unenhanced
 20 data generated by the Landsat system or any other land remote sensing sys-
 21 tem funded and owned by the United States Government shall be made
 22 available to all users without preference, bias, or any other special arrange-
 23 ment (except on the basis of national security concerns pursuant to section
 24 60146 of this title) regarding delivery, format, pricing, or technical consid-
 25 erations which would favor one customer or class of customers over another.

26 (b) EXCEPTIONS.—Unenhanced data generated by the Landsat system or
 27 any other land remote sensing system funded and owned by the United
 28 States Government may be made available to the United States Government
 29 and its affiliated users at reduced prices, in accordance with this chapter,
 30 on the condition that such unenhanced data are used solely for noncommer-
 31 cial purposes.

32 **§ 60142. Archiving of data**

33 (a) PUBLIC INTEREST.—It is in the public interest for the United States
 34 Government to—

35 (1) maintain an archive of land remote sensing data for historical,
 36 scientific, and technical purposes, including long-term global environ-
 37 mental monitoring;

38 (2) control the content and scope of the archive; and

39 (3) ensure the quality, integrity, and continuity of the archive.

40 (b) ARCHIVING PRACTICES.—The Secretary of the Interior, in consulta-
 41 tion with the Landsat Program Management, shall provide for long-term

1 storage, maintenance, and upgrading of a basic, global, land remote sensing
2 data set (hereafter in this section referred to as the “basic data set”) and
3 shall follow reasonable archival practices to ensure proper storage and pres-
4 ervation of the basic data set and timely access for parties requesting data.

5 (c) DETERMINATION OF CONTENT OF BASIC DATA SET.—In determining
6 the initial content of, or in upgrading, the basic data set, the Secretary of
7 the Interior shall—

8 (1) use as a baseline the data archived on October 28, 1992;

9 (2) take into account future technical and scientific developments
10 and needs, paying particular attention to the anticipated data require-
11 ments of global environmental change research;

12 (3) consult with and seek the advice of users and producers of re-
13 mote sensing data and data products;

14 (4) consider the need for data which may be duplicative in terms of
15 geographical coverage but which differ in terms of season, spectral
16 bands, resolution, or other relevant factors;

17 (5) include, as the Secretary of the Interior considers appropriate,
18 unenhanced data generated either by the Landsat system, pursuant to
19 subchapter II, or by licensees under subchapter III;

20 (6) include, as the Secretary of the Interior considers appropriate,
21 data collected by foreign ground stations or by foreign remote sensing
22 space systems; and

23 (7) ensure that the content of the archive is developed in accordance
24 with section 60146 of this title.

25 (d) PUBLIC DOMAIN.—After the expiration of any exclusive right to sell,
26 or after relinquishment of such right, the data provided to the National Sat-
27 ellite Land Remote Sensing Data Archive shall be in the public domain and
28 shall be made available to requesting parties by the Secretary of the Interior
29 at the cost of fulfilling user requests.

30 **§ 60143. Nonreproduction**

31 Unenhanced data distributed by any licensee under subchapter III may
32 be sold on the condition that such data will not be reproduced or dissemi-
33 nated by the purchaser for commercial purposes.

34 **§ 60144. Reimbursement for assistance**

35 The Administrator, the Secretary of Defense, and the heads of other
36 United States Government agencies may provide assistance to land remote
37 sensing system operators under the provisions of this chapter. Substantial
38 assistance shall be reimbursed by the operator, except as otherwise provided
39 by law.

1 **§ 60145. Acquisition of equipment**

2 The Landsat Program Management may, by means of a competitive process,
3 allow a licensee under subchapter III or any other private party to buy,
4 lease, or otherwise acquire the use of equipment from the Landsat system,
5 when such equipment is no longer needed for the operation of such system
6 or for the sale of data from such system. Officials of other United States
7 Government civilian agencies are authorized and encouraged to cooperate
8 with the Secretary in carrying out this section.

9 **§ 60146. Radio frequency allocation**

10 (a) APPLICATION TO FEDERAL COMMUNICATIONS COMMISSION.—To the
11 extent required by the Communications Act of 1934 (47 U.S.C. 151 et
12 seq.), an application shall be filed with the Federal Communications Com-
13 mission for any radio facilities involved with commercial remote sensing
14 space systems licensed under subchapter III.

15 (b) DEADLINE FOR FCC ACTION.—It is the intent of Congress that the
16 Federal Communications Commission complete the radio licensing process
17 under the Communications Act of 1934 (47 U.S.C. 151 et seq.), upon the
18 application of any private sector party or consortium operator of any com-
19 mercial land remote sensing space system subject to this chapter, within
20 120 days of the receipt of an application for such licensing. If final action
21 has not occurred within 120 days of the receipt of such an application, the
22 Federal Communications Commission shall inform the applicant of any
23 pending issues and of actions required to resolve them.

24 (c) DEVELOPMENT AND CONSTRUCTION OF UNITED STATES SYSTEMS.—
25 Authority shall not be required from the Federal Communications Commis-
26 sion for the development and construction of any United States land remote
27 sensing space system (or component thereof), other than radio transmitting
28 facilities or components, while any licensing determination is being made.

29 (d) CONSISTENCY WITH INTERNATIONAL OBLIGATIONS AND PUBLIC IN-
30 TEREST.—Frequency allocations made pursuant to this section by the Fed-
31 eral Communications Commission shall be consistent with international obli-
32 gations and with the public interest.

33 **§ 60147. Consultation**

34 (a) CONSULTATION WITH SECRETARY OF DEFENSE.—The Secretary and
35 the Landsat Program Management shall consult with the Secretary of De-
36 fense on all matters under this chapter affecting national security. The Sec-
37 retary of Defense shall be responsible for determining those conditions, con-
38 sistent with this chapter, necessary to meet national security concerns of the
39 United States and for notifying the Secretary and the Landsat Program
40 Management promptly of such conditions.

41 (b) CONSULTATION WITH SECRETARY OF STATE.—

1 (1) IN GENERAL.—The Secretary and the Landsat Program Man-
2 agement shall consult with the Secretary of State on all matters under
3 this chapter affecting international obligations. The Secretary of State
4 shall be responsible for determining those conditions, consistent with
5 this chapter, necessary to meet international obligations and policies of
6 the United States and for notifying promptly the Secretary and the
7 Landsat Program Management of such conditions.

8 (2) INTERNATIONAL AID.—Appropriate United States Government
9 agencies are authorized and encouraged to provide remote sensing data,
10 technology, and training to developing nations as a component of pro-
11 grams of international aid.

12 (3) REPORTING DISCRIMINATORY DISTRIBUTION.—The Secretary of
13 State shall promptly report to the Secretary and Landsat Program
14 Management any instances outside the United States of discriminatory
15 distribution of Landsat data.

16 (c) STATUS REPORT.—The Landsat Program Management shall, as often
17 as necessary, provide to Congress complete and updated information about
18 the status of ongoing operations of the Landsat system, including timely no-
19 tification of decisions made with respect to the Landsat system in order to
20 meet national security concerns and international obligations and policies of
21 the United States Government.

22 (d) REIMBURSEMENTS.—If, as a result of technical modifications imposed
23 on a licensee under subchapter III on the basis of national security con-
24 cerns, the Secretary, in consultation with the Secretary of Defense or with
25 other Federal agencies, determines that additional costs will be incurred by
26 the licensee, or that past development costs (including the cost of capital)
27 will not be recovered by the licensee, the Secretary may require the agency
28 or agencies requesting such technical modifications to reimburse the licensee
29 for such additional or development costs, but not for anticipated profits. Re-
30 imbursements may cover costs associated with required changes in system
31 performance, but not costs ordinarily associated with doing business abroad.

32 **§ 60148. Enforcement**

33 (a) IN GENERAL.—In order to ensure that unenhanced data from the
34 Landsat system received solely for noncommercial purposes are not used for
35 any commercial purpose, the Secretary (in collaboration with private sector
36 entities responsible for the marketing and distribution of unenhanced data
37 generated by the Landsat system) shall develop and implement a system for
38 enforcing this prohibition, in the event that unenhanced data from the
39 Landsat system are made available for noncommercial purposes at a dif-
40 ferent price than such data are made available for other purposes.

1 (b) AUTHORITY OF SECRETARY.—Subject to subsection (d), the Secretary
 2 may impose any of the enforcement mechanisms described in subsection (c)
 3 against a person that—

4 (1) receives unenhanced data from the Landsat system under this
 5 chapter solely for noncommercial purposes (and at a different price
 6 than the price at which such data are made available for other pur-
 7 poses); and

8 (2) uses such data for other than noncommercial purposes.

9 (c) ENFORCEMENT MECHANISMS.—Enforcement mechanisms referred to
 10 in subsection (b) may include civil penalties of not more than \$10,000 (per
 11 day per violation), denial of further unenhanced data purchasing privileges,
 12 and any other penalties or restrictions the Secretary considers necessary to
 13 ensure, to the greatest extent practicable, that unenhanced data provided
 14 for noncommercial purposes are not used to unfairly compete in the com-
 15 mercial market against private sector entities not eligible for data at the
 16 cost of fulfilling user requests.

17 (d) PROCEDURES AND REGULATIONS.—The Secretary shall issue any reg-
 18 ulations necessary to carry out this section and shall establish standards
 19 and procedures governing the imposition of enforcement mechanisms under
 20 subsection (b). The standards and procedures shall include a procedure for
 21 potentially aggrieved parties to file formal protests with the Secretary alleg-
 22 ing instances where such unenhanced data have been, or are being, used for
 23 commercial purposes in violation of the terms of receipt of such data. The
 24 Secretary shall promptly act to investigate any such protest, and shall re-
 25 port annually to Congress on instances of such violations.

26 SUBCHAPTER VI—PROHIBITION OF COMMERCIALIZATION OF
 27 WEATHER SATELLITES

28 **§ 60161. Prohibition**

29 Neither the President nor any other official of the Government shall make
 30 any effort to lease, sell, or transfer to the private sector, or commercialize,
 31 any portion of the weather satellite systems operated by the Department of
 32 Commerce or any successor agency.

33 **§ 60162. Future considerations**

34 Regardless of any change in circumstances subsequent to October 28,
 35 1992, even if such change makes it appear to be in the national interest
 36 to commercialize weather satellites, neither the President nor any official
 37 shall take any action prohibited by section 60161 of this title unless this
 38 subchapter has first been repealed.

39 **CHAPTER 603—REMOTE SENSING**

Sec.

60301. Definitions.

60302. General responsibilities.

60303. Pilot projects to encourage public sector applications.
 60304. Program evaluation.
 60305. Data availability.
 60306. Education.

1 **§ 60301. Definitions**

2 In this chapter:

3 (1) GEOSPATIAL INFORMATION.—The term “geospatial information”
 4 means knowledge of the nature and distribution of physical and cul-
 5 tural features on the landscape based on analysis of data from airborne
 6 or spaceborne platforms or other types and sources of data.

7 (2) HIGH RESOLUTION.—The term “high resolution” means resolu-
 8 tion better than five meters.

9 (3) INSTITUTION OF HIGHER EDUCATION.—The term “institution of
 10 higher education” has the meaning given the term in section 101(a)
 11 of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

12 **§ 60302. General responsibilities**

13 The Administrator shall—

14 (1) develop a sustained relationship with the United States commer-
 15 cial remote sensing industry and, consistent with applicable policies and
 16 law, to the maximum practicable, rely on their services; and

17 (2) in conjunction with United States industry and universities, re-
 18 search, develop, and demonstrate prototype Earth science applications
 19 to enhance Federal, State, local, and tribal governments’ use of govern-
 20 ment and commercial remote sensing data, technologies, and other
 21 sources of geospatial information for improved decision support to ad-
 22 dress their needs.

23 **§ 60303. Pilot projects to encourage public sector applica-**
 24 **tions**

25 (a) IN GENERAL.—The Administrator shall establish a program of grants
 26 for competitively awarded pilot projects to explore the integrated use of
 27 sources of remote sensing and other geospatial information to address State,
 28 local, regional, and tribal agency needs.

29 (b) PREFERRED PROJECTS.—In awarding grants under this section, the
 30 Administrator shall give preference to projects that—

31 (1) make use of commercial data sets, including high resolution com-
 32 mercial satellite imagery and derived satellite data products, existing
 33 public data sets where commercial data sets are not available or appli-
 34 cable, or the fusion of such data sets;

35 (2) integrate multiple sources of geospatial information, such as geo-
 36 graphic information system data, satellite-provided positioning data,
 37 and remotely sensed data, in innovative ways;

38 (3) include funds or in-kind contributions from non-Federal sources;

1 (4) involve the participation of commercial entities that process raw
2 or lightly processed data, often merging that data with other geospatial
3 information, to create data products that have significant value added
4 to the original data; and

5 (5) taken together demonstrate as diverse a set of public sector ap-
6 plications as possible.

7 (c) OPPORTUNITIES.—In carrying out this section, the Administrator
8 shall seek opportunities to assist—

9 (1) in the development of commercial applications potentially avail-
10 able from the remote sensing industry; and

11 (2) State, local, regional, and tribal agencies in applying remote
12 sensing and other geospatial information technologies for growth man-
13 agement.

14 (d) DURATION.—Assistance for a pilot project under subsection (a) shall
15 be provided for a period not to exceed 3 years.

16 (e) REPORT.—Each recipient of a grant under subsection (a) shall trans-
17 mit a report to the Administrator on the results of the pilot project within
18 180 days of the completion of that project.

19 (f) WORKSHOP.—Each recipient of a grant under subsection (a) shall, not
20 later than 180 days after the completion of the pilot project, conduct at
21 least one workshop for potential users to disseminate the lessons learned
22 from the pilot project as widely as feasible.

23 (g) REGULATIONS.—The Administrator shall issue regulations estab-
24 lishing application, selection, and implementation procedures for pilot
25 projects, and guidelines for reports and workshops required by this section.

26 **§ 60304. Program evaluation**

27 (a) ADVISORY COMMITTEE.—The Administrator shall establish an advi-
28 sory committee, consisting of individuals with appropriate expertise in State,
29 local, regional, and tribal agencies, the university research community, and
30 the remote sensing and other geospatial information industries, to monitor
31 the program established under section 60303 of this title. The advisory com-
32 mittee shall consult with the Federal Geographic Data Committee and other
33 appropriate industry representatives and organizations. Notwithstanding
34 section 14 of the Federal Advisory Committee Act (5 App. U.S.C.), the ad-
35 visory committee established under this subsection shall remain in effect
36 until the termination of the program under section 60303 of this title.

37 (b) EFFECTIVENESS EVALUATION.—Not later than December 31, 2009,
38 the Administrator shall transmit to Congress an evaluation of the effective-
39 ness of the program established under section 60303 of this title in explor-
40 ing and promoting the integrated use of sources of remote sensing and other

1 geospatial information to address State, local, regional, and tribal agency
2 needs. Such evaluation shall have been conducted by an independent entity.

3 **§ 60305. Data availability**

4 The Administrator shall ensure that the results of each of the pilot
5 projects completed under section 60303 of this title shall be retrievable
6 through an electronic, internet-accessible database.

7 **§ 60306. Education**

8 The Administrator shall establish an educational outreach program to in-
9 crease awareness at institutions of higher education and State, local, re-
10 gional, and tribal agencies of the potential applications of remote sensing
11 and other geospatial information and awareness of the need for geospatial
12 workforce development.

13 **Subtitle VII—Access to Space**

Chapter		Sec.
701.	Use of Space Shuttle or Alternatives	70101
703.	Shuttle Pricing Policy for Commercial and Foreign Users	70301
705.	Human Space Flight	70501
707.	Human Space Flight Independent Investigation Commission	70701

14 **CHAPTER 701—USE OF SPACE SHUTTLE OR**
15 **ALTERNATIVES**

Sec.

70101. Recovery of fair value of placing Department of Defense payloads in orbit with space shuttle.

70102. Space shuttle use policy.

70103. Commercial payloads on space shuttle.

16 **§ 70101. Recovery of fair value of placing Department of De-**
17 **fense payloads in orbit with space shuttle**

18 Notwithstanding any other provision of law, or any interagency agree-
19 ment, the Administrator shall charge such prices as are necessary to recover
20 the fair value of placing Department of Defense payloads into orbit by
21 means of the space shuttle.

22 **§ 70102. Space shuttle use policy**

23 (a) USE POLICY.—

24 (1) IN GENERAL.—

25 (A) POLICY.—It shall be the policy of the United States to use
26 the space shuttle—

27 (i) for purposes that require a human presence;

28 (ii) for purposes that require the unique capabilities of the
29 space shuttle; or

30 (iii) when other compelling circumstances exist.

31 (B) DEFINITION OF COMPELLING CIRCUMSTANCES.—In this
32 paragraph, the term “compelling circumstances” includes, but is
33 not limited to, occasions when the Administrator determines, in
34 consultation with the Secretary of Defense and the Secretary of

1 State, that important national security or foreign policy interests
2 would be served by a shuttle launch.

3 (2) USING AVAILABLE CARGO SPACE FOR SECONDARY PAYLOADS.—
4 The policy stated in paragraph (1) shall not preclude the use of avail-
5 able cargo space, on a space shuttle mission otherwise consistent with
6 the policy described in paragraph (1), for the purpose of carrying sec-
7 ondary payloads (as defined by the Administrator) that do not require
8 a human presence if such payloads are consistent with the require-
9 ments of research, development, demonstration, scientific, commercial,
10 and educational programs authorized by the Administrator.

11 (b) ANNUAL REPORT.—At least annually, the Administrator shall submit
12 to Congress a report certifying that the payloads scheduled to be launched
13 on the space shuttle for the next 4 years are consistent with the policy set
14 forth in subsection (a)(1). For each payload scheduled to be launched from
15 the space shuttle that does not require a human presence, the Administrator
16 shall, in the certified report to Congress, state the specific circumstances
17 that justified the use of the space shuttle. If, during the period between
18 scheduled reports to Congress, any additions are made to the list of certified
19 payloads intended to be launched from the shuttle, the Administrator shall
20 inform Congress of the additions and the reasons therefor within 45 days
21 of the change.

22 (c) ADMINISTRATION PAYLOADS.—The report described in subsection (b)
23 shall also include those Administration payloads designed solely to fly on the
24 space shuttle which have begun the phase C/D of its development cycle.

25 **§ 70103. Commercial payloads on space shuttle**

26 (a) DEFINITIONS.—In this section:

27 (1) LAUNCH VEHICLE.—The term “launch vehicle” means any vehi-
28 cle constructed for the purpose of operating in, or placing a payload
29 in, outer space.

30 (2) PAYLOAD.—The term “payload” means an object which a person
31 undertakes to place in outer space by means of a launch vehicle, and
32 includes subcomponents of the launch vehicle specifically designed or
33 adapted for that object.

34 (b) IN GENERAL.—Commercial payloads may not be accepted for launch
35 as primary payloads on the space shuttle unless the Administrator deter-
36 mines that—

- 37 (1) the payload requires the unique capabilities of the space shuttle;
38 or
39 (2) launching of the payload on the space shuttle is important for
40 either national security or foreign policy purposes.

1 **CHAPTER 703—SHUTTLE PRICING POLICY FOR**
2 **COMMERCIAL AND FOREIGN USERS**

Sec.

70301. Congressional findings and declarations.

70302. Purpose, policy, and goals.

70303. Definition of additive cost.

70304. Duties of Administrator.

3 **§ 70301. Congressional findings and declarations**

4 Congress finds and declares that—

5 (1) the Space Transportation System is a vital element of the United
6 States space program, contributing to the United States leadership in
7 space research, technology, and development;

8 (2) the Space Transportation System is the primary space launch
9 system for both United States national security and civil government
10 missions;

11 (3) the Space Transportation System contributes to the expansion of
12 United States private sector investment and involvement in space and
13 therefore should serve commercial users;

14 (4) the availability of the Space Transportation System to foreign
15 users for peaceful purposes is an important means of promoting inter-
16 national cooperative activities in the national interest and in maintain-
17 ing access to space for activities which enhance the security and welfare
18 of humankind;

19 (5) the United States is committed to maintaining world leadership
20 in space transportation;

21 (6) making the Space Transportation System fully operational and
22 cost effective in providing routine access to space will maximize the na-
23 tional economic benefits of the system; and

24 (7) national goals and the objectives for the Space Transportation
25 System can be furthered by a stable and fair pricing policy for the
26 Space Transportation System.

27 **§ 70302. Purpose, policy, and goals**

28 The purpose of this chapter is to set, for commercial and foreign users,
29 the reimbursement pricing policy for the Space Transportation System that
30 is consistent with the findings included in section 70301 of this title, en-
31 courages the full and effective use of space, and is designed to achieve the
32 following goals:

33 (1) The preservation of the role of the United States as a leader in
34 space research, technology, and development.

35 (2) The efficient and cost effective use of the Space Transportation
36 System.

37 (3) The achievement of greatly increased commercial space activity.

1 (4) The enhancement of the international competitive position of the
2 United States.

3 **§ 70303. Definition of additive cost**

4 In this chapter, the term “additive cost” means the average direct and
5 indirect costs to the Administration of providing additional flights of the
6 Space Transportation System beyond the costs associated with those flights
7 necessary to meet the space transportation needs of the United States Gov-
8 ernment.

9 **§ 70304. Duties of Administrator**

10 (a) ESTABLISHMENT AND IMPLEMENTATION OF REIMBURSEMENT RE-
11 COVERY SYSTEM.—The Administrator shall establish and implement a pric-
12 ing system to recover reimbursement in accordance with the pricing policy
13 under section 70302 of this title from each commercial or foreign user of
14 the Space Transportation System, which, except as provided in subsections
15 (c), (d), and (e), shall include a base price of not less than \$74,000,000
16 for each flight of the Space Transportation System in 1982 dollars.

17 (b) REPORTS TO CONGRESS.—Each year the Administrator shall submit
18 to the President of the Senate, the Speaker of the House of Representatives,
19 the Committee on Commerce, Science, and Transportation of the Senate,
20 and the Committee on Science and Technology of the House of Representa-
21 tives a report, transmitted contemporaneously with the annual budget re-
22 quest of the President, which shall inform Congress how the policy goals
23 contained in section 70302 of this title are being furthered by the shuttle
24 price for foreign and commercial users.

25 (c) REDUCTION OF BASE PRICE.—

26 (1) AUTHORITY TO REDUCE.—If at any time the Administrator finds
27 that the policy goals contained in section 70302 of this title are not
28 being achieved, the Administrator shall have authority to reduce the
29 base price established in subsection (a) after 45 days following receipt
30 by the President of the Senate, the Speaker of the House of Representa-
31 tives, the Committee on Commerce, Science, and Transportation of
32 the Senate, and the Committee on Science and Technology of the
33 House of Representatives of a notice by the Administrator containing
34 a description of the proposed reduction together with a full and com-
35 plete statement of the facts and circumstances which necessitate such
36 proposed reduction.

37 (2) MINIMUM PRICE.—In no case shall the minimum price estab-
38 lished under paragraph (1) be less than additive cost.

39 (d) LOW OR NO-COST FLIGHTS.—The Administrator may set a price
40 lower than the price determined under subsection (a) or (c), or provide no-
41 cost flights, for any commercial or foreign user of the Space Transportation

1 System that is involved in research, development, or demonstration pro-
2 grams with the Administration.

3 (e) CUSTOMER INCENTIVES.—Notwithstanding the provisions of sub-
4 section (a), the Administrator shall have the authority to offer reasonable
5 customer incentives consistent with the policy goals in section 70302 of this
6 title.

7 **CHAPTER 705—HUMAN SPACE FLIGHT**

Sec.

70501. Space shuttle follow-on.

70502. Requirements.

70503. Ground-based analog capabilities.

70504. International Space Station completion.

70505. International Space Station research.

70506. National laboratory designation.

8 **§ 70501. Space shuttle follow-on**

9 (a) POLICY STATEMENT.—It is the policy of the United States to possess
10 the capability for human access to space on a continuous basis.

11 (b) PROGRESS REPORT.—Not later than 180 days after December 30,
12 2005, and annually thereafter, the Administrator shall transmit a report to
13 the Committee on Science and Technology of the House of Representatives
14 and the Committee on Commerce, Science, and Transportation of the Sen-
15 ate describing the progress being made toward developing the Crew Explor-
16 ation Vehicle and the Crew Launch Vehicle and the estimated time before
17 they will demonstrate crewed, orbital spaceflight.

18 (c) COMPLIANCE REPORT.—If, 1 year before the final planned flight of
19 the space shuttle orbiter, the United States has not demonstrated a replace-
20 ment human space flight system, and the United States cannot uphold the
21 policy described in subsection (a), the Administrator shall transmit a report
22 to the Committee on Science and Technology of the House of Representa-
23 tives and the Committee on Commerce, Science, and Transportation of the
24 Senate describing—

25 (1) strategic risks to the United States associated with the failure
26 to uphold the policy described in subsection (a);

27 (2) the estimated length of time during which the United States will
28 not have its own human access to space;

29 (3) what steps will be taken to shorten that length of time; and

30 (4) what other means will be used to allow human access to space
31 during that time.

32 **§ 70502. Requirements**

33 The Administrator shall—

34 (1) construct an architecture and implementation plan for the Ad-
35 ministration's human exploration program that is not critically depend-
36 ent on the achievement of milestones by fixed dates;

1 (2) implement an exploration technology development program to en-
2 able lunar human and robotic operations consistent with section
3 20302(b) of this title, including surface power to use on the Moon and
4 other locations;

5 (3) conduct an in-situ resource utilization technology program to de-
6 velop the capability to use space resources to increase independence
7 from Earth, and sustain exploration beyond low-Earth orbit; and

8 (4) pursue aggressively automated rendezvous and docking capabili-
9 ties that can support the International Space Station and other mission
10 requirements.

11 **§ 70503. Ground-based analog capabilities**

12 (a) IN GENERAL.—The Administrator may establish a ground-based ana-
13 log capability in remote United States locations in order to assist in the de-
14 velopment of lunar operations, life support, and in-situ resource utilization
15 experience and capabilities.

16 (b) ENVIRONMENTAL CHARACTERISTICS.—The Administrator shall select
17 locations for the activities described in subsection (a) that—

18 (1) are regularly accessible;

19 (2) have significant temperature extremes and range; and

20 (3) have access to energy and natural resources (including geo-
21 thermal, permafrost, volcanic, or other potential resources).

22 (c) INVOLVEMENT OF LOCAL POPULATIONS AND PRIVATE SECTOR PART-
23 NERS.—In carrying out this section, the Administrator shall involve local
24 populations, academia, and industrial partners as much as possible to en-
25 sure that ground-based benefits and applications are encouraged and devel-
26 oped.

27 **§ 70504. International Space Station completion**

28 (a) POLICY.—It is the policy of the United States to achieve diverse and
29 growing utilization of, and benefits from, the International Space Station.

30 (b) ELEMENTS, CAPABILITIES, AND CONFIGURATION CRITERIA.—The
31 Administrator shall ensure that the International Space Station will—

32 (1) be assembled and operated in a manner that fulfills international
33 partner agreements, as long as the Administrator determines that the
34 shuttle can safely enable the United States to do so;

35 (2) be used for a diverse range of microgravity research, including
36 fundamental, applied, and commercial research, consistent with section
37 40704 of this title;

38 (3) have an ability to support a crew size of at least 6 persons, un-
39 less the Administrator transmits to the Committee on Science and
40 Technology of the House of Representatives and the Committee on
41 Commerce, Science, and Transportation of the Senate not later than

1 60 days after December 30, 2005, a report explaining why such a re-
 2 quirement should not be met, the impact of not meeting the require-
 3 ment on the International Space Station research agenda and oper-
 4 ations and international partner agreements, and what additional fund-
 5 ing or other steps would be required to have an ability to support a
 6 crew size of at least 6 persons;

7 (4) support Crew Exploration Vehicle docking and automated dock-
 8 ing of cargo vehicles or modules launched by either heavy-lift or com-
 9 mercially-developed launch vehicles;

10 (5) support any diagnostic human research, on-orbit characterization
 11 of molecular crystal growth, cellular research, and other research that
 12 the Administration believes is necessary to conduct, but for which the
 13 Administration lacks the capacity to return the materials that need to
 14 be analyzed to Earth; and

15 (6) be operated at an appropriate risk level.

16 (e) CONTINGENCIES.—

17 (1) POLICY.—The Administrator shall ensure that the International
 18 Space Station can have available, if needed, sufficient logistics and on-
 19 orbit capabilities to support any potential period during which the
 20 space shuttle or its follow-on crew and cargo systems are unavailable,
 21 and can have available, if needed, sufficient surge delivery capability or
 22 repositioning of spares and other supplies needed to accommodate any
 23 such hiatus.

24 (2) PLAN.—Not later than 60 days after December 30, 2005, and
 25 before making any change in the International Space Station assembly
 26 sequence in effect on December 30, 2005, the Administrator shall
 27 transmit to the Committee on Science and Technology of the House of
 28 Representatives and the Committee on Commerce, Science, and Trans-
 29 portation of the Senate a plan to carry out the policy described in para-
 30 graph (1).

31 **§ 70505. International Space Station research**

32 The Administrator shall—

33 (1) carry out a program of microgravity research consistent with sec-
 34 tion 40704 of this title;

35 (2) consider the need for a life sciences centrifuge and any associated
 36 holding facilities; and

37 (3) not later than 90 days after December 30, 2005, transmit to the
 38 Committee on Science and Technology of the House of Representatives
 39 and the Committee on Commerce, Science, and Transportation of the
 40 Senate the research plan for Administration utilization of the Inter-
 41 national Space Station and the proposed final configuration of the

1 International Space Station, which shall include an identification of
2 microgravity research that can be performed in ground-based facilities
3 and then validated in space and an assessment of the impact of having
4 or not having a life sciences centrifuge aboard the International Space
5 Station.

6 **§ 70506. National laboratory designation**

7 (a) DEFINITION OF UNITED STATES SEGMENT OF THE INTERNATIONAL
8 SPACE STATION.—In this section the term “United States segment of the
9 International Space Station” means those elements of the International
10 Space Station manufactured—

- 11 (1) by the United States; or
12 (2) for the United States by other nations in exchange for funds or
13 launch services.

14 (b) DESIGNATION.—To further the policy described in section 70501(a)
15 of this title, the United States segment of the International Space Station
16 is hereby designated a national laboratory.

17 (c) MANAGEMENT.—

18 (1) PARTNERSHIPS.—The Administrator shall seek to increase the
19 utilization of the International Space Station by other Federal entities
20 and the private sector through partnerships, cost-sharing agreements,
21 and other arrangements that would supplement Administration funding
22 of the International Space Station.

23 (2) CONTRACTING.—The Administrator may enter into a contract
24 with a nongovernmental entity to operate the International Space Sta-
25 tion national laboratory, subject to all applicable Federal laws and reg-
26 ulations.

27 (d) PLAN.—Not later than 1 year after December 30, 2005, the Adminis-
28 trator shall transmit to the Committee on Science and Technology of the
29 House of Representatives and the Committee on Commerce, Science, and
30 Transportation of the Senate a plan describing how the national laboratory
31 will be operated. At a minimum, the plan shall describe—

32 (1) any changes in the research plan transmitted under section
33 70505(3) of this title and any other changes in the operation of the
34 International Space Station resulting from the designation;

35 (2) any ground-based Administration operations or buildings that
36 will be considered part of the national laboratory;

37 (3) the management structure for the laboratory, including the ra-
38 tionale for contracting or not contracting with a nongovernmental enti-
39 ty to operate the International Space Station national laboratory;

40 (4) the workforce that will be considered employees of the national
41 laboratory;

1 (5) how the Administration will seek the participation of other par-
 2 ties described in subsection (c)(1); and

3 (6) a schedule for implementing any changes in International Space
 4 Station operations, utilization, or management described in the plan.

5 **CHAPTER 707—HUMAN SPACE FLIGHT INDEPENDENT**
 6 **INVESTIGATION COMMISSION**

Sec.

70701. Definitions.

70702. Establishment of Commission.

70703. Tasks of Commission.

70704. Composition of Commission.

70705. Powers of Commission.

70706. Public meetings, information, and hearings.

70707. Staff of Commission.

70708. Compensation and travel expenses.

70709. Security clearances for Commission members and staff.

70710. Reporting requirements and termination.

7 **§ 70701. Definitions**

8 In this chapter:

9 (1) COMMISSION.—The term “Commission” means a Commission es-
 10 tablished under this chapter.

11 (2) INCIDENT.—The term “incident” means either an accident or a
 12 deliberate act.

13 **§ 70702. Establishment of Commission**

14 (a) ESTABLISHMENT.—The President shall establish an independent,
 15 nonpartisan Commission within the executive branch to investigate any inci-
 16 dent that results in the loss of—

17 (1) a space shuttle;

18 (2) the International Space Station or its operational viability;

19 (3) any other United States space vehicle carrying humans that is
 20 owned by the Federal Government or that is being used pursuant to
 21 a contract with the Federal Government; or

22 (4) a crew member or passenger of any space vehicle described in
 23 this subsection.

24 (b) DEADLINE FOR ESTABLISHMENT.—The President shall establish a
 25 Commission within 7 days after an incident specified in subsection (a).

26 **§ 70703. Tasks of Commission**

27 A Commission established pursuant to this chapter shall, to the extent
 28 possible, undertake the following tasks:

29 (1) INVESTIGATION.—Investigate the incident.

30 (2) CAUSE.—Determine the cause of the incident.

31 (3) CONTRIBUTING FACTORS.—Identify all contributing factors to
 32 the cause of the incident.

33 (4) RECOMMENDATIONS.—Make recommendations for corrective ac-
 34 tions.

1 (5) ADDITIONAL FINDINGS OR RECOMMENDATIONS.—Provide any
2 additional findings or recommendations deemed by the Commission to
3 be important, whether or not they are related to the specific incident
4 under investigation.

5 (6) REPORT.—Prepare a report to Congress, the President, and the
6 public.

7 **§ 70704. Composition of Commission**

8 (a) NUMBER OF COMMISSIONERS.—A Commission established pursuant
9 to this chapter shall consist of 15 members.

10 (b) SELECTION.—The members of a Commission shall be chosen in the
11 following manner:

12 (1) APPOINTMENT BY PRESIDENT.—The President shall appoint the
13 members, and shall designate the Chairman and Vice Chairman of the
14 Commission from among its members.

15 (2) LISTS PROVIDED BY LEADERS OF CONGRESS.—The majority
16 leader of the Senate, the minority leader of the Senate, the Speaker
17 of the House of Representatives, and the minority leader of the House
18 of Representatives shall each provide to the President a list of candi-
19 dates for membership on the Commission. The President may select
20 one of the candidates from each of the 4 lists for membership on the
21 Commission.

22 (3) PROHIBITION REGARDING FEDERAL OFFICERS AND EMPLOYEES
23 AND MEMBERS OF CONGRESS.—No officer or employee of the Federal
24 Government or Member of Congress shall serve as a member of the
25 Commission.

26 (4) PROHIBITION REGARDING CONTRACTORS.—No member of the
27 Commission shall have, or have pending, a contractual relationship with
28 the Administration.

29 (5) PROHIBITION REGARDING CONFLICT OF INTEREST.—The Presi-
30 dent shall not appoint any individual as a member of a Commission
31 under this section who has a current or former relationship with the
32 Administrator that the President determines would constitute a conflict
33 of interest.

34 (6) EXPERIENCE.—To the extent practicable, the President shall en-
35 sure that the members of the Commission include some individuals with
36 experience relative to human carrying spacecraft, as well as some indi-
37 viduals with investigative experience and some individuals with legal ex-
38 perience.

39 (7) DIVERSITY.—To the extent practicable, the President shall seek
40 diversity in the membership of the Commission.

1 (c) DEADLINE FOR APPOINTMENT.—All members of a Commission estab-
2 lished under this chapter shall be appointed no later than 30 days after the
3 incident.

4 (d) INITIAL MEETING.—A Commission shall meet and begin operations
5 as soon as practicable.

6 (e) SUBSEQUENT MEETINGS.—After its initial meeting, a Commission
7 shall meet upon the call of the Chairman or a majority of its members.

8 (f) QUORUM.—Eight members of a Commission shall constitute a
9 quorum.

10 (g) VACANCIES.—Any vacancy in a Commission shall not affect its pow-
11 ers, but shall be filled in the same manner in which the original appoint-
12 ment was made.

13 § 70705. Powers of Commission

14 (a) HEARINGS AND EVIDENCE.—A Commission or, on the authority of
15 the Commission, any subcommittee or member thereof, may, for the purpose
16 of carrying out this chapter—

17 (1) hold such hearings and sit and act at such times and places, take
18 such testimony, receive such evidence, administer such oaths; and

19 (2) require, by subpoena or otherwise, the attendance and testimony
20 of such witnesses and the production of such books, records, cor-
21 respondence, memoranda, papers, and documents,

22 as the Commission or such designated subcommittee or member may deter-
23 mine advisable.

24 (b) CONTRACTING.—A Commission may, to such extent and in such
25 amounts as are provided in appropriation Acts, enter into contracts to en-
26 able the Commission to discharge its duties under this chapter.

27 (c) INFORMATION FROM FEDERAL AGENCIES.—

28 (1) IN GENERAL.—A Commission may secure directly from any exec-
29 utive department, bureau, agency, board, commission, office, inde-
30 pendent establishment, or instrumentality of the Government, informa-
31 tion, suggestions, estimates, and statistics for the purposes of this
32 chapter. Each department, bureau, agency, board, commission, office,
33 independent establishment, or instrumentality shall, to the extent au-
34 thorized by law, furnish such information, suggestions, estimates, and
35 statistics directly to the Commission, upon request made by the Chair-
36 man, the chairman of any subcommittee created by a majority of the
37 Commission, or any member designated by a majority of the Commis-
38 sion.

39 (2) RECEIPT, HANDLING, STORAGE, AND DISSEMINATION.—Informa-
40 tion shall only be received, handled, stored, and disseminated by mem-

1 bers of the Commission and its staff consistent with all applicable stat-
2 utes, regulations, and Executive orders.

3 (d) ASSISTANCE FROM FEDERAL AGENCIES.—

4 (1) GENERAL SERVICES ADMINISTRATION.—The Administrator of
5 General Services shall provide to a Commission on a reimbursable basis
6 administrative support and other services for the performance of the
7 Commission’s tasks.

8 (2) OTHER DEPARTMENTS AND AGENCIES.—In addition to the as-
9 sistance prescribed in paragraph (1), departments and agencies of the
10 United States may provide to the Commission such services, funds, fa-
11 cilities, staff, and other support services as they may determine advis-
12 able and as may be authorized by law.

13 (3) ADMINISTRATION ENGINEERING AND SAFETY CENTER.—The Ad-
14 ministration Engineering and Safety Center shall provide data and
15 technical support as requested by the Commission.

16 **§ 70706. Public meetings, information, and hearings**

17 (a) PUBLIC MEETINGS AND RELEASE OF PUBLIC VERSIONS OF RE-
18 PORTS.—A Commission shall—

19 (1) hold public hearings and meetings to the extent appropriate; and

20 (2) release public versions of the reports required under this chapter.

21 (b) PUBLIC HEARINGS.—Any public hearings of a Commission shall be
22 conducted in a manner consistent with the protection of information pro-
23 vided to or developed for or by the Commission as required by any applica-
24 ble statute, regulation, or Executive order.

25 **§ 70707. Staff of Commission**

26 (a) APPOINTMENT AND COMPENSATION.—The Chairman, in consultation
27 with the Vice Chairman, in accordance with rules agreed upon by a Com-
28 mission, may appoint and fix the compensation of a staff director and such
29 other personnel as may be necessary to enable the Commission to carry out
30 its functions.

31 (b) DETAILEES.—Any Federal Government employee, except for an em-
32 ployee of the Administration, may be detailed to a Commission without re-
33 imbursement from the Commission, and such detailee shall retain the rights,
34 status, and privileges of his or her regular employment without interruption.

35 (c) CONSULTANT SERVICES.—A Commission may procure the services of
36 experts and consultants in accordance with section 3109 of title 5, but at
37 rates not to exceed the daily equivalent of the annual rate of basic pay in
38 effect for positions at level IV of the Executive Schedule under section 5315
39 of title 5. An expert or consultant whose services are procured under this
40 subsection shall disclose any contract or association the expert or consultant
41 has with the Administration or any Administration contractor.

1 **§ 70708. Compensation and travel expenses**

2 (a) COMPENSATION.—Each member of a Commission may be com-
3 pensated at a rate not to exceed the daily equivalent of the annual rate of
4 basic pay in effect for positions at level IV of the Executive Schedule under
5 section 5315 of title 5 for each day during which that member is engaged
6 in the actual performance of the duties of the Commission.

7 (b) TRAVEL EXPENSES.—While away from their homes or regular places
8 of business in the performance of services for the Commission, members of
9 a Commission shall be allowed travel expenses, including per diem in lieu
10 of subsistence, in the same manner as persons employed intermittently in
11 the Government service are allowed expenses under section 5703 of title 5.

12 **§ 70709. Security clearances for Commission members and**
13 **staff**

14 The appropriate Federal agencies or departments shall cooperate with a
15 Commission in expeditiously providing to the Commission members and
16 staff appropriate security clearances to the extent possible pursuant to exist-
17 ing procedures and requirements. No person shall be provided with access
18 to classified information under this chapter without the appropriate security
19 clearances.

20 **§ 70710. Reporting requirements and termination**

21 (a) INTERIM REPORTS.—A Commission may submit to the President and
22 Congress interim reports containing such findings, conclusions, and rec-
23 ommendations for corrective actions as have been agreed to by a majority
24 of Commission members.

25 (b) FINAL REPORT.—A Commission shall submit to the President and
26 Congress, and make concurrently available to the public, a final report con-
27 taining such findings, conclusions, and recommendations for corrective ac-
28 tions as have been agreed to by a majority of Commission members. Such
29 report shall include any minority views or opinions not reflected in the ma-
30 jority report.

31 (c) TERMINATION.—

32 (1) IN GENERAL.—A Commission, and all the authorities of this
33 chapter with respect to that Commission, shall terminate 60 days after
34 the date on which the final report is submitted under subsection (b).

35 (2) ADMINISTRATIVE ACTIVITIES BEFORE TERMINATION.—A Com-
36 mission may use the 60-day period referred to in paragraph (1) for the
37 purpose of concluding its activities, including providing testimony to
38 committees of Congress concerning its reports and disseminating the
39 final report.

1 **SEC. 4. CONFORMING AMENDMENTS TO OTHER LAWS.**

2 (a) TITLE 5.—Section 9811(a)(1)(E) of title 5, United States Code, is
3 amended by striking “section 203(e)(2)(A) of the National Aeronautics and
4 Space Act of 1958 (42 U.S.C. 2473(e)(2)(A))” and substituting “section
5 20113(b)(1) of title 51”.

6 (b) TITLE 31.—Section 1304(a)(3)(D) of title 31, United States Code,
7 is amended by striking “section 203 of the National Aeronautics and Space
8 Act of 1958 (42 U.S.C. 2473)” and substituting “section 20113 of title
9 51”.

10 (c) TITLE 35.—Section 210(a)(7) of title 35, United States Code, is
11 amended by striking “section 305 of the National Aeronautics and Space
12 Act of 1958 (42 U.S.C. 2457)” and substituting “section 20135 of title
13 51”.

14 (d) TRANSFER OF CHAPTERS 701 AND 703 OF TITLE 49, UNITED
15 STATES CODE.—

16 (1) TITLE 49, UNITED STATES CODE.—Title 49, United States Code,
17 is amended as follows:

18 (A) In the analysis for title 49, United States Code, the item
19 related to subtitle IX is amended to read as follows:

20 **“IX. [TRANSFERRED]”.**

21 (B) The heading and analysis for subtitle IX of title 49, United
22 States Code, are amended to read as follows:

“Subtitle IX—[Transferred]

“Chapter

Sec.

“701. [Transferred]

“703. [Transferred]”.

23 (2) RENUMBERING AND TRANSFER OF CHAPTERS.—Chapters 701
24 and 703 of title 49, United States Code, are renumbered as chapters
25 507 and 509, respectively, of title 51, United States Code, and trans-
26 ferred so as to appear after chapter 505 of title 51, United States
27 Code, as enacted by section 3 of this Act.

28 (3) RENUMBERING OF SECTIONS IN CHAPTER 507 OF TITLE 51,
29 UNITED STATES CODE.—In chapter 507 of title 51, United States
30 Code, as renumbered by paragraph (2), and in the chapter analysis, the
31 sections are renumbered as follows:

32 (A) Section 70101 is renumbered 50701.

33 (B) Section 70102 is renumbered 50702.

34 (C) Section 70103 is renumbered 50703.

35 (D) Section 70104 is renumbered 50704.

36 (E) Section 70105 is renumbered 50705.

37 (F) Section 70105a is renumbered 50706.

38 (G) Section 70106 is renumbered 50707.

39 (H) Section 70107 is renumbered 50708.

- 1 (I) Section 70108 is renumbered 50709.
 2 (J) Section 70109 is renumbered 50710.
 3 (K) Section 70109a is renumbered 50711.
 4 (L) Section 70110 is renumbered 50712.
 5 (M) Section 70111 is renumbered 50713.
 6 (N) Section 70112 is renumbered 50714.
 7 (O) Section 70113 is renumbered 50715.
 8 (P) Section 70114 is renumbered 50716.
 9 (Q) Section 70115 is renumbered 50717.
 10 (R) Section 70116 is renumbered 50718.
 11 (S) Section 70117 is renumbered 50719.
 12 (T) Section 70118 is renumbered 50720.
 13 (U) Section 70119 is renumbered 50721.
 14 (V) Section 70120 is renumbered 50722.
 15 (W) Section 70121 is renumbered 50723.

16 (4) RENUMBERING OF SECTIONS IN CHAPTER 509 OF TITLE 51,
 17 UNITED STATES CODE.—In chapter 509 of title 51, United States
 18 Code, as renumbered by paragraph (2), and in the chapter analysis, the
 19 sections are renumbered as follows:

- 20 (A) Section 70301 is renumbered 50901.
 21 (B) Section 70302 is renumbered 50902.
 22 (C) Section 70303 is renumbered 50903.
 23 (D) Section 70304 is renumbered 50904.
 24 (E) Section 70305 is renumbered 50905.

25 (5) CROSS REFERENCES IN CHAPTER 507 OF TITLE 51, UNITED
 26 STATES CODE.—

- 27 (A) Section 50702(11) of title 51, United States Code, as re-
 28 numbered by paragraph (3), is amended—
 29 (i) by striking “section 70104(e)” and substituting “section
 30 50704(e)”; and
 31 (ii) by striking “section 70105a” and substituting “section
 32 50706”.
- 33 (B) Section 50702(19) of title 51, United States Code, as re-
 34 numbered by paragraph (3), is amended by striking “section
 35 70120(c)(2)” and substituting “section 50722(c)(2)”.
- 36 (C) Section 50704(a)(2) of title 51, United States Code, as re-
 37 numbered by paragraph (3), is amended by striking “section
 38 70102(1)(A) or (B)” and substituting “section 50702(1)(A) or
 39 (B)”.

1 (D) Section 50704(a)(3) of title 51, United States Code, as re-
2 numbered by paragraph (3), is amended by striking “section
3 70102(1)(C)” and substituting “section 50702(1)(C)”.

4 (E) Section 50704(a)(4) of title 51, United States Code, as re-
5 numbered by paragraph (3), is amended by striking “section
6 70102(1)(C)” and substituting “section 50702(1)(C)”.

7 (F) Section 50705(b)(5)(A) of title 51, United States Code, as
8 renumbered by paragraph (3), is amended by striking “section
9 70112(a)(2) and (c)” and substituting “section 50714(a)(2) and
10 (c)”.

11 (G) Section 50706(e) of title 51, United States Code, as renum-
12 bered by paragraph (3), is amended by striking “section
13 70105(b)(2)(C)” and substituting “section 50705(b)(2)(C)”.

14 (H) Section 50706(i) of title 51, United States Code, as renum-
15 bered by paragraph (3), is amended by striking “sections 70106,
16 70107, 70108, 70109, 70110, 70112, 70115, 70116, 70117, and
17 70121” and substituting “sections 50707, 50708, 50709, 50710,
18 50712, 50714, 50717, 50718, 50719, and 50723”.

19 (I) Section 50707(a) of title 51, United States Code, as renum-
20 bered by paragraph (3), is amended by striking “sections
21 70104(c), 70105, and 70105a” and substituting “sections
22 50704(c), 50705, and 50706”.

23 (J) Section 50708(b)(2) of title 51, United States Code, as re-
24 numbered by paragraph (3), is amended by striking “section
25 70105(c)” and substituting “section 50705(e)”.

26 (K) Section 50708(e) of title 51, United States Code, as renum-
27 bered by paragraph (3), is amended by striking “section 70110”
28 and substituting “section 50712”.

29 (L) Section 50709(b) of title 51, United States Code, as renum-
30 bered by paragraph (3), is amended by striking “section 70110”
31 and substituting “section 50712”.

32 (M) Section 50712(a)(1) of title 51, United States Code, as re-
33 numbered by paragraph (3), is amended by striking “section
34 70105(a) or 70105a” and substituting “section 50705(a) or
35 50706”.

36 (N) Section 50712(a)(2) of title 51, United States Code, as re-
37 numbered by paragraph (3), is amended by striking “section
38 70104(c)” and substituting “section 50704(c)”.

39 (O) Section 50712(a)(3)(A) of title 51, United States Code, as
40 renumbered by paragraph (3), is amended by striking “section
41 70107(b) or (c)” and substituting “section 50708(b) or (c)”.

1 (P) Section 50712(a)(3)(B) of title 51, United States Code, as
 2 renumbered by paragraph (3), is amended by striking “section
 3 70108(a)” and substituting “section 50709(a)”.

4 (Q) Section 50715(a)(1)(A) of title 51, United States Code, as
 5 renumbered by paragraph (3), is amended by striking “section
 6 70112(a)(1)(A)” and substituting “section 50714(a)(1)(A)”.

7 (R) Section 50715(a)(2) of title 51, United States Code, as re-
 8 numbered by paragraph (3), is amended—

9 (i) by striking “section 70112(a)(1)(A)” and substituting
 10 “section 50714(a)(1)(A)”; and

11 (ii) by striking “section 70112(a)(1)” and substituting
 12 “section 50714(a)(1)”.

13 (S) Section 50716 of title 51, United States Code, as renum-
 14 bered by paragraph (3), is amended by striking “section
 15 70106(b)” and substituting “section 50707(b)”.

16 (T) Section 50719(b)(2) of title 51, United States Code, as re-
 17 numbered by paragraph (3), is amended by striking “the Land
 18 Remote Sensing Policy Act of 1992 (15 U.S.C. 5601 et seq.)” and
 19 substituting “chapter 601 of this title”.

20 (U) Section 50722(c)(2)(B) of title 51, United States Code, as
 21 renumbered by paragraph (3), is amended by striking “section
 22 70102” and substituting “section 50702”.

23 (6) CROSS REFERENCES IN CHAPTER 509 OF TITLE 51, UNITED
 24 STATES CODE.—

25 (A) Section 50901(1) of title 51, United States Code, as renum-
 26 bered by paragraph (4), is amended by striking “section 502 of
 27 the National Aeronautics and Space Administration Authorization
 28 Act, Fiscal Year 1993 (15 U.S.C. 5802)” and substituting “sec-
 29 tion 50502 of this title”.

30 (B) Section 50904(d)(1) of title 51, United States Code, as re-
 31 numbered by paragraph (4), is amended by striking “section 303
 32 of this title” and substituting “section 303 of title 49”.

33 (7) ANALYSIS FOR SUBTITLE V OF TITLE 51, UNITED STATES
 34 CODE.—In title 51, United States Code, as enacted by section 3 of this
 35 Act, the analysis for subtitle V is amended by adding, at the end, the
 36 following items:

37
 “507. **Commercial Space Launch Activities** **50701**
 “509. **Space Transportation Infrastructure Matching Grants** **50901”.**

38 (8) DEEMED REFERENCES TO TITLE 49, UNITED STATES CODE.—In
 39 title 49, United States Code, references to “this title” are deemed to
 40 refer also to chapters 507 and 509 of title 51, United States Code.

1 (e) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZA-
2 TION ACT OF 2005.—Section 304 of the National Aeronautics and Space
3 Administration Authorization Act of 2005 (Public Law 109–155, 119 Stat.
4 2918) is amended as follows:

5 (1) Subsection (a)(1) is redesignated as subsection (a) and amended
6 to read as follows:

7 “(a) ASSESSMENT OF CERTAIN MISSIONS.—Not later than 60 days after
8 the date of enactment of this Act, the Administrator shall carry out an as-
9 sessment under section 30504 of title 51, United States Code, for at least
10 the following missions: FAST, TIMED, Cluster, Wind, Geotail, Polar,
11 TRACE, Ulysses, and Voyager.”.

12 (2) Subsection (b) is amended by striking “subsection (a)(1)” and
13 substituting “subsection (a)”.

14 **SEC. 5. TRANSITIONAL AND SAVINGS PROVISIONS.**

15 (a) CUTOFF DATE.—This Act replaces certain provisions of law enacted
16 on or before January 17, 2007. If a law enacted after that date amends
17 or repeals a provision replaced by this Act, that law is deemed to amend
18 or repeal, as the case may be, the corresponding provision enacted by this
19 Act. If a law enacted after that date is otherwise inconsistent with this Act,
20 it supersedes this Act to the extent of the inconsistency.

21 (b) ORIGINAL DATE OF ENACTMENT UNCHANGED.—For purposes of de-
22 termining whether one provision of law supersedes another based on enact-
23 ment later in time, the date of enactment of a provision enacted by this Act
24 is deemed to be the date of enactment of the provision it replaced.

25 (c) REFERENCES TO PROVISIONS REPLACED.—A reference to a provision
26 of law replaced by this Act, including a reference in a regulation, order, or
27 other law, is deemed to refer to the corresponding provision enacted by this
28 Act.

29 (d) REGULATIONS, ORDERS, AND OTHER ADMINISTRATIVE ACTIONS.—A
30 regulation, order, or other administrative action in effect under a provision
31 of law replaced by this Act continues in effect under the corresponding pro-
32 vision enacted by this Act.

33 (e) ACTIONS TAKEN AND OFFENSES COMMITTED.—An action taken or
34 an offense committed under a provision of law replaced by this Act is
35 deemed to have been taken or committed under the corresponding provision
36 enacted by this Act.

37 **SEC. 6. REPEALS.**

38 The following provisions of law are repealed, except with respect to rights
39 and duties that matured, penalties that were incurred, or proceedings that
40 were begun before the date of enactment of this Act:

Schedule of Laws Repealed

Act	Section	United States Code
National Aeronautics and Space Act of 1958 (Public Law 85-568)	102	42 U.S.C. 2451.
	103	42 U.S.C. 2452.
	201	42 U.S.C. 2471 (prior).
	202	42 U.S.C. 2472.
	203	42 U.S.C. 2473.
	204	42 U.S.C. 2474.
	205	42 U.S.C. 2475.
	206	42 U.S.C. 2476.
	207	42 U.S.C. 2476a.
	208	42 U.S.C. 2476b.
	302	42 U.S.C. 2453.
	303	42 U.S.C. 2454.
	304(a)	42 U.S.C. 2455(a).
	304(c)	42 U.S.C. 2456.
	304(f)	42 U.S.C. 2456a.
	305	42 U.S.C. 2457.
	306	42 U.S.C. 2458.
	307	42 U.S.C. 2458a.
	308	42 U.S.C. 2458b.
	309	42 U.S.C. 2458c.
	310	42 U.S.C. 2459.
	311	42 U.S.C. 2459b.
	312	42 U.S.C. 2459c.
	313	42 U.S.C. 2459f.
	314	42 U.S.C. 2459f-1.
	315	42 U.S.C. 2459j.
	316	42 U.S.C. 2459k.
	317	42 U.S.C. 2459l.
	401	42 U.S.C. 2481.
	402	42 U.S.C. 2482.
	403	42 U.S.C. 2483.
	404	42 U.S.C. 2484.
	Act of June 15, 1959 (Public Law 86-45)	4
National Aeronautics and Space Administration Authorization Act, 1968 (Public Law 90-67)	6	42 U.S.C. 2477.
Joint Resolution of September 29, 1969 (Public Law 91-76)	1, 2	42 U.S.C. 2461.
National Aeronautics and Space Administration Authorization Act, 1978 (Public Law 95-76)	6	42 U.S.C. 2463.
National Aeronautics and Space Administration Authorization Act, 1983 (Public Law 97-324)	106(a)	42 U.S.C. 2464.
National Aeronautics and Space Administration Authorization Act of 1986 (Public Law 99-170)	201	42 U.S.C. 2466.
	202	42 U.S.C. 2466a.
	203	42 U.S.C. 2466b.
	204	42 U.S.C. 2466c.
National Space Grant College and Fellowship Act (Title II of Public Law 100-147)	202	42 U.S.C. 2486.
	203	42 U.S.C. 2486a.
	204	42 U.S.C. 2486b.
	205	42 U.S.C. 2486c.
	206	42 U.S.C. 2486d.
	207	42 U.S.C. 2486e.
	208	42 U.S.C. 2486f.
	209	42 U.S.C. 2486g.
	210	42 U.S.C. 2486h.
	211	42 U.S.C. 2486i.
	213	42 U.S.C. 2486k.
214	42 U.S.C. 2486l.	
Department of Housing and Urban Development—Independent Agencies Appropriations Act, 1989 (Public Law 100-404)	(par. under heading “Science, Space, and Technology Education Trust Fund”, at 102 Stat. 1028).	42 U.S.C. 2467.

Schedule of Laws Repealed—Continued

Act	Section	United States Code
Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1990 (Public Law 101-144)	(pars. under heading “Small and Disadvantaged Business”, at 103 Stat. 863).	42 U.S.C. 2473b.
National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991 (Public Law 101-611)	112	42 U.S.C. 2465a.
	123	(not previously classified).
	203	42 U.S.C. 2465c.
	206	42 U.S.C. 2465f.
Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1992 (Public Law 102-139)	(1st par. under heading “Administrative Provisions”, at 105 Stat. 771).	42 U.S.C. 2459d.
National Aeronautics and Space Administration Authorization Act, Fiscal Year 1992 (Public Law 102-195)	19	42 U.S.C. 2459e.
	20	42 U.S.C. 2467a.
	21	42 U.S.C. 2473e.
Land Remote Sensing Policy Act of 1992 (Public Law 102-555)	2	15 U.S.C. 5601.
	3	15 U.S.C. 5602.
	101	15 U.S.C. 5611.
	102	15 U.S.C. 5612.
	103	15 U.S.C. 5613.
	104	15 U.S.C. 5614.
	105	15 U.S.C. 5615.
	201	15 U.S.C. 5621.
	202	15 U.S.C. 5622.
	203	15 U.S.C. 5623.
	204	15 U.S.C. 5624.
	205	15 U.S.C. 5625.
	301	15 U.S.C. 5631.
	302	15 U.S.C. 5632.
	303	15 U.S.C. 5633.
	401	15 U.S.C. 5641.
	501	15 U.S.C. 5651.
	502	15 U.S.C. 5652.
	503	15 U.S.C. 5653.
	504	15 U.S.C. 5654.
	505	15 U.S.C. 5655.
	506	15 U.S.C. 5656.
	507	15 U.S.C. 5657.
	508	15 U.S.C. 5658.
	601	15 U.S.C. 5671.
	602	15 U.S.C. 5672.
National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993 (Public Law 102-588)	304	42 U.S.C. 2467b.
	501	15 U.S.C. 5801.
	502	15 U.S.C. 5802.
	504	15 U.S.C. 5803.
	506	15 U.S.C. 5805.
	507	15 U.S.C. 5806.
	508	15 U.S.C. 5807.
	510	15 U.S.C. 5808.
	601	42 U.S.C. 2487.
	602	42 U.S.C. 2487a.
	603	42 U.S.C. 2487b.
	604	42 U.S.C. 2487c.
	606	42 U.S.C. 2487e.
	607	42 U.S.C. 2487f.
	608	42 U.S.C. 2487g.
Commercial Space Act of 1998 (Public Law 105-303)	2	42 U.S.C. 14701.
	101	42 U.S.C. 14711.
	104	42 U.S.C. 14712.
	105	42 U.S.C. 14713.
	106	42 U.S.C. 14714.
	107	42 U.S.C. 14715, 15 U.S.C. 5621, 5622.
	201	42 U.S.C. 14731.
	202	42 U.S.C. 14732.

Schedule of Laws Repealed—Continued

Act	Section	United States Code
	204	42 U.S.C. 14733.
	205	42 U.S.C. 14734.
	206	42 U.S.C. 14735.
National Aeronautics and Space Administration Authorization Act of 2000 (Public Law 106-391)	126	42 U.S.C. 2475a.
	301	42 U.S.C. 2459g.
	304	42 U.S.C. 2459h.
	305	42 U.S.C. 2475b.
	325	42 U.S.C. 2473d.
Commercial Reusable In-Space Transportation Act of 2002 (Title IX of Public Law 107-248)	902	42 U.S.C. 14751.
	903	42 U.S.C. 14752.
	904	42 U.S.C. 14753.
Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2003 (Division K of Public Law 108-7)	(last par. under heading “Administrative Provisions”, at 117 Stat. 520).	42 U.S.C. 2459i.
National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109-155)	101(a)	42 U.S.C. 16611(a).
	101(b)	42 U.S.C. 16611(b).
	101(h)(1)	42 U.S.C. 16611(h)(1).
	101(i)	42 U.S.C. 16611(i).
	103	42 U.S.C. 16613.
	105	42 U.S.C. 16614.
	107	42 U.S.C. 16615.
	110	42 U.S.C. 16618.
	202	42 U.S.C. 16631.
	203	42 U.S.C. 16632.
	204	42 U.S.C. 16633.
	205	42 U.S.C. 16634.
	301	42 U.S.C. 16651.
	304(a) (matter before par. (1))	42 U.S.C. 16654(a) (matter before par. (1)).
	304(a)(2)	42 U.S.C. 16654(a)(2).
	305	42 U.S.C. 16655.
	306	42 U.S.C. 16656.
	311	42 U.S.C. 16671.
	312	42 U.S.C. 16672.
	313	42 U.S.C. 16673.
	314	42 U.S.C. 16674.
	315	42 U.S.C. 16675.
	316	42 U.S.C. 16676.
	401	42 U.S.C. 16701.
	411	42 U.S.C. 16711.
	421	42 U.S.C. 16721.
	422	42 U.S.C. 16722.
	423	42 U.S.C. 16723.
	424	42 U.S.C. 16724.
	425	42 U.S.C. 16725.
	426	42 U.S.C. 16726.
	427	42 U.S.C. 16727.
	431	42 U.S.C. 16741.
	441	42 U.S.C. 16751.
	501	42 U.S.C. 16761.
	503	42 U.S.C. 16763.
	504	42 U.S.C. 16764.
	505	42 U.S.C. 16765.
	506	42 U.S.C. 16766.
	507	42 U.S.C. 16767.
	601	42 U.S.C. 16781.
	612	42 U.S.C. 16791.
	613	42 U.S.C. 16792.
	615	42 U.S.C. 16794.
	616	42 U.S.C. 16795.
	618	42 U.S.C. 16797.
	619(b)	42 U.S.C. 16798(b).
	621	42 U.S.C. 16811.
	707	42 U.S.C. 16821.
	708	42 U.S.C. 16822.
	709	42 U.S.C. 16823.
	821	42 U.S.C. 16841.
	822	42 U.S.C. 16842.
	823	42 U.S.C. 16843.
	824	42 U.S.C. 16844.
	825	42 U.S.C. 16845.

Schedule of Laws Repealed—Continued

Act	Section	United States Code
	826	42 U.S.C. 16846.
	827	42 U.S.C. 16847.
	828	42 U.S.C. 16848.
	829	42 U.S.C. 16849.
	830	42 U.S.C. 16850.

