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111TH CONGRESS
2^D SESSION

H. R. 3237

IN THE SENATE OF THE UNITED STATES

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Received; read twice and referred to the Committee on the Judiciary

MAY 10, 2010

Reported by Mr. LEAHY, without amendment

AN ACT

To enact certain laws relating to national and commercial space programs as title 51, United States Code, “National and Commercial Space Programs”.

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

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

2 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.

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

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

7 (b) CONFORMITY WITH ORIGINAL INTENT.—In the codification of laws
8 by this Act, the intent is to conform to the understood policy, intent, and
9 purpose of Congress in the original enactments, with such amendments and
10 corrections as will remove ambiguities, contradictions, and other imperfec-
11 tions, in accordance with section 205(c)(1) of House Resolution No. 988,
12 93d Congress, as enacted into law by Public Law 93–554 (2 U.S.C.
13 285b(1)).

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

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

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

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Subtitle I—General

2

CHAPTER 101—DEFINITIONS

Sec.

10101. Definitions.

3

§ 10101. Definitions

4

In this title:

5

(1) ADMINISTRATION.—The term “Administration” means the National Aeronautics and Space Administration.

6

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(2) ADMINISTRATOR.—The term “Administrator” means the Administrator of the National Aeronautics and Space Administration.

8

9

Subtitle II—General Program and Policy Provisions

10

11

CHAPTER 201—NATIONAL AERONAUTICS AND SPACE PROGRAM

12

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

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20102. Congressional declaration of policy and purpose.
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1 SUBCHAPTER I—SHORT TITLE, DECLARATION OF POLICY, AND
 2 DEFINITIONS

3 **§ 20101. Short title**

4 This chapter may be cited as the “National Aeronautics and Space Act”.

5 **§ 20102. Congressional declaration of policy and purpose**

6 (a) DEVOTION OF SPACE ACTIVITIES TO PEACEFUL PURPOSES FOR BEN-
 7 EFIT OF ALL HUMANKIND.—Congress declares that it is the policy of the
 8 United States that activities in space should be devoted to peaceful purposes
 9 for the benefit of all humankind.

10 (b) AERONAUTICAL AND SPACE ACTIVITIES FOR WELFARE AND SECU-
 11 RITY OF UNITED STATES.—Congress declares that the general welfare and
 12 security of the United States require that adequate provision be made for
 13 aeronautical and space activities. Congress further declares that such activi-
 14 ties shall be the responsibility of, and shall be directed by, a civilian agency
 15 exercising control over aeronautical and space activities sponsored by the
 16 United States, except that activities peculiar to or primarily associated with
 17 the development of weapons systems, military operations, or the defense of
 18 the United States (including the research and development necessary to
 19 make effective provision for the defense of the United States) shall be the

1 responsibility of, and shall be directed by, the Department of Defense; and
2 that determination as to which agency has responsibility for and direction
3 of any such activity shall be made by the President.

4 (e) COMMERCIAL USE OF SPACE.—Congress declares that the general
5 welfare of the United States requires that the Administration seek and en-
6 courage, to the maximum extent possible, the fullest commercial use of
7 space.

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

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

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

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

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

21 (5) The preservation of the role of the United States as a leader in
22 aeronautical and space science and technology and in the application
23 thereof to the conduct of peaceful activities within and outside the at-
24 mosphere.

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

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

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

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

40 (e) GROUND PROPULSION SYSTEMS RESEARCH AND DEVELOPMENT.—
41 Congress declares that the general welfare of the United States requires

1 that the unique competence in scientific and engineering systems of the Ad-
 2 ministration also be directed toward ground propulsion systems research
 3 and development. Such development shall be conducted so as to contribute
 4 to the objectives of developing energy and petroleum-conserving ground pro-
 5 pulsion systems, and of minimizing the environmental degradation caused
 6 by such systems.

7 (f) BIOENGINEERING RESEARCH, DEVELOPMENT, AND DEMONSTRATION
 8 PROGRAMS.—Congress declares that the general welfare of the United
 9 States requires that the unique competence of the Administration in science
 10 and engineering systems be directed to assisting in bioengineering research,
 11 development, and demonstration programs designed to alleviate and mini-
 12 mize the effects of disability.

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

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

21 § 20103. Definitions

22 In this chapter:

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

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

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

29 (C) the operation of a space transportation system including the
 30 space shuttle, upper stages, space platforms, and related equip-
 31 ment; and

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

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

SUBCHAPTER II—COORDINATION OF AERONAUTICAL AND
SPACE ACTIVITIES

§ 20111. National Aeronautics and Space Administration

(a) ESTABLISHMENT AND APPOINTMENT OF ADMINISTRATOR.—There is established the National Aeronautics and Space Administration. The Administration shall be headed by an Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate. Under the supervision and direction of the President, the Administrator shall be responsible for the exercise of all powers and the discharge of all duties of the Administration and shall have authority and control over all personnel and activities thereof.

(b) DEPUTY ADMINISTRATOR.—There shall be in the Administration a Deputy Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate. The Deputy Administrator shall perform such duties and exercise such powers as the Administrator may prescribe. The Deputy Administrator shall act for, and exercise the powers of, the Administrator during the Administrator's absence or disability.

(c) RESTRICTION ON OTHER BUSINESS OR EMPLOYMENT.—The Administrator and the Deputy Administrator shall not engage in any other business, vocation, or employment while serving as such.

§ 20112. Functions of the Administration

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

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

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

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

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

(5) encourage and provide for Federal Government use of commercially provided space services and hardware, consistent with the requirements of the Federal Government.

(b) RESEARCH AND DEVELOPMENT IN CERTAIN TECHNOLOGIES.—

(1) GROUND PROPULSION TECHNOLOGIES.—The Administration shall, to the extent of appropriated funds, initiate, support, and carry out such research, development, demonstration, and other related ac-

1 activities in ground propulsion technologies as are provided for in sections
2 4 to 10 of the Electric and Hybrid Vehicle Research, Development, and
3 Demonstration Act of 1976 (15 U.S.C. 2503 to 2509).

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

10 **§ 20113. Powers of the Administration in performance of**
11 **functions**

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

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

22 (1) to the extent the Administrator deems such action necessary to
23 the discharge of the Administrator’s responsibilities, the Administrator
24 may appoint not more than 425 of the scientific, engineering, and ad-
25 ministrative personnel of the Administration without regard to such
26 laws, and may fix the compensation of such personnel not in excess of
27 the rate of basic pay payable for level III of the Executive Schedule;
28 and

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

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

37 (1) to acquire (by purchase, lease, condemnation, or otherwise), con-
38 struct, improve, repair, operate, and maintain laboratories, research
39 and testing sites and facilities, aeronautical and space vehicles, quar-
40 ters and related accommodations for employees and dependents of em-
41 ployees of the Administration, and such other real and personal prop-

1 erty (including patents), or any interest therein, as the Administration
2 deems necessary within and outside the continental United States;

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

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

8 (4) to sell and otherwise dispose of real and personal property (in-
9 cluding patents and rights thereunder) in accordance with the provi-
10 sions of chapters 1 to 11 of title 40 and in accordance with title III
11 of the Federal Property and Administrative Services Act of 1949 (41
12 U.S.C. 251 et seq.); and

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

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

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

32 (f) COOPERATION WITH FEDERAL AGENCIES AND OTHERS.—In the per-
33 formance of its functions, the Administration is authorized to use, with their
34 consent, the services, equipment, personnel, and facilities of Federal and
35 other agencies with or without reimbursement, and on a similar basis to co-
36 operate with other public and private agencies and instrumentalities in the
37 use of services, equipment, and facilities. Each department and agency of
38 the Federal Government shall cooperate fully with the Administration in
39 making its services, equipment, personnel, and facilities available to the Ad-
40 ministration, and any such department or agency is authorized, notwith-
41 standing any other provision of law, to transfer to or to receive from the

1 Administration, without reimbursement, aeronautical and space vehicles,
2 and supplies and equipment other than administrative supplies or equip-
3 ment.

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

8 (h) OFFICES AND PROCEDURES.—In the performance of its functions, the
9 Administration is authorized to establish within the Administration such of-
10 fices and procedures as may be appropriate to provide for the greatest pos-
11 sible coordination of its activities under this chapter with related scientific
12 and other activities being carried on by other public and private agencies
13 and organizations.

14 (i) TEMPORARY OR INTERMITTENT SERVICES OF EXPERTS OR CONSULT-
15 ANTS.—In the performance of its functions, the Administration is author-
16 ized to obtain services as provided by section 3109 of title 5, but at rates
17 for individuals not to exceed the per diem rate equivalent to the maximum
18 rate payable under section 5376 of title 5.

19 (j) ALIENS.—In the performance of its functions, the Administration is
20 authorized, when determined by the Administrator to be necessary, and sub-
21 ject to such security investigations as the Administrator may determine to
22 be appropriate, to employ aliens without regard to statutory provisions pro-
23 hibiting payment of compensation to aliens.

24 (k) CONCESSIONS FOR VISITORS' FACILITIES.—

25 (1) IN GENERAL.—In the performance of its functions, the Adminis-
26 tration is authorized to provide by concession, without regard to section
27 1302 of title 40, on such terms as the Administrator may deem to be
28 appropriate and necessary to protect the concessioner against loss of
29 the concessioner's investment in property (but not anticipated profits)
30 resulting from the Administration's discretionary acts and decisions,
31 for the construction, maintenance, and operation of all manner of facili-
32 ties and equipment for visitors to the several installations of the Ad-
33 ministration and, in connection therewith, to provide services incident
34 to the dissemination of information concerning its activities to such
35 visitors, without charge or with a reasonable charge therefor (with this
36 authority being in addition to any other authority that the Administra-
37 tion may have to provide facilities, equipment, and services for visitors
38 to its installations).

39 (2) PUBLIC NOTICE AND DUE CONSIDERATION OF PROPOSALS.—A
40 concession agreement under this subsection may be negotiated with any

1 qualified proposer following due consideration of all proposals received
2 after reasonable public notice of the intention to contract.

3 (3) REASONABLE OPPORTUNITY FOR PROFIT.—The concessioner
4 shall be afforded a reasonable opportunity to make a profit commensu-
5 rate with the capital invested and the obligations assumed. The consid-
6 eration paid by the concessioner for the concession shall be based on
7 the probable value of the opportunity and not on maximizing revenue
8 to the United States.

9 (4) RECORDS AND ACCESS TO RECORDS.—Each concession agree-
10 ment shall specify the manner in which the concessioner's records are
11 to be maintained, and shall provide for access to the records by the
12 Administration and the Comptroller General of the United States for
13 a period of 5 years after the close of the business year to which the
14 records relate.

15 (5) POSSESSORY INTERESTS.—A concessioner may be accorded a
16 possessory interest, consisting of all incidents of ownership except legal
17 title (which shall vest in the United States), in any structure, fixture,
18 or improvement the concessioner constructs or locates upon land owned
19 by the United States. With the approval of the Administration, such
20 possessory interest may be assigned, transferred, encumbered, or relin-
21 quished by the concessioner, and, unless otherwise provided by con-
22 tract, shall not be extinguished by the expiration or other termination
23 of the concession and may not be taken for public use without just
24 compensation.

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

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

34 (1) to consider, ascertain, adjust, determine, settle, and pay, on be-
35 half of the United States, in full satisfaction thereof, any claim for
36 \$25,000 or less against the United States for bodily injury, death, or
37 damage to or loss of real or personal property resulting from the con-
38 duct of the Administration's functions as specified in section 20112(a)
39 of this title, where such claim is presented to the Administration in
40 writing within 2 years after the accident or incident out of which the
41 claim arises; and

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

4 **§ 20114. Administration and Department of Defense coordi-**
5 **nation**

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

11 (b) REFERRAL TO THE PRESIDENT.—If the Secretary of Defense con-
12 cludes that any request, action, proposed action, or failure to act on the
13 part of the Administrator is adverse to the responsibilities of the Depart-
14 ment of Defense, or the Administrator concludes that any request, action,
15 proposed action, or failure to act on the part of the Department of Defense
16 is adverse to the responsibilities of the Administration, and the Adminis-
17 trator and the Secretary of Defense are unable to reach an agreement with
18 respect to the matter, either the Administrator or the Secretary of Defense
19 may refer the matter to the President for a decision (which shall be final).

20 **§ 20115. International cooperation**

21 The Administration, under the foreign policy guidance of the President,
22 may engage in a program of international cooperation in work done pursu-
23 ant to this chapter, and in the peaceful application of the results thereof,
24 pursuant to agreements made by the President with the advice and consent
25 of the Senate.

26 **§ 20116. Reports to Congress**

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

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

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

35 (b) RECOMMENDATIONS FOR ADDITIONAL LEGISLATION.—Any report
36 made under this section shall contain such recommendations for additional
37 legislation as the Administrator or the President may consider necessary or
38 desirable for the attainment of the objectives described in section 20102(d)
39 of this title.

40 (c) CLASSIFIED INFORMATION.—No information that has been classified
41 for reasons of national security shall be included in any report made under

1 this section, unless the information has been declassified by, or pursuant to
2 authorization given by, the President.

3 **§ 20117. Disposal of excess land**

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

9 (1) a period of 30 days has passed after the receipt by the Speaker
10 and the Committee on Science and Technology of the House of Rep-
11 resentatives and the President and the Committee on Commerce,
12 Science, and Transportation of the Senate of a report by the Adminis-
13 trator or the Administrator’s designee containing a full and complete
14 statement of the action proposed to be taken and the facts and cir-
15 cumstances relied upon in support of such action; or

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

19 SUBCHAPTER III—GENERAL ADMINISTRATIVE PROVISIONS

20 **§ 20131. Public access to information**

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

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

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

26 (3) described in subsection (b).

27 (b) SPECIAL HANDLING OF TRADE SECRET OR CONFIDENTIAL INFORMA-
28 TION.—

29 (1) IN GENERAL.—The Administrator, for a period of up to 5 years
30 after the development of information described in paragraph (2), may
31 provide appropriate protections against the dissemination of such infor-
32 mation, including exemption from subchapter II of chapter 5 of title
33 5.

34 (2) INFORMATION DESCRIBED.—Information referred to in para-
35 graph (1) is information that results from activities conducted under
36 an agreement entered into under subsections (e) and (f) of section
37 20113 of this title, and that would be a trade secret or commercial or
38 financial information that is privileged or confidential under the mean-
39 ing of section 552(b)(4) of title 5 if the information had been obtained
40 from a non-Federal party participating in such an agreement.

1 (e) COMMITTEES OF CONGRESS.—Nothing in this chapter authorizes the
2 withholding of information by the Administrator from the duly authorized
3 committees of Congress.

4 **§ 20132. Security requirements**

5 The Administrator shall establish such security requirements, restrictions,
6 and safeguards as the Administrator deems necessary in the interest of the
7 national security. The Administrator may arrange with the Director of the
8 Office of Personnel Management for the conduct of such security or other
9 personnel investigations of the Administration's officers, employees, and
10 consultants, and its contractors and subcontractors and their officers and
11 employees, actual or prospective, as the Administrator deems appropriate.
12 If any such investigation develops any data reflecting that the individual
13 who is the subject of the investigation is of questionable loyalty, the matter
14 shall be referred to the Federal Bureau of Investigation for the conduct of
15 a full field investigation, the results of which shall be furnished to the Ad-
16 ministrator.

17 **§ 20133. Permission to carry firearms**

18 As the Administrator deems necessary in the public interest, the Adminis-
19 trator may—

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

22 (2) authorize employees of contractors and subcontractors of the Ad-
23 ministration who are engaged in the protection of property owned by
24 the United States, and located at facilities owned by or contracted to
25 the United States, to carry firearms while in the conduct of their offi-
26 cial duties.

27 **§ 20134. Arrest authority**

28 Under regulations prescribed by the Administrator and approved by the
29 Attorney General, employees of the Administration and of its contractors
30 and subcontractors authorized to carry firearms under section 20133 of this
31 title may arrest without warrant for any offense against the United States
32 committed in their presence, or for any felony cognizable under the laws of
33 the United States if they have reasonable grounds to believe that the person
34 to be arrested has committed or is committing such felony. Persons granted
35 authority to make arrests by this section may exercise that authority only
36 while guarding and protecting property owned or leased by, or under the
37 control of, the United States under the administration and control of the
38 Administration or one of its contractors or subcontractors, at facilities
39 owned by or contracted to the Administration.

40 **§ 20135. Property rights in inventions**

41 (a) DEFINITIONS.—In this section:

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

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

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

10 (b) EXCLUSIVE PROPERTY OF UNITED STATES.—

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

15 (A) the person who made the invention was employed or as-
16 signed to perform research, development, or exploration work and
17 the invention is related to the work the person was employed or
18 assigned to perform, or was within the scope of the person’s em-
19 ployment duties, whether or not it was made during working
20 hours, or with a contribution by the Government of the use of
21 Government facilities, equipment, materials, allocated funds, infor-
22 mation proprietary to the Government, or services of Government
23 employees during working hours; or

24 (B) the person who made the invention was not employed or as-
25 signed to perform research, development, or exploration work, but
26 the invention is nevertheless related to the contract, or to the work
27 or duties the person was employed or assigned to perform, and
28 was made during working hours, or with a contribution from the
29 Government of the sort referred to in subparagraph (A).

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

36 (c) CONTRACT PROVISIONS FOR FURNISHING REPORTS OF INVENTIONS,
37 DISCOVERIES, IMPROVEMENTS, OR INNOVATIONS.—Each contract entered
38 into by the Administrator with any party for the performance of any work
39 shall contain effective provisions under which the party shall furnish
40 promptly to the Administrator a written report containing full and complete

1 technical information concerning any invention, discovery, improvement, or
2 innovation which may be made in the performance of any such work.

3 (d) PATENT APPLICATION.—No patent may be issued to any applicant
4 other than the Administrator for any invention which appears to the Under
5 Secretary of Commerce for Intellectual Property and Director of the United
6 States Patent and Trademark Office (hereafter in this section referred to
7 as the “Director”) to have significant utility in the conduct of aeronautical
8 and space activities unless the applicant files with the Director, with the ap-
9 plication or within 30 days after request therefor by the Director, a written
10 statement executed under oath setting forth the full facts concerning the
11 circumstances under which the invention was made and stating the relation-
12 ship (if any) of the invention to the performance of any work under any
13 contract of the Administration. Copies of each such statement and the appli-
14 cation to which it relates shall be transmitted forthwith by the Director to
15 the Administrator.

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

33 (f) SUBSEQUENT TRANSFER OF PATENT IN CASE OF FALSE REPRESENTA-
34 TIONS.—Whenever a patent has been issued to an applicant in conformity
35 with subsection (e), and the Administrator thereafter has reason to believe
36 that the statement filed by the applicant in connection with the patent con-
37 tained a false representation of a material fact, the Administrator, within
38 5 years after the date of issuance of the patent, may file with the Director
39 a request for the transfer to the Administrator of title to the patent on the
40 records of the Director. Notice of any such request shall be transmitted by
41 the Director to the owner of record of the patent, and title to the patent

1 shall be so transferred to the Administrator unless, within 30 days after re-
2 ceipt of notice, the owner of record requests a hearing before the Board of
3 Patent Appeals and Interferences on the question whether any such false
4 representation was contained in the statement filed in connection with the
5 patent. The question shall be heard and determined, and the determination
6 shall be subject to review, in the manner prescribed by subsection (e) for
7 questions arising thereunder. A request made by the Administrator under
8 this subsection for the transfer of title to a patent, and prosecution for the
9 violation of any criminal statute, shall not be barred by the failure of the
10 Administrator to make a request under subsection (e) for the issuance of
11 the patent to the Administrator, or by any notice previously given by the
12 Administrator stating that the Administrator had no objection to the
13 issuance of the patent to the applicant.

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

35 (h) PROTECTION OF TITLE.—The Administrator is authorized to take all
36 suitable and necessary steps to protect any invention or discovery to which
37 the Administrator has title, and to require contractors or persons who retain
38 title to inventions or discoveries under this section to protect the inventions
39 or discoveries to which the Administration has or may acquire a license of
40 use.

1 (i) ADMINISTRATION AS DEFENSE AGENCY.—The Administration shall be
2 considered a defense agency of the United States for the purpose of chapter
3 17 of title 35.

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

8 (k) USE OR MANUFACTURE OF PATENTED INVENTIONS INCORPORATED
9 IN SPACE VEHICLES LAUNCHED FOR PERSONS OTHER THAN UNITED
10 STATES.—The use or manufacture of any patented invention incorporated
11 in a space vehicle launched by the United States Government for a person
12 other than the United States shall not be considered to be a use or manu-
13 facture by or for the United States within the meaning of section 1498(a)
14 of title 28, unless the Administration gives an express authorization or con-
15 sent for such use or manufacture.

16 **§ 20136. Contributions awards**

17 (a) APPLICATIONS.—Subject to the provisions of this section, the Admin-
18 istrator is authorized, on the Administrator’s own initiative or on applica-
19 tion of any person, to make a monetary award, in an amount and on terms
20 the Administrator determines to be warranted, to any person (as defined by
21 section 20135(a) of this title) for any scientific or technical contribution to
22 the Administration which is determined by the Administrator to have sig-
23 nificant value in the conduct of aeronautical and space activities. Each ap-
24 plication made for such an award shall be referred to the Inventions and
25 Contributions Board established under section 20135 of this title. Such
26 Board shall accord to each applicant an opportunity for hearing on the ap-
27 plication, and shall transmit to the Administrator its recommendation as to
28 the terms of the award, if any, to be made to the applicant for the contribu-
29 tion. In determining the terms and conditions of an award the Adminis-
30 trator shall take into account—

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

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

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

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

39 (b) APPORTIONMENT OF AWARDS.—If more than one applicant under
40 subsection (a) claims an interest in the same contribution, the Adminis-
41 trator shall ascertain and determine the respective interests of the appli-

1 cants, and shall apportion any award to be made among the applicants in
2 amounts the Administrator determines to be equitable.

3 (c) SURRENDER OF OTHER CLAIMS.—No award may be made under sub-
4 section (a) unless the applicant surrenders, by means the Administrator de-
5 termines to be effective, all claims that the applicant may have to receive
6 any compensation (other than the award made under this section) for the
7 use of the contribution or any element thereof at any time by or on behalf
8 of the United States, or by or on behalf of any foreign government pursuant
9 to a treaty or agreement with the United States, within the United States
10 or at any other place.

11 (d) REPORT AND WAITING PERIOD.—No award may be made under sub-
12 section (a) in an amount exceeding \$100,000 unless the Administrator
13 transmits to the appropriate committees of Congress a full and complete re-
14 port concerning the amount and terms of, and the basis for, the proposed
15 award, and a period of 30 calendar days of regular session of Congress ex-
16 pires after receipt of the report by the committees.

17 **§ 20137. Malpractice and negligence suits against United**
18 **States**

19 (a) EXCLUSIVE REMEDY.—The remedy against the United States pro-
20 vided by sections 1346(b) and 2672 of title 28, for damages for personal
21 injury, including death, caused by the negligent or wrongful act or omission
22 of any physician, dentist, nurse, pharmacist, or paramedical or other sup-
23 porting personnel (including medical and dental technicians, nursing assist-
24 ants, and therapists) of the Administration in the performance of medical,
25 dental, or related health care functions (including clinical studies and inves-
26 tigation) while acting within the scope of such person's duties or employ-
27 ment therein or therefor shall be exclusive of any other civil action or pro-
28 ceeding by reason of the same subject matter against such person (or the
29 estate of such person) whose act or omission gave rise to the action or pro-
30 ceeding.

31 (b) ATTORNEY GENERAL TO DEFEND ANY CIVIL ACTION OR PRO-
32 CEEDING FOR MALPRACTICE OR NEGLIGENCE.—The Attorney General shall
33 defend any civil action or proceeding brought in any court against any per-
34 son referred to in subsection (a) (or the estate of such person) for any such
35 injury. Any such person against whom such civil action or proceeding is
36 brought shall deliver within such time after date of service or knowledge of
37 service as determined by the Attorney General, all process served upon such
38 person or an attested true copy thereof to such person's immediate superior
39 or to whomever was designated by the Administrator to receive such papers.
40 Such person shall promptly furnish copies of the pleading and process there-
41 in to the United States Attorney for the district embracing the place where-

1 in the proceeding is brought, to the Attorney General, and to the Adminis-
2 trator.

3 (c) REMOVAL OF ACTIONS.—Upon a certification by the Attorney General
4 that any person described in subsection (a) was acting in the scope of such
5 person’s duties or employment at the time of the incident out of which the
6 suit arose, any such civil action or proceeding commenced in a State court
7 shall be removed without bond at any time before trial by the Attorney Gen-
8 eral to the district court of the United States of the district and division
9 embracing the place wherein it is pending and the proceeding deemed a tort
10 action brought against the United States under the provisions of title 28,
11 and all references thereto. Should a district court of the United States de-
12 termine, on a hearing on a motion to remand held before a trial on the mer-
13 its, that the case so removed is one in which a remedy by suit within the
14 meaning of subsection (a) is not available against the United States, the
15 case shall be remanded to the State court.

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

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

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

38 **§ 20138. Insurance and indemnification**

39 (a) DEFINITIONS.—In this section:

40 (1) SPACE VEHICLE.—The term “space vehicle” means an object in-
41 tended for launch, launched, or assembled in outer space, including the

1 space shuttle and other components of a space transportation system,
2 together with related equipment, devices, components, and parts.

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

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

10 (b) AUTHORIZATION.—The Administration is authorized on such terms
11 and to the extent it may deem appropriate to provide liability insurance for
12 any user of a space vehicle to compensate all or a portion of claims by third
13 parties for death, bodily injury, or loss of or damage to property resulting
14 from activities carried on in connection with the launch, operations, or re-
15 covery of the space vehicle. Appropriations available to the Administration
16 may be used to acquire such insurance, but such appropriations shall be re-
17 imbursement to the maximum extent practicable by the users under reimburse-
18 ment policies established pursuant to section 20113 of this title.

19 (c) INDEMNIFICATION.—Under such regulations in conformity with this
20 section as the Administrator shall prescribe taking into account the avail-
21 ability, cost, and terms of liability insurance, any agreement between the
22 Administration and a user of a space vehicle may provide that the United
23 States will indemnify the user against claims (including reasonable expenses
24 of litigation or settlement) by third parties for death, bodily injury, or loss
25 of or damage to property resulting from activities carried on in connection
26 with the launch, operations, or recovery of the space vehicle, but only to the
27 extent that such claims are not compensated by liability insurance of the
28 user. Such indemnification may be limited to claims resulting from other
29 than the actual negligence or willful misconduct of the user.

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

32 (1) notice to the United States of any claim or suit against the user
33 for the death, bodily injury, or loss of or damage to the property; and

34 (2) control of or assistance in the defense by the United States, at
35 its election, of that suit or claim.

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

39 (f) PAYMENTS.—Upon the approval by the Administrator, payments
40 under subsection (c) may be made, at the Administrator’s election, either

1 from funds available for research and development not otherwise obligated
 2 or from funds appropriated for such payments.

3 **§ 20139. Insurance for experimental aerospace vehicles**

4 (a) DEFINITIONS.—In this section:

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

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

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

14 (B) owns or provides property to be flown or situated on that
 15 vehicle; or

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

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

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

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

29 (c) TERMS AND CONDITIONS.—

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

35 (2) INSURANCE.—

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

39 (i) a third party for death, bodily injury, or property dam-
 40 age, or loss resulting from an activity carried out in connec-

1 tion with the development or use of an experimental aero-
2 space vehicle; and

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

5 (B) MAXIMUM REQUIRED.—The Administrator shall determine
6 the amount of insurance required, but, except as provided in sub-
7 paragraph (C), that amount shall not be greater than the amount
8 required under section 50914(a)(3) of this title for a launch. The
9 Administrator shall publish notice of the Administrator’s deter-
10 mination and the applicable amount or amounts in the Federal
11 Register within 10 days after making the determination.

12 (C) INCREASE IN DOLLAR AMOUNTS.—The Administrator may
13 increase the dollar amounts set forth in section 50914(a)(3)(A) of
14 this title for the purpose of applying that section under this sec-
15 tion to a developer after consultation with the Comptroller General
16 and such experts and consultants as may be appropriate, and after
17 publishing notice of the increase in the Federal Register not less
18 than 180 days before the increase goes into effect. The Adminis-
19 trator shall make available for public inspection, not later than the
20 date of publication of such notice, a complete record of any cor-
21 respondence received by the Administration, and a transcript of
22 any meetings in which the Administration participated, regarding
23 the proposed increase.

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

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

35 (4) APPLICATION OF CERTAIN PROCEDURES.—If the Administrator
36 requests additional appropriations to make payments under this sec-
37 tion, like the payments that may be made under section 20138(c) of
38 this title, then the request for those appropriations shall be made in
39 accordance with the procedures established by subsections (d) and (e)
40 of section 50915 of this title.

41 (d) CROSS-WAIVERS.—

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

11 (2) LIMITATIONS.—

12 (A) CLAIMS.—A reciprocal waiver under paragraph (1) may not
13 preclude a claim by any natural person (including, but not limited
14 to, a natural person who is an employee of the United States, the
15 developer, the cooperating party, or their respective subcontractors
16 or that natural person’s estate, survivors, or subrogees for
17 injury or death, except with respect to a subrogee that is a party
18 to the waiver or has otherwise agreed to be bound by the terms
19 of the waiver.

20 (B) LIABILITY FOR NEGLIGENCE.—A reciprocal waiver under
21 paragraph (1) may not absolve any party of liability to any nat-
22 ural person (including, but not limited to, a natural person who
23 is an employee of the United States, the developer, the cooperating
24 party, or their respective subcontractors) or such a natural per-
25 son’s estate, survivors, or subrogees for negligence, except with re-
26 spect to a subrogee that is a party to the waiver or has otherwise
27 agreed to be bound by the terms of the waiver.

28 (C) INDEMNIFICATION FOR DAMAGES.—A reciprocal waiver
29 under paragraph (1) may not be used as the basis of a claim by
30 the Administration, or the developer or cooperating party, for in-
31 demnification against the other for damages paid to a natural per-
32 son, or that natural person’s estate, survivors, or subrogees, for
33 injury or death sustained by that natural person as a result of ac-
34 tivities connected to the agreement or use of the experimental
35 aerospace vehicle.

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

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

4 (e) RELATIONSHIP TO OTHER LAWS.—

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

7 (2) SECTION 50919(g)(1).—The Administrator may not provide indem-
 8 nification to a developer under this section for launches subject to li-
 9 cense under section 50919(g)(1) of this title.

10 (f) TERMINATION.—

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

13 (2) EFFECT OF TERMINATION ON AGREEMENT.—The termination of
 14 this section shall not terminate or otherwise affect any cross-waiver
 15 agreement, insurance agreement, indemnification agreement, or other
 16 agreement entered into under this section, except as may be provided
 17 in that agreement.

18 **§ 20140. Appropriations**

19 (a) AUTHORIZATION.—

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

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

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

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

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

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

1 **§ 20141. Misuse of agency name and initials**

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

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

11 (2) in connection with any product or service being offered or made
12 available to the public in a manner reasonably calculated to convey the
13 impression that the product or service has the authorization, support,
14 sponsorship, or endorsement of, or the development, use, or manufac-
15 ture by or on behalf of the Administration which does not, in fact,
16 exist.

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

22 **§ 20142. Contracts regarding expendable launch vehicles**

23 (a) COMMITMENTS BEYOND AVAILABLE APPROPRIATIONS.—The Admin-
24 istrator may enter into contracts for expendable launch vehicle services that
25 are for periods in excess of the period for which funds are otherwise avail-
26 able for obligation, provide for the payment for contingent liability which
27 may accrue in excess of available appropriations in the event the Federal
28 Government for its convenience terminates such contracts, and provide for
29 advance payments reasonably related to launch vehicle and related equip-
30 ment, fabrication, and acquisition costs, if any such contract limits the
31 amount of the payments that the Government is allowed to make under
32 such contract to amounts provided in advance in appropriation Acts. Such
33 contracts may be limited to sources within the United States when the Ad-
34 ministrator determines that such limitation is in the public interest.

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

1 **§ 20143. Full cost appropriations account structure**

2 (a) ACCOUNTS FOR APPROPRIATIONS.—

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

8 (2) REPROGRAMMING.—Within the Exploration Systems and Space
9 Operations account, no more than 10 percent of the funds for a fiscal
10 year for Exploration Systems may be reprogrammed for Space Oper-
11 ations, and no more than 10 percent of the funds for a fiscal year for
12 Space Operations may be reprogrammed for Exploration Systems. This
13 paragraph shall not apply to reprogramming for the purposes described
14 in subsection (b)(2).

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

18 (b) TRANSFERS AMONG ACCOUNTS.—

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

22 (A) Federal salaries and benefits;

23 (B) training, travel, and awards;

24 (C) facility and related costs;

25 (D) information technology services;

26 (E) publishing services;

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

28 (G) other administrative services.

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

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

1 **§ 20144. Prize authority**

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

8 (b) TOPICS.—In selecting topics for prize competitions, the Administrator
9 shall consult widely both within and outside the Federal Government, and
10 may empanel advisory committees. The Administrator shall give consider-
11 ation to prize goals such as the demonstration of the ability to provide en-
12 ergy to the lunar surface from space-based solar power systems, demonstra-
13 tion of innovative near-Earth object survey and deflection strategies, and in-
14 novative approaches to improving the safety and efficiency of aviation sys-
15 tems.

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

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

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

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

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

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

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

34 (f) LIABILITY.—

35 (1) ASSUMPTION OF RISK.—Registered participants must agree to
36 assume any and all risks and waive claims against the Federal Govern-
37 ment and its related entities, except in the case of willful misconduct,
38 for any injury, death, damage, or loss of property, revenue, or profits,
39 whether direct, indirect, or consequential, arising from their participa-
40 tion in a competition, whether such injury, death, damage, or loss
41 arises through negligence or otherwise. For the purposes of this para-

1 graph, the term “related entity” means a contractor or subcontractor
2 at any tier, and a supplier, user, customer, cooperating party, grantee,
3 investigator, or detailee.

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

7 (A) a third party for death, bodily injury, or property damage,
8 or loss resulting from an activity carried out in connection with
9 participation in a competition, with the Federal Government
10 named as an additional insured under the registered participant’s
11 insurance policy and registered participants agreeing to indemnify
12 the Federal Government against third party claims for damages
13 arising from or related to competition activities; and

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

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

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

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

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

30 (i) FUNDING.—

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

36 (2) AVAILABILITY.—

37 (A) DEFINITION OF PROVISIONS KNOWN AS THE ANTI-DEFI-
38 CIENCY ACT.—In this paragraph, the term “provisions known as
39 the Anti-Deficiency Act” means sections 1341, 1342, 1349(a),
40 1350, 1351, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518,
41 and 1519 of title 31.

1 (B) IN GENERAL.—Notwithstanding any other provision of law,
 2 funds appropriated for prize awards under this section shall re-
 3 main available until expended, and may be transferred, repro-
 4 grammed, or expended for other purposes only after the expiration
 5 of 10 fiscal years after the fiscal year for which the funds were
 6 originally appropriated. No provision in this section permits obli-
 7 gation or payment of funds in violation of the provisions known
 8 as the Anti-Deficiency Act.

9 (3) APPROPRIATION OR COMMITMENT OF FUNDS REQUIRED BEFORE
 10 ANNOUNCEMENT OF PRIZE OR INCREASE.—

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

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

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

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

23 (4) NOTICE TO COMMITTEES FOR PRIZE GREATER THAN
 24 \$50,000,000.—No prize competition under this section may offer a prize
 25 in an amount greater than \$50,000,000 unless 30 days have elapsed
 26 after written notice has been transmitted to the Committee on Science
 27 and Technology of the House of Representatives and the Committee on
 28 Commerce, Science, and Transportation of the Senate.

29 (5) APPROVAL OF ADMINISTRATOR FOR PRIZE GREATER THAN
 30 \$1,000,000.—No prize competition under this section may result in the
 31 award of more than \$1,000,000 in cash prizes without the approval of
 32 the Administrator.

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

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

1 **§ 20145. Lease of non-excess property**

2 (a) IN GENERAL.—The Administrator may enter into a lease under this
3 section with any person or entity (including another department or agency
4 of the Federal Government or an entity of a State or local government) with
5 regard to any non-excess real property and related personal property under
6 the jurisdiction of the Administrator.

7 (b) CASH CONSIDERATION.—

8 (1) FAIR MARKET VALUE.—A person or entity entering into a lease
9 under this section shall provide cash consideration for the lease at fair
10 market value as determined by the Administrator.

11 (2) UTILIZATION.—

12 (A) IN GENERAL.—The Administrator may utilize amounts of
13 cash consideration received under this subsection for a lease en-
14 tered into under this section to cover the full costs to the Adminis-
15 tration in connection with the lease. These funds shall remain
16 available until expended.

17 (B) CAPITAL REVITALIZATION AND IMPROVEMENTS.—Of any
18 amounts of cash consideration received under this subsection that
19 are not utilized in accordance with subparagraph (A)—

20 (i) 35 percent shall be deposited in a capital asset account
21 to be established by the Administrator, shall be available for
22 maintenance, capital revitalization, and improvements of the
23 real property assets and related personal property under the
24 jurisdiction of the Administrator, and shall remain available
25 until expended; and

26 (ii) the remaining 65 percent shall be available to the re-
27 spective center or facility of the Administration engaged in
28 the lease of nonexcess real property, and shall remain avail-
29 able until expended for maintenance, capital revitalization,
30 and improvements of the real property assets and related per-
31 sonal property at the respective center or facility subject to
32 the concurrence of the Administrator.

33 (C) NO UTILIZATION FOR DAILY OPERATING COSTS.—Amounts
34 utilized under subparagraph (B) may not be utilized for daily op-
35 erating costs.

36 (c) ADDITIONAL TERMS AND CONDITIONS.—The Administrator may re-
37 quire such terms and conditions in connection with a lease under this sec-
38 tion as the Administrator considers appropriate to protect the interests of
39 the United States.

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

4 (e) LEASE RESTRICTIONS.—

5 (1) NO LEASE BACK OR OTHER CONTRACT.—The Administration is
 6 not authorized to lease back property under this section during the
 7 term of the out-lease or enter into other contracts with the lessee re-
 8 specting the property.

9 (2) CERTIFICATION THAT OUT-LEASE WILL NOT HAVE NEGATIVE IM-
 10 PACT ON MISSION.—The Administration is not authorized to enter into
 11 an out-lease under this section unless the Administrator certifies that
 12 the out-lease will not have a negative impact on the mission of the Ad-
 13 ministration.

14 (f) REPORTING REQUIREMENTS.—The Administrator shall submit an an-
 15 nual report by January 31st of each year. The report shall include the fol-
 16 lowing:

17 (1) VALUE OF ARRANGEMENTS AND EXPENDITURES OF REVE-
 18 NUES.—Information that identifies and quantifies the value of the ar-
 19 rangements and expenditures of revenues received under this section.

20 (2) AVAILABILITY AND USE OF FUNDS FOR OPERATING PLAN.—The
 21 availability and use of funds received under this section for the Admin-
 22 istration's operating plan.

23 (g) SUNSET.—The authority to enter into leases under this section shall
 24 expire 10 years after December 26, 2007. The expiration under this sub-
 25 section of authority to enter into leases under this section shall not affect
 26 the validity or term of leases or the Administration's retention of proceeds
 27 from leases entered into under this section before the expiration of the au-
 28 thority.

29 **§ 20146. Retrocession of jurisdiction**

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

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

39 **§ 20147. Recovery and disposition authority**

40 (a) DEFINITIONS.—In this section:

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

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

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

6 (C) is either—

7 (i) owned by the Administration; or

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

11 (2) CREWMEMBER.—The term “crewmember” means an astronaut
12 or other person assigned to an Administration human space flight vehi-
13 cle.

14 (b) CONTROL OF REMAINS.—

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

20 (2) TREATMENT.—Each crewmember shall provide the Adminis-
21 trator with the crewmember’s preferences regarding the treatment ac-
22 cording to the crewmember’s remains and the Administrator shall, to
23 the extent possible, respect those stated preferences.

24 (3) CONSTRUCTION.—This section shall not be construed to permit
25 the Administrator to interfere with any Federal investigation of a mis-
26 hap or accident.

27 SUBCHAPTER IV—UPPER ATMOSPHERE RESEARCH

28 **§ 20161. Congressional declaration of purpose and policy**

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

34 (b) POLICY.—Congress declares that it is the policy of the United States
35 to undertake an immediate and appropriate research, technology, and moni-
36 toring program that will provide for understanding the physics and chem-
37 istry of the Earth’s upper atmosphere.

38 **§ 20162. Definition of upper atmosphere**

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

1 **§ 20163. Program authorized**

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

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

9 (1) arrange for participation by the scientific and engineering com-
10 munity, of both the Nation’s industrial organizations and institutions
11 of higher education, in planning and carrying out appropriate research,
12 in developing necessary technology, and in making necessary observa-
13 tions and measurements;

14 (2) provide, by way of grant, contract, scholarships, or other ar-
15 rangements, to the maximum extent practicable and consistent with
16 other laws, for the widest practicable and appropriate participation of
17 the scientific and engineering community in the program authorized by
18 this subchapter; and

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

22 **§ 20164. International cooperation**

23 In carrying out the provisions of this subchapter, the Administration, sub-
24 ject to the direction of the President and after consultation with the Sec-
25 retary of State, shall make every effort to enlist the support and cooperation
26 of appropriate scientists and engineers of other countries and international
27 organizations.

28 **CHAPTER 203—RESPONSIBILITIES AND VISION**

Sec.

20301. General responsibilities.

20302. Vision for space exploration.

20303. Contribution to innovation.

20304. Basic research enhancement.

20305. National Academies decadal surveys.

29 **§ 20301. General responsibilities**

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

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

35 (2) aeronautics research and development; and

36 (3) scientific research, which shall include, at a minimum—

1 (A) robotic missions to study the Moon and other planets and
 2 their moons, and to deepen understanding of astronomy, astro-
 3 physics, and other areas of science that can be productively stud-
 4 ied from space;

5 (B) Earth science research and research on the Sun-Earth con-
 6 nection through the development and operation of research sat-
 7 ellites and other means;

8 (C) support of university research in space science, Earth
 9 science, and microgravity science; and

10 (D) research on microgravity, including research that is not di-
 11 rectly related to human exploration.

12 (b) CONSULTATION AND COORDINATION.—In carrying out the programs
 13 of the Administration, the Administrator shall—

14 (1) consult and coordinate to the extent appropriate with other rel-
 15 evant Federal agencies, including through the National Science and
 16 Technology Council;

17 (2) work closely with the private sector, including by—

18 (A) encouraging the work of entrepreneurs who are seeking to
 19 develop new means to launch satellites, crew, or cargo;

20 (B) contracting with the private sector for crew and cargo serv-
 21 ices, including to the International Space Station, to the extent
 22 practicable;

23 (C) using commercially available products (including software)
 24 and services to the extent practicable to support all Administration
 25 activities; and

26 (D) encouraging commercial use and development of space to
 27 the greatest extent practicable; and

28 (3) involve other nations to the extent appropriate.

29 **§ 20302. Vision for space exploration**

30 (a) IN GENERAL.—The Administrator shall establish a program to de-
 31 velop a sustained human presence on the Moon, including a robust pre-
 32 cursor program, to promote exploration, science, commerce, and United
 33 States preeminence in space, and as a stepping-stone to future exploration
 34 of Mars and other destinations. The Administrator is further authorized to
 35 develop and conduct appropriate international collaborations in pursuit of
 36 these goals.

37 (b) MILESTONES.—The Administrator shall manage human space flight
 38 programs to strive to achieve the following milestones (in conformity with
 39 section 70502 of this title):

40 (1) Returning Americans to the Moon no later than 2020.

1 (2) Launching the Crew Exploration Vehicle as close to 2010 as possible.
2

3 (3) Increasing knowledge of the impacts of long duration stays in
4 space on the human body using the most appropriate facilities available,
5 including the International Space Station.

6 (4) Enabling humans to land on and return from Mars and other
7 destinations on a timetable that is technically and fiscally possible.

8 **§ 20303. Contribution to innovation**

9 (a) PARTICIPATION IN INTERAGENCY ACTIVITIES.—The Administration
10 shall be a full participant in any interagency effort to promote innovation
11 and economic competitiveness through near-term and long-term basic scientific
12 research and development and the promotion of science, technology,
13 engineering, and mathematics education, consistent with the Administration’s
14 mission, including authorized activities.

15 (b) HISTORIC FOUNDATION.—In order to carry out the participation described
16 in subsection (a), the Administrator shall build on the historic role of the
17 Administration in stimulating excellence in the advancement of physical science
18 and engineering disciplines and in providing opportunities and incentives for
19 the pursuit of academic studies in science, technology, engineering, and
20 mathematics.

21 (c) BALANCED SCIENCE PROGRAM AND ROBUST AUTHORIZATION LEVELS.—The
22 balanced science program authorized by section 101(d) of the National Aeronautics
23 and Space Administration Authorization Act of 2005 (42 U.S.C. 16611(d)) shall be
24 an element of the contribution by the Administration to the interagency programs.
25

26 (d) ANNUAL REPORT.—

27 (1) REQUIREMENT.—The Administrator shall submit to Congress
28 and the President an annual report describing the activities conducted pursuant
29 to this section, including a description of the goals and the objective metrics
30 upon which funding decisions were made.

31 (2) CONTENT.—Each report submitted pursuant to paragraph (1) shall
32 include, with regard to science, technology, engineering, and mathematics
33 education programs, at a minimum, the following:

34 (A) A description of each program.

35 (B) The amount spent on each program.

36 (C) The number of students or teachers served by each program.
37

38 **§ 20304. Basic research enhancement**

39 (a) DEFINITION OF BASIC RESEARCH.—In this section, the term “basic
40 research” has the meaning given the term in Office of Management and
41 Budget Circular No. A–11.

(b) COORDINATION.—The Administrator, the Director of the National Science Foundation, the Secretary of Energy, the Secretary of Defense, and the Secretary of Commerce shall, to the extent practicable, coordinate basic research activities related to physical sciences, technology, engineering, and mathematics.

§ 20305. National Academies decadal surveys

(a) IN GENERAL.—The Administrator shall enter into agreements on a periodic basis with the National Academies for independent assessments, also known as decadal surveys, to take stock of the status and opportunities for Earth and space science discipline fields and Aeronautics research and to recommend priorities for research and programmatic areas over the next decade.

(b) INDEPENDENT COST ESTIMATES.—The agreements described in subsection (a) shall include independent estimates of the life cycle costs and technical readiness of missions assessed in the decadal surveys whenever possible.

(c) REEXAMINATION.—The Administrator shall request that each National Academies decadal survey committee identify any conditions or events, such as significant cost growth or scientific or technological advances, that would warrant the Administration asking the National Academies to reexamine the priorities that the decadal survey had established.

Subtitle III—Administrative Provisions

CHAPTER 301—APPROPRIATIONS, BUDGETS, AND ACCOUNTING

Sec.

30101. Prior authorization of appropriations required.

30102. Working capital fund.

30103. Budgets.

30104. Baselines and cost controls.

§ 30101. Prior authorization of appropriations required

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

§ 30102. Working capital fund

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

(b) AVAILABILITY OF AMOUNTS.—

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

(A) within the Administration;

- 1 (B) to other agencies or instrumentalities of the United States;
 2 (C) to any State, territory, or possession or political subdivision
 3 thereof;
 4 (D) to other public or private agencies; or
 5 (E) to any person, firm, association, corporation, or educational
 6 institution on a reimbursable basis.

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

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

13 (e) CONTENTS.—The capital of the fund consists of—

- 14 (1) amounts appropriated to the fund;
 15 (2) the reasonable value of stocks of supplies, equipment, and other
 16 assets and inventories on order that the Administrator transfers to the
 17 fund, less the related liabilities and unpaid obligations; and
 18 (3) payments received for loss or damage to property of the fund.

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

23 **§ 30103. Budgets**

24 (a) CATEGORIES.—The proposed budget for the Administration submitted
 25 by the President for each fiscal year shall be accompanied by documents
 26 showing—

27 (1) by program—

- 28 (A) the budget for space operations, including the International
 29 Space Station and the space shuttle;
 30 (B) the budget for exploration systems;
 31 (C) the budget for aeronautics;
 32 (D) the budget for space science;
 33 (E) the budget for Earth science;
 34 (F) the budget for microgravity science;
 35 (G) the budget for education;
 36 (H) the budget for safety oversight; and
 37 (I) the budget for public relations;
 38 (2) the budget for technology transfer programs;
 39 (3) the budget for the Integrated Enterprise Management Program,
 40 by individual element;

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

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

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

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

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

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

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

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

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

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

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

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

30 (c) INFORMATION IN ANNUAL BUDGET JUSTIFICATION.—The Adminis-
31 tration shall provide, at a minimum, the following information in its annual
32 budget justification:

33 (1) The actual, current, proposed funding level, and estimated budg-
34 ets for the next 5 fiscal years by directorate, theme, program, project
35 and activity within each appropriations account.

36 (2) The proposed programmatic and non-programmatic construction
37 of facilities.

38 (3) The budget for headquarters including—

39 (A) the budget by office, and any division thereof, for the ac-
40 tual, current, proposed funding level, and estimated budgets for
41 the next 5 fiscal years;

1 (B) the travel budget for each office, and any division thereof,
2 for the actual, current, and proposed funding level; and

3 (C) the civil service full time equivalent assignments per head-
4 quarters office, and any division thereof, including the number of
5 Senior Executive Service, noncareer, detailee, and contract per-
6 sonnel per office.

7 (4) Within 14 days of the submission of the budget to Congress an
8 accompanying volume shall be provided to the Committees on Appro-
9 priations containing the following information for each center, facility
10 managed by any center, and federally funded research and development
11 center operated on behalf of the Administration:

12 (A) The actual, current, proposed funding level, and estimated
13 budgets for the next 5 fiscal years by directorate, theme, program,
14 project, and activity.

15 (B) The proposed programmatic and non-programmatic con-
16 struction of facilities.

17 (C) The number of civil service full time equivalent positions per
18 center for each identified fiscal year.

19 (D) The number of civil service full time equivalent positions
20 considered to be uncovered capacity at each location for each iden-
21 tified fiscal year.

22 (5) The proposed budget as designated by object class for each direc-
23 torate, theme, and program.

24 (6) Sufficient narrative shall be provided to explain the request for
25 each program, project, and activity, and an explanation for any devi-
26 ation to previously adopted baselines for all justification materials pro-
27 vided to the Committees.

28 (d) ESTIMATE OF GROSS RECEIPTS AND PROPOSED USE OF FUNDS RE-
29 LATED TO LEASE OF PROPERTY.—Each annual budget request shall include
30 an annual estimate of gross receipts and collections and proposed use of all
31 funds collected pursuant to section 20145 of this title.

32 **§ 30104. Baselines and cost controls**

33 (a) DEFINITIONS.—In this section:

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

38 (2) DEVELOPMENT COST.—The term “development cost” means the
39 total of all costs, including construction of facilities and civil servant
40 costs, from the period beginning with the approval to proceed to imple-
41 mentation through the achievement of operational readiness, without

1 regard to funding source or management control, for the life of the pro-
2 gram.

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

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

13 (b) CONDITIONS FOR DEVELOPMENT.—

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

17 (A) the technical, cost, and schedule risks of the program are
18 clearly identified and the program has developed a plan to manage
19 those risks;

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

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

24 (2) REPORT.—The Administrator shall transmit a report describing
25 the basis for the determination required under paragraph (1) to the
26 Committee on Science and Technology of the House of Representatives
27 and the Committee on Commerce, Science, and Transportation of the
28 Senate at least 30 days before entering into a contract for development
29 under a major program.

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

33 (c) MAJOR PROGRAM ANNUAL REPORTS.—

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

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

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

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

9 (C) the schedule for development, including key program mile-
10 stones;

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

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

16 (3) INFORMATION UPDATES.—For major programs for which a
17 Baseline Report has been submitted, each subsequent Major Program
18 Annual Report shall describe any changes to the information that had
19 been provided in the Baseline Report, and the reasons for those
20 changes.

21 (d) NOTIFICATION.—

22 (1) REQUIREMENT.—The individual identified under subsection
23 (e)(2)(E) shall immediately notify the Administrator any time that in-
24 dividual has reasonable cause to believe that, for the major program
25 for which he or she is responsible—

26 (A) the development cost of the program is likely to exceed the
27 estimate provided in the Baseline Report of the program by 15
28 percent or more; or

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

32 (2) REASONS.—Not later than 30 days after the notification required
33 under paragraph (1), the individual identified under subsection
34 (e)(2)(E) shall transmit to the Administrator a written notification ex-
35 plaining the reasons for the change in the cost or milestone of the pro-
36 gram for which notification was provided under paragraph (1).

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

1 (e) FIFTEEN PERCENT THRESHOLD.—

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

9 (A) transmit to the Committee on Science and Technology of
10 the House of Representatives and the Committee on Commerce,
11 Science, and Transportation of the Senate, not later than 15 days
12 after making the determination, a report that includes—

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

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

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

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

23 (i) the projected cost and schedule for completing the pro-
24 gram if current requirements of the program are not modi-
25 fied;

26 (ii) the projected cost and the schedule for completing the
27 program after instituting the actions described under sub-
28 paragraph (A)(ii); and

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

31 (2) COMPLETION OF ANALYSIS AND TRANSMITTAL TO COMMIT-
32 TEES.—The Administration shall complete an analysis initiated under
33 paragraph (1)(B) not later than 6 months after the Administrator
34 makes a determination under this subsection. The Administrator shall
35 transmit the analysis to the Committee on Science and Technology of
36 the House of Representatives and Committee on Commerce, Science,
37 and Transportation of the Senate not later than 30 days after its com-
38 pletion.

39 (f) THIRTY PERCENT THRESHOLD.—If the Administrator determines
40 under subsection (e) that the development cost of a program will exceed the
41 estimate provided in the Baseline Report of the program by more than 30

1 percent, then, beginning 18 months after the date the Administrator trans-
 2 mits a report under subsection (e)(1)(A), the Administrator shall not expend
 3 any additional funds on the program, other than termination costs, unless
 4 Congress has subsequently authorized continuation of the program by law.
 5 An appropriation for the specific program enacted subsequent to a report
 6 being transmitted shall be considered an authorization for purposes of this
 7 subsection. If the program is continued, the Administrator shall submit a
 8 new Baseline Report for the program no later than 90 days after the date
 9 of enactment of the Act under which Congress has authorized continuation
 10 of the program.

11 **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. Outreach program.
- 30306. Small business contracting.
- 30307. Requirement for independent cost analysis.
- 30308. Cost effectiveness calculations.
- 30309. Use of abandoned and underutilized buildings, grounds, and facilities.
- 30310. Exception to alternative fuel procurement requirement.

12 **§ 30301. Guaranteed customer base**

13 No amount appropriated to the Administration may be used to fund
 14 grants, contracts, or other agreements with an expected duration of more
 15 than one year, when a primary effect of the grant, contract, or agreement
 16 is to provide a guaranteed customer base for or establish an anchor tenancy
 17 in new commercial space hardware or services unless an appropriations Act
 18 specifies the new commercial space hardware or services to be developed or
 19 used, or the grant, contract, or agreement is otherwise identified in such
 20 Act.

21 **§ 30302. Quality assurance personnel**

22 (a) EXCLUSION OF ADMINISTRATION PERSONNEL.—A person providing
 23 articles to the Administration under a contract entered into after December
 24 9, 1991, may not exclude Administration quality assurance personnel from
 25 work sites except as provided in a contract provision that has been sub-
 26 mitted to Congress as provided in subsection (b).

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

1 **§ 30303. Tracking and data relay satellite services**

2 (a) **CONTRACTS.**—The Administration is authorized, when so provided in
3 an appropriation Act, to enter into and to maintain a contract for tracking
4 and data relay satellite services. Such services shall be furnished to the Ad-
5 ministration in accordance with applicable authorization and appropriations
6 Acts. The Government shall incur no costs under such contract prior to the
7 furnishing of such services except that the contract may provide for the pay-
8 ment for contingent liability of the Government which may accrue in the
9 event the Government should decide for its convenience to terminate the
10 contract before the end of the period of the contract. Facilities which may
11 be required in the performance of the contract may be constructed on Gov-
12 ernment-owned lands if there is included in the contract a provision under
13 which the Government may acquire title to the facilities, under terms and
14 conditions agreed upon in the contract, upon termination of the contract.

15 (b) **REPORTS TO CONGRESS.**—The Administrator shall in January of
16 each year report to the Committee on Science and Technology and the Com-
17 mittee on Appropriations of the House of Representatives and the Com-
18 mittee on Commerce, Science, and Transportation and the Committee on
19 Appropriations of the Senate the projected aggregate contingent liability of
20 the Government under termination provisions of any contract authorized in
21 this section through the next fiscal year. The authority of the Administra-
22 tion to enter into and to maintain the contract authorized hereunder shall
23 remain in effect unless repealed by legislation enacted by Congress.

24 **§ 30304. Award of contracts to small businesses and dis-**
25 **advantaged individuals**

26 The Administrator shall annually establish a goal of at least 8 percent
27 of the total value of prime and subcontracts awarded in support of author-
28 ized programs, including the space station by the time operational status
29 is obtained, which funds will be made available to small business concerns
30 or other organizations owned or controlled by socially and economically dis-
31 advantaged individuals (within the meaning of paragraphs (5) and (6) of
32 section 8(a) of the Small Business Act (15 U.S.C. 637(a))), including His-
33 torically Black Colleges and Universities that are part B institutions (as de-
34 fined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C.
35 1061(2))), Hispanic-serving institutions (as defined in section 502(a)(5) of
36 that Act (20 U.S.C. 1101a(a)(5))), Tribal Colleges or Universities (as de-
37 fined in section 316(b)(3) of that Act (20 U.S.C. 1059e(b)(3))), Alaska Na-
38 tive-serving institutions (as defined in section 317(b)(2) of that Act (20
39 U.S.C. 1059d(b)(2))), Native Hawaiian-serving institutions (as defined in
40 section 317(b)(4) of that Act (20 U.S.C. 1059d(b)(4))), and minority edu-

1 educational institutions (as defined by the Secretary of Education pursuant to
2 the General Education Provisions Act (20 U.S.C. 1221 et seq.)).

3 **§ 30305. Outreach program**

4 (a) ESTABLISHMENT.—The Administration shall competitively select an
5 organization to partner with Administration centers, aerospace contractors,
6 and academic institutions to carry out a program to help promote the com-
7 petitiveness of small, minority-owned, and women-owned businesses in com-
8 munities across the United States through enhanced insight into the tech-
9 nologies of the Administration’s space and aeronautics programs. The pro-
10 gram shall support the mission of the Administration’s Innovative Partner-
11 ships Program with its emphasis on joint partnerships with industry, aca-
12 demia, government agencies, and national laboratories.

13 (b) PROGRAM STRUCTURE.—In carrying out the program described in
14 subsection (a), the organization shall support the mission of the Administra-
15 tion’s Innovative Partnerships Program by undertaking the following activi-
16 ties:

17 (1) FACILITATING ENHANCED INSIGHT.—Facilitating the enhanced
18 insight of the private sector into the Administration’s technologies in
19 order to increase the competitiveness of the private sector in producing
20 viable commercial products.

21 (2) CREATING NETWORK.—Creating a network of academic institu-
22 tions, aerospace contractors, and Administration centers that will com-
23 mit to donating appropriate technical assistance to small businesses,
24 giving preference to socially and economically disadvantaged small busi-
25 ness concerns, small business concerns owned and controlled by service-
26 disabled veterans, and HUBZone small business concerns. This para-
27 graph shall not apply to any contracting actions entered into or taken
28 by the Administration.

29 (3) CREATING NETWORK OF ECONOMIC DEVELOPMENT ORGANIZA-
30 TIONS.—Creating a network of economic development organizations to
31 increase the awareness and enhance the effectiveness of the program
32 nationwide.

33 (c) REPORT.—Not later than one year after October 15, 2008, and annu-
34 ally thereafter, the Administrator shall submit a report to the Committee
35 on Science and Technology of the House of Representatives and the Com-
36 mittee on Commerce, Science, and Transportation of the Senate describing
37 the efforts and accomplishments of the program established under sub-
38 section (a) in support of the Administration’s Innovative Partnerships Pro-
39 gram. As part of the report, the Administrator shall provide—

1 (1) data on the number of small businesses receiving assistance, jobs
2 created and retained, and volunteer hours donated by the Administra-
3 tion, contractors, and academic institutions nationwide;

4 (2) an estimate of the total dollar value of the economic impact made
5 by small businesses that received technical assistance through the pro-
6 gram; and

7 (3) an accounting of the use of funds appropriated for the program.

8 **§ 30306. Small business contracting**

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

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

20 **§ 30307. Requirement for independent cost analysis**

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

27 (b) REQUIREMENT.—Before any funds may be obligated for implementa-
28 tion of a project that is projected to cost more than \$250,000,000 in total
29 project costs, the Administrator shall conduct and consider an independent
30 life-cycle cost analysis of the project and shall report the results to Con-
31 gress. In developing cost accounting and reporting standards for carrying
32 out this section, the Administrator shall, to the extent practicable and con-
33 sistent with other laws, solicit the advice of experts outside of the Adminis-
34 tration.

35 **§ 30308. Cost effectiveness calculations**

36 (a) DEFINITIONS.—In this section:

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

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

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

12 **§ 30309. Use of abandoned and underutilized buildings,**
13 **grounds, and facilities**

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

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

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

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

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

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

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

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

33 (ii) underutilized by that agency.

34 **§ 30310. Exception to alternative fuel procurement require-**
35 **ment**

36 Section 526(a) of the Energy Independence and Security Act of 2007 (42
37 U.S.C. 17142(a)) does not prohibit the Administration from entering into
38 a contract to purchase a generally available fuel that is not an alternative
39 or synthetic fuel or predominantly produced from a nonconventional petro-
40 leum source, if—

1 (1) the contract does not specifically require the contractor to pro-
 2 vide an alternative or synthetic fuel or fuel from a nonconventional pe-
 3 troleum source;

4 (2) the purpose of the contract is not to obtain an alternative or syn-
 5 thetic fuel or fuel from a nonconventional petroleum source; and

6 (3) the contract does not provide incentives for a refinery upgrade
 7 or expansion to allow a refinery to use or increase its use of fuel from
 8 a nonconventional petroleum source.

9 CHAPTER 305—MANAGEMENT AND REVIEW

Sec.

30501. Lessons learned and best practices.

30502. Whistleblower protection.

30503. Performance assessments.

30504. Assessment of science mission extensions.

10 § 30501. Lessons learned and best practices

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

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

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

30 § 30502. Whistleblower protection

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

1 success of a mission. The plan shall be designed to ensure that Administra-
2 tion employees have the full protection required by law. The Administrator
3 shall implement the plan not more than 1 year after its transmittal.

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

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

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

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

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

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

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

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

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

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

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

36 **§ 30503. Performance assessments**

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

40 (b) TIMING.—Beginning with the first fiscal year following December 30,
41 2005, the Administrator shall select at least one division for review under

1 this section. The Administrator shall select divisions so that all disciplines
 2 will have received their first review within 6 fiscal years of December 30,
 3 2005.

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

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

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

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

16 **§ 30504. Assessment of science mission extensions**

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

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

27 **CHAPTER 307—INTERNATIONAL COOPERATION AND**
 28 **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.

29 **§ 30701. Competitiveness and international cooperation**

30 (a) LIMITATION.—

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

1 (2) AGREEMENTS WITH PEOPLE’S REPUBLIC OF CHINA.—The Ad-
2 ministrators shall certify to Congress at least 15 days in advance of any
3 cooperative agreement with the People’s Republic of China, or any
4 company owned by the People’s Republic of China or incorporated
5 under the laws of the People’s Republic of China, involving spacecraft,
6 spacecraft systems, launch systems, or scientific or technical informa-
7 tion, that—

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

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

13 (3) ANNUAL AUDIT.—The Inspector General of the Administration,
14 in consultation with appropriate agencies, shall conduct an annual
15 audit of the policies and procedures of the Administration with respect
16 to the export of technologies and the transfer of scientific and technical
17 information, to assess the extent to which the Administration is car-
18 rying out its activities in compliance with Federal export control laws
19 and with paragraph (2).

20 (b) NATIONAL INTERESTS.—

21 (1) DEFINITION OF UNITED STATES COMMERCIAL PROVIDER.—In
22 this subsection, the term “United States commercial provider” means
23 a commercial provider (as defined in section 30308(a) of this title), or-
24 ganized under the laws of the United States or of a State (as defined
25 in section 30308(a) of this title), which is—

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

27 (B) a subsidiary of a foreign company and the Secretary of
28 Commerce finds that—

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

31 (I) investments in the United States in long-term re-
32 search, development, and manufacturing (including the
33 manufacture of major components and subassemblies);
34 and

35 (II) significant contributions to employment in the
36 United States; and

37 (ii) the country or countries in which such foreign company
38 is incorporated or organized, and, if appropriate, in which it
39 principally conducts its business, affords reciprocal treatment
40 to companies described in subparagraph (A) comparable to

1 that afforded to such foreign company's subsidiary in the
2 United States, as evidenced by—

3 (I) providing comparable opportunities for companies
4 described in subparagraph (A) to participate in Govern-
5 ment sponsored research and development similar to that
6 authorized under this section, section 30307, 30308,
7 30309, or 30702 of this title, or the National Aero-
8 nautics and Space Administration Authorization Act of
9 2000 (Public Law 106–391, 114 Stat. 1577);

10 (II) providing no barriers to companies described in
11 subparagraph (A) with respect to local investment oppor-
12 tunities that are not provided to foreign companies in the
13 United States; and

14 (III) providing adequate and effective protection for
15 the intellectual property rights of companies described in
16 subparagraph (A).

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

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

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

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

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

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

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

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

36 **§ 30702. Foreign contract limitation**

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

1 **§ 30703. Foreign launch vehicles**

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

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

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

15 **§ 30704. Offshore performance of contracts for the procure-**
16 **ment of goods and services**

17 The Administrator shall submit to Congress, not later than 120 days
18 after the end of each fiscal year, a report on the contracts and subcontracts
19 performed overseas and the amount of purchases directly or indirectly by
20 the Administration from foreign entities in that fiscal year. The report shall
21 separately indicate—

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

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

29 **CHAPTER 309—AWARDS**

Sec.

30901. Congressional Space Medal of Honor.

30902. Charles “Pete” Conrad Astronomy Awards.

30 **§ 30901. Congressional Space Medal of Honor**

31 (a) AUTHORITY TO AWARD.—The President may award, and present in
32 the name of Congress, a medal of appropriate design, which shall be known
33 as the Congressional Space Medal of Honor, to any astronaut who in the
34 performance of the astronaut’s duties has distinguished himself or herself
35 by exceptionally meritorious efforts and contributions to the welfare of the
36 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.

(2) MINOR PLANET CENTER.—The term “Minor Planet Center” means the Minor Planet Center of the Smithsonian Astrophysical Observatory.

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

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

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

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

(2) AWARDS.—The Administrator shall make awards under the Program based on the recommendations of the Minor Planet Center.

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

(A) DISCOVERY OF BRIGHTEST NEAR-EARTH ASTEROID.—The amateur astronomer or group of amateur astronomers who in the preceding calendar year discovered the intrinsically brightest near-Earth asteroid among the near-Earth asteroids that were discovered during that year by amateur astronomers or groups of amateur astronomers.

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

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

1 (5) GUIDELINES.—

2 (A) CITIZEN OR PERMANENT RESIDENT.—No individual who is
3 not a citizen or permanent resident of the United States at the
4 time of the individual's discovery or contribution may receive an
5 award under this section.

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

8 **CHAPTER 311—SAFETY**

Sec.

31101. Aerospace Safety Advisory Panel.

31102. Drug and alcohol testing.

9 **§ 31101. Aerospace Safety Advisory Panel**

10 (a) ESTABLISHMENT AND MEMBERS.—There is established an Aerospace
11 Safety Advisory Panel consisting of a maximum of 9 members who shall be
12 appointed by the Administrator for terms of 6 years each. Not more than
13 4 such members shall be chosen from among the officers and employees of
14 the Administration.

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

17 (c) DUTIES.—The Panel shall—

18 (1) review safety studies and operations plans referred to it, includ-
19 ing evaluating the Administration's compliance with the return-to-flight
20 and continue-to-fly recommendations of the Columbia Accident Inves-
21 tigation Board, and make reports thereon;

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

23 (A) the hazards of proposed or existing facilities and proposed
24 operations;

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

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

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

28 (d) COMPENSATION AND EXPENSES.—

29 (1) COMPENSATION.—

30 (A) FEDERAL OFFICERS AND EMPLOYEES.—A member of the
31 Panel who is an officer or employee of the Federal Government
32 shall receive no compensation for the member's services as such.

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

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

9 (e) ANNUAL REPORT.—The Panel shall submit an annual report to the
10 Administrator and to Congress. In the first annual report submitted after
11 December 30, 2005, the Panel shall include an evaluation of the Adminis-
12 tration’s management and culture related to safety. Each annual report
13 shall include an evaluation of the Administration’s compliance with the rec-
14 ommendations of the Columbia Accident Investigation Board through retire-
15 ment of the space shuttle.

16 **§ 31102. Drug and alcohol testing**

17 (a) DEFINITION OF CONTROLLED SUBSTANCE.—In this section, the term
18 “controlled substance” means any substance under section 102(6) of the
19 Controlled Substances Act (21 U.S.C. 802(6)) specified by the Adminis-
20 trator.

21 (b) TESTING PROGRAM.—

22 (1) EMPLOYEES OF ADMINISTRATION.—The Administrator shall es-
23 tablish a program applicable to employees of the Administration whose
24 duties include responsibility for safety-sensitive, security, or national
25 security functions. Such program shall provide for preemployment, rea-
26 sonable suspicion, random, and post-accident testing for use, in viola-
27 tion of applicable law or Federal regulation, of alcohol or a controlled
28 substance. The Administrator may also prescribe regulations, as the
29 Administrator considers appropriate in the interest of safety, security,
30 and national security, for the conduct of periodic recurring testing of
31 such employees for such use in violation of applicable law or Federal
32 regulation.

33 (2) EMPLOYEES OF CONTRACTORS.—The Administrator shall, in the
34 interest of safety, security, and national security, prescribe regulations.
35 Such regulations shall establish a program that requires Administration
36 contractors to conduct preemployment, reasonable suspicion, random,
37 and post-accident testing of contractor employees responsible for safe-
38 ty-sensitive, security, or national security functions (as determined by
39 the Administrator) for use, in violation of applicable law or Federal
40 regulation, of alcohol or a controlled substance. The Administrator may
41 also prescribe regulations, as the Administrator considers appropriate

1 in the interest of safety, security, and national security, for the conduct
 2 of periodic recurring testing of such employees for such use in violation
 3 of applicable law or Federal regulation.

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

12 (c) PROHIBITION ON SERVICE.—

13 (1) PROHIBITION UNLESS PROGRAM OF REHABILITATION COM-
 14 PLETED.—No individual who is determined by the Administrator under
 15 this section to have used, in violation of applicable law or Federal regu-
 16 lation, alcohol or a controlled substance after December 9, 1991, shall
 17 serve as an Administration employee with responsibility for safety-sen-
 18 sitive, security, or national security functions (as determined by the
 19 Administrator), or as an Administration contractor employee with such
 20 responsibility, unless such individual has completed a program of reha-
 21 bilitation described in subsection (d).

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

28 (A) engaged in such use while on duty;

29 (B) prior to such use had undertaken or completed a rehabilita-
 30 tion program described in subsection (d);

31 (C) following such determination refuses to undertake such a re-
 32 habilitation program; or

33 (D) following such determination fails to complete such a reha-
 34 bilitation program.

35 (d) PROGRAM FOR REHABILITATION.—

36 (1) REGULATIONS AND AVAILABILITY OF PROGRAM FOR CON-
 37 TRACTOR EMPLOYEES.—The Administrator shall prescribe regulations
 38 setting forth requirements for rehabilitation programs which at a min-
 39 imum provide for the identification and opportunity for treatment of
 40 employees referred to in subsection (b) in need of assistance in resolv-
 41 ing problems with the use, in violation of applicable law or Federal reg-

1 ulation, of alcohol or a controlled substance. Each contractor is encour-
2 aged to make such a program available to all of its employees in addi-
3 tion to those employees referred to in subsection (b)(2). The Adminis-
4 trator shall determine the circumstances under which such employees
5 shall be required to participate in such a program. Nothing in this sub-
6 section shall preclude any Administration contractor from establishing
7 a program under this subsection in cooperation with any other such
8 contractor.

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

16 (e) PROCEDURES FOR TESTING.—In establishing the programs required
17 under subsection (b), the Administrator shall develop requirements which
18 shall—

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

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

25 (A) establish comprehensive standards for all aspects of labora-
26 tory controlled substances testing and laboratory procedures to be
27 applied in carrying out this section, including standards which re-
28 quire the use of the best available technology for ensuring the full
29 reliability and accuracy of controlled substances tests and strict
30 procedures governing the chain of custody of specimen samples
31 collected for controlled substances testing;

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

34 (C) establish appropriate standards and procedures for periodic
35 review of laboratories and criteria for certification and revocation
36 of certification of laboratories to perform controlled substances
37 testing in carrying out this section;

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

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

6 (5) provide that each specimen sample be subdivided, secured, and
 7 labelled in the presence of the tested individual and that a portion
 8 thereof be retained in a secure manner to prevent the possibility of
 9 tampering, so that in the event the individual's confirmation test re-
 10 sults are positive the individual has an opportunity to have the retained
 11 portion assayed by a confirmation test done independently at a second
 12 certified laboratory if the individual requests the independent test with-
 13 in 3 days after being advised of the results of the initial confirmation
 14 test;

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

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

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

24 (f) EFFECT ON OTHER LAWS AND REGULATIONS.—

25 (1) CONSISTENCY WITH FEDERAL REGULATION.—No State or local
 26 government shall adopt or have in effect any law, rule, regulation, ordi-
 27 nance, standard, or order that is inconsistent with the regulations pro-
 28 mulgated under this section.

29 (2) CONTINUANCE OF REGULATIONS ISSUED BEFORE DECEMBER 9,
 30 1991.—Nothing in this section shall be construed to restrict the discre-
 31 tion of the Administrator to continue in force, amend, or further sup-
 32 plement any regulations issued before December 9, 1991, that govern
 33 the use of alcohol and controlled substances by Administration employ-
 34 ees with responsibility for safety-sensitive, security, and national secu-
 35 rity functions (as determined by the Administrator), or by Administra-
 36 tion contractor employees with such responsibility.

37 **CHAPTER 313—HEALTHCARE**

Sec.

31301. Healthcare program.

31302. Astronaut healthcare survey.

1 **§ 31301. Healthcare program**

2 The Administrator shall develop a plan to better understand the longitu-
3 dinal health effects of space flight on humans. In the development of the
4 plan, the Administrator shall consider the need for the establishment of a
5 lifetime healthcare program for Administration astronauts and their families
6 or other methods to obtain needed health data from astronauts and retired
7 astronauts.

8 **§ 31302. Astronaut healthcare survey**

9 (a) SURVEY.—The Administrator shall administer an anonymous survey
10 of astronauts and flight surgeons to evaluate communication, relationships,
11 and the effectiveness of policies. The survey questions and the analysis of
12 results shall be evaluated by experts independent of the Administration. The
13 survey shall be administered on at least a biennial basis.

14 (b) REPORT.—The Administrator shall transmit a report of the results
15 of the survey to Congress not later than 90 days following completion of
16 the survey.

17 **CHAPTER 315—MISCELLANEOUS**

Sec.

31501. Orbital debris.

31502. Maintenance of facilities.

31503. Laboratory productivity.

31504. Cooperative unmanned aerial vehicle activities.

31505. Development of enhanced-use lease policy.

18 **§ 31501. Orbital debris**

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

22 **§ 31502. Maintenance of facilities**

23 In order to sustain healthy Centers that are capable of carrying out the
24 Administration's missions, the Administrator shall ensure that adequate
25 maintenance and upgrading of those Center facilities is performed on a reg-
26 ular basis.

27 **§ 31503. Laboratory productivity**

28 The Administration's laboratories are a critical component of the Admin-
29 istration's research capabilities, and the Administrator shall ensure that
30 those laboratories remain productive.

31 **§ 31504. Cooperative unmanned aerial vehicle activities**

32 The Administrator, in cooperation with the Administrator of the National
33 Oceanic and Atmospheric Administration and in coordination with other
34 agencies that have existing civil capabilities, shall continue to utilize the ca-
35 pabilities of unmanned aerial vehicles as appropriate in support of Adminis-
36 tration and interagency cooperative missions. The Administrator may enter

1 into cooperative agreements with universities with unmanned aerial vehicle
 2 programs and related assets to conduct collaborative research and develop-
 3 ment activities, including development of appropriate applications of small
 4 unmanned aerial vehicle technologies and systems in remote areas.

5 **§ 31505. Development of enhanced-use lease policy**

6 (a) IN GENERAL.—The Administrator shall develop an agency-wide en-
 7 hanced-use lease policy that—

8 (1) is based upon sound business practices and lessons learned from
 9 the demonstration centers; and

10 (2) establishes controls and procedures to ensure accountability and
 11 protect the interests of the Government.

12 (b) CONTENTS.—The policy required by subsection (a) shall include the
 13 following:

14 (1) CRITERIA FOR DETERMINING ECONOMIC VALUE.—Criteria for
 15 determining whether enhanced-use lease provides better economic value
 16 to the Government than other options, such as—

17 (A) Federal financing through appropriations; or

18 (B) sale of the property.

19 (2) SECURITY AND ACCESS.—Requirement for the identification of
 20 proposed physical and procedural changes needed to ensure security
 21 and restrict access to specified areas, coordination of proposed changes
 22 with existing site tenants, and development of estimated costs of such
 23 changes.

24 (3) MEASURES OF EFFECTIVENESS.—Measures of effectiveness for
 25 the enhanced-use lease program.

26 (4) ACCOUNTING CONTROLS.—Accounting controls and procedures to
 27 ensure accountability, such as an audit trail and documentation to
 28 readily support financial transactions.

29 **Subtitle IV—Aeronautics and Space**
 30 **Research and Education**

31 **CHAPTER 401—AERONAUTICS**

SUBCHAPTER I—GENERAL

Sec.

- 40101. Definition of institution of higher education.
- 40102. Governmental interest in aeronautics research and development.
- 40103. Cooperation with other agencies on aeronautics activities.
- 40104. Cooperation among Mission Directorates.

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. 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.

§ 40103. Cooperation with other agencies on aeronautics activities

The Administrator shall coordinate, as appropriate, the Administration’s aeronautics activities with relevant programs in the Department of Transportation, the Department of Defense, the Department of Commerce, and the Department of Homeland Security, including the activities of the Next Generation Air Transportation System Joint Planning and Development Office established under section 709 of the Vision 100—Century of Aviation Reauthorization Act (Public Law 108–176, 49 U.S.C. 40101 note).

§ 40104. Cooperation among Mission Directorates

Research and development activities performed by the Aeronautics Research Mission Directorate with the primary objective of assisting in the development of a flight project in another Mission Directorate shall be funded by the Mission Directorate seeking assistance.

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.

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

7 **§ 40112. Research and technology programs**

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

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

17 (c) HYPERSONICS RESEARCH.—The Administrator may establish a
 18 hypersonics research program with the objective of exploring the science and
 19 technology of hypersonic flight using air-breathing propulsion concepts,
 20 through a mix of theoretical work, basic and applied research, and develop-
 21 ment of flight research demonstration vehicles. The program may also in-
 22 clude the transition to the hypersonic range of Mach 3 to Mach 5.

23 (d) REVOLUTIONARY AERONAUTICAL CONCEPTS.—The Administrator
 24 may establish a research program which covers a unique range of subsonic,
 25 fixed wing vehicles and propulsion concepts. This research is intended to
 26 push technology barriers beyond current subsonic technology. Propulsion
 27 concepts include advanced materials, morphing engines, hybrid engines, and
 28 fuel cells.

29 (e) FUEL CELL-POWERED AIRCRAFT RESEARCH.—

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

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

38 (f) MARS AIRCRAFT RESEARCH.—

39 (1) OBJECTIVE.—The Administrator may establish a Mars Aircraft
 40 project whose objective shall be to develop and test concepts for an

1 uncrewed aircraft that could operate for sustained periods in the at-
2 mosphere of Mars.

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

7 **§ 40113. Airspace systems research**

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

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

18 **§ 40114. Aviation safety and security research**

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

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

30 **§ 40115. Aviation weather research**

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

35 **§ 40116. University-based Centers for Research on Aviation
36 Training**

37 (a) IN GENERAL.—The Administrator shall award grants to institutions
38 of higher education (or consortia thereof) to establish one or more Centers
39 for Research on Aviation Training under cooperative agreements with ap-
40 propriate Administration Centers.

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

6 (c) APPLICATION.—An institution of higher education (or a consortium
 7 of such institutions) seeking funding under this section shall submit an ap-
 8 plication to the Administrator at such time, in such manner, and containing
 9 such information as the Administrator may require, including, at a min-
 10 imum, a 5-year research plan.

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

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

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

17 SUBCHAPTER III—SCHOLARSHIPS

18 § 40131. Aeronautics scholarships

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

26 (b) IMPLEMENTATION.—Not later than 180 days after December 30,
 27 2005, the Administrator shall publish regulations governing the scholarship
 28 program under this section.

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

35 SUBCHAPTER IV—DATA REQUESTS

36 § 40141. Aviation data requests

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

1 **CHAPTER 403—NATIONAL SPACE GRANT COLLEGE AND**
 2 **FELLOWSHIP PROGRAM**

Sec.

- 40301. Purposes.
- 40302. Definitions.
- 40303. National space grant college and fellowship program.
- 40304. Grants or contracts.
- 40305. Specific national needs.
- 40306. Space grant college and space grant regional consortium.
- 40307. Space grant fellowship program.
- 40308. Space grant review panel.
- 40309. Availability of other Federal personnel and data.
- 40310. Designation or award to be on competitive basis.
- 40311. Continuing emphasis.

3 **§ 40301. Purposes**

4 The purposes of this chapter are to—

- 5 (1) increase the understanding, assessment, development, and utiliza-
 6 tion of space resources by promoting a strong educational base, respon-
 7 sive research and training activities, and broad and prompt dissemina-
 8 tion of knowledge and techniques;
- 9 (2) utilize the abilities and talents of the universities of the Nation
 10 to support and contribute to the exploration and development of the
 11 resources and opportunities afforded by the space environment;
- 12 (3) encourage and support, within the university community of the
 13 Nation, the existence of interdisciplinary and multidisciplinary pro-
 14 grams of space research that—
 15 (A) engage in integrated activities of training, research, and
 16 public service;
- 17 (B) have cooperative programs with industry; and
- 18 (C) are coordinated with the overall program of the Administra-
 19 tion;
- 20 (4) encourage and support the existence of consortia, made up of
 21 university and industry members, in order to advance the exploration
 22 and development of space resources in cases in which national objec-
 23 tives can be better fulfilled through such consortia than through the
 24 programs of single universities;
- 25 (5) encourage and support Federal funding for graduate fellowships
 26 in fields related to space; and
- 27 (6) support activities in colleges and universities generally for the
 28 purpose of creating and operating a network of institutional programs
 29 that will enhance achievements resulting from efforts under this chap-
 30 ter.

31 **§ 40302. Definitions**

32 In this chapter:

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

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

11 (3) PANEL.—The term “panel” means the space grant review panel
12 established pursuant to section 40308 of this title.

13 (4) PERSON.—The term “person” means any individual, any public
14 or private corporation, partnership, or other association or entity (in-
15 cluding any space grant college, space grant regional consortium, insti-
16 tution of higher education, institute, or laboratory), or any State, polit-
17 ical subdivision of a State, or agency or officer of a State or political
18 subdivision of a State.

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

21 (6) SPACE GRANT COLLEGE.—The term “space grant college” means
22 any public or private institution of higher education which is designated
23 as such by the Administrator pursuant to section 40306 of this title.

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

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

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

31 (i) Research.

32 (ii) Training.

33 (iii) Advisory services.

34 (8) SPACE GRANT REGIONAL CONSORTIUM.—The term “space grant
35 regional consortium” means any association or other alliance that is
36 designated as a space grant regional consortium by the Administrator
37 pursuant to section 40306 of this title.

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

40 (A) aeronautical and space activities; or

41 (B) advancements in any field related to space.

1 (10) STATE.—The term “State” means any State of the United
 2 States, the District of Columbia, the Commonwealth of Puerto Rico,
 3 the Virgin Islands, Guam, American Samoa, the Commonwealth of the
 4 Northern Mariana Islands, or any other territory or possession of the
 5 United States.

6 **§ 40303. National space grant college and fellowship pro-**
 7 **gram**

8 (a) ESTABLISHMENT.—The Administrator shall establish and maintain,
 9 within the Administration, a program to be known as the national space
 10 grant college and fellowship program. The national space grant college and
 11 fellowship program shall consist of the financial assistance and other activi-
 12 ties provided for in this chapter. The Administrator shall establish long-
 13 range planning guidelines and priorities, and adequately evaluate the pro-
 14 gram.

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

16 (1) apply the long-range planning guidelines and the priorities estab-
 17 lished by the Administrator under subsection (a);

18 (2) advise the Administrator with respect to the expertise and capa-
 19 bilities which are available through the national space grant college and
 20 fellowship program, and make such expertise available to the Adminis-
 21 tration as directed by the Administrator;

22 (3) evaluate activities conducted under grants and contracts awarded
 23 pursuant to sections 40304 and 40305 of this title to ensure that the
 24 purposes set forth in section 40301 of this title are implemented;

25 (4) encourage other Federal departments, agencies, and instrumen-
 26 talities to use and take advantage of the expertise and capabilities
 27 which are available through the national space grant college and fellow-
 28 ship program, on a cooperative or other basis;

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

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

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

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

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

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

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

6 **§ 40304. Grants or contracts**

7 (a) **AUTHORITY OF ADMINISTRATOR.**—The Administrator may make
8 grants and enter into contracts or other transactions under this subsection
9 to assist any space grant and fellowship program or project if the Adminis-
10 trator finds that the program or project will carry out the purposes set forth
11 in section 40301 of this title. The total amount paid pursuant to a grant
12 or contract may equal not more than 66 percent of the total cost of the
13 space grant and fellowship program or project involved, except in the case
14 of grants or contracts paid for with funds accepted by the Administrator
15 pursuant to section 40303(c)(2) of this title.

16 (b) **SPECIAL GRANTS.**—The Administrator may make special grants
17 under this subsection to carry out the purposes set forth in section 40301
18 of this title. The amount of a special grant may equal up to 100 percent
19 of the total cost of the project involved. A special grant may be made under
20 this subsection only if the Administrator finds that—

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

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

25 (3) the same or equivalent benefit cannot be obtained through the
26 award of a contract or grant under subsection (a) or section 40305 of
27 this title.

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

32 (d) **TERMS AND CONDITIONS.**—

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

37 (2) **LIMITATIONS.**—No payment under any grant or contract under
38 this section may be applied to—

39 (A) the purchase of any land;

40 (B) the purchase, construction, preservation, or repair of any
41 building; or

1 (C) the purchase or construction of any launch facility or launch
2 vehicle.

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

6 (4) RECORDS.—Any person that receives or utilizes any proceeds of
7 any grant or contract under this section shall keep such records as the
8 Administrator shall by regulation prescribe as being necessary and ap-
9 propriate to facilitate effective audit and evaluation, including records
10 which fully disclose the amount and disposition by such recipient of
11 such proceeds, the total cost of the program or project in connection
12 with which such proceeds were used, and the amount, if any, of such
13 cost which was provided through other sources. Such records shall be
14 maintained for 3 years after the completion of such a program or
15 project. The Administrator and the Comptroller General of the United
16 States, or any of their duly authorized representatives, shall have ac-
17 cess, for the purpose of audit and evaluation, to any books, documents,
18 papers, and records of receipts which, in the opinion of the Adminis-
19 trator or the Comptroller General, may be related or pertinent to such
20 grants and contracts.

21 **§ 40305. Specific national needs**

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

28 (b) APPLICATIONS FOR GRANTS OR CONTRACTS.—Any person may apply
29 to the Administrator for a grant or contract under this section. In addition,
30 the Administrator may invite applications with respect to specific national
31 needs or problems identified under subsection (a). Application shall be made
32 in such form and manner, and with such content and other submissions,
33 as the Administrator shall by regulation prescribe. Any grant made, or con-
34 tract entered into, under this section shall be subject to the limitations and
35 provisions set forth in paragraphs (2) and (4) of section 40304(d) of this
36 title and to such other terms, conditions, and requirements as the Adminis-
37 trator considers necessary or appropriate.

38 **§ 40306. Space grant college and space grant regional con-**
39 **sortium**

40 (a) DESIGNATION AND QUALIFICATIONS.—

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

3 (A) any institution of higher education as a space grant college;
4 and

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

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

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

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

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

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

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

24 (B) will encourage and follow a regional approach to solving
25 problems or meeting needs relating to space, in cooperation with
26 appropriate space grant colleges, space grant programs, and other
27 persons in the region;

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

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

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

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

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

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

1 **§ 40307. Space grant fellowship program**

2 (a) AWARD OF FELLOWSHIPS.—The Administrator shall support a space
3 grant fellowship program to provide educational and training assistance to
4 qualified individuals at the graduate level of education in fields related to
5 space. Such fellowships shall be awarded pursuant to guidelines established
6 by the Administrator. Space grant fellowships shall be awarded to individ-
7 uals at space grant colleges, space grant regional consortia, other colleges
8 and institutions of higher education, professional associations, and institutes
9 in such a manner as to ensure wide geographic and institutional diversity
10 in the pursuit of research under the fellowship program.

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

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

20 **§ 40308. Space grant review panel**

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

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

26 (1) applications or proposals for, and performance under, grants and
27 contracts awarded pursuant to sections 40304 and 40305 of this title;

28 (2) the space grant fellowship program;

29 (3) the designation and operation of space grant colleges and space
30 grant regional consortia, and the operation of space grant and fellow-
31 ship programs;

32 (4) the formulation and application of the planning guidelines and
33 priorities pursuant to subsections (a) and (b)(1) of section 40303 of
34 this title; and

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

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

41 (d) MEMBERS.—

1 (1) APPOINTMENT.—The Administrator shall appoint the voting
 2 members of the panel. A majority of the voting members shall be indi-
 3 viduals who, by reason of knowledge, experience, or training, are espe-
 4 cially qualified in one or more of the disciplines and fields related to
 5 space. The other voting members shall be individuals who, by reason
 6 of knowledge, experience, or training, are especially qualified in, or rep-
 7 resentative of, education, extension services, State government, indus-
 8 try, economics, planning, or any other activity related to efforts to en-
 9 hance the understanding, assessment, development, or utilization of
 10 space resources. The Administrator shall consider the potential conflict
 11 of interest of any individual in making appointments to the panel.

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

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

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

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

24 **§ 40309. Availability of other Federal personnel and data**

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

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

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

36 (3) may cooperate with the Administration.

37 **§ 40310. Designation or award to be on competitive basis**

38 The Administrator shall not under this chapter designate any space grant
 39 college or space grant regional consortium or award any fellowship, grant,
 40 or contract unless such designation or award is made in accordance with

1 the competitive, merit-based review process employed by the Administration
2 on October 30, 1987.

3 **§ 40311. Continuing emphasis**

4 The Administration shall continue its emphasis on the importance of edu-
5 cation to expand opportunities for Americans to understand and participate
6 in the Administration's aeronautics and space projects by supporting and
7 enhancing science and engineering education, research, and public outreach
8 efforts.

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

Sec.

40501. Biomedical research joint working group.

40502. Biomedical research grants.

40503. Biomedical research fellowships.

40504. Establishment of electronic data archive.

40505. Establishment of emergency medical service telemedicine capability.

10 **§ 40501. Biomedical research joint working group**

11 (a) ESTABLISHMENT.—The Administrator and the Director of the Na-
12 tional Institutes of Health shall jointly establish a working group to coordi-
13 nate biomedical research activities in areas where a microgravity environ-
14 nent may contribute to significant progress in the understanding and treat-
15 ment of diseases and other medical conditions. The joint working group
16 shall formulate joint and complementary programs in such areas of re-
17 search.

18 (b) MEMBERSHIP.—The joint working group shall include equal represen-
19 tation from the Administration and the National Institutes of Health, and
20 shall include representation from National Institutes of Health councils, as
21 selected by the Director of the National Institutes of Health, and from the
22 National Aeronautics and Space Administration Advisory Council.

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

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

29 **§ 40502. Biomedical research grants**

30 (a) ESTABLISHMENT OF PROGRAM.—The Administrator and the Director
31 of the National Institutes of Health shall establish a joint program of bio-
32 medical research grants in areas described in section 40501(a) of this title,
33 where such research requires access to a microgravity environment. Such
34 program shall be consistent with actions taken by the joint working group
35 under section 40501 of this title.

1 (b) RESEARCH OPPORTUNITY ANNOUNCEMENTS.—The grants program
 2 established under subsection (a) shall annually issue joint research oppor-
 3 tunity announcements under the sponsorship of the National Institutes of
 4 Health and the Administration. Responses to the announcements shall be
 5 evaluated by a peer review committee whose members shall be selected by
 6 the Director of the National Institutes of Health and the Administrator,
 7 and shall include individuals not employed by the Administration or the Na-
 8 tional Institutes of Health.

9 **§ 40503. Biomedical research fellowships**

10 The Administrator and the Director of the National Institutes of Health
 11 shall create a joint program of graduate research fellowships in biomedical
 12 research described in section 40501(a) of this title. Fellowships under such
 13 program may provide for participation in approved research conferences and
 14 symposia.

15 **§ 40504. Establishment of electronic data archive**

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

18 **§ 40505. Establishment of emergency medical service tele-**
 19 **medicine capability**

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

25 **CHAPTER 407—ENVIRONMENTALLY FRIENDLY**
 26 **AIRCRAFT**

Sec.

40701. Research and development initiative.

40702. Additional research and development initiative.

40703. Research alignment.

40704. Research program on perceived impact of sonic booms.

27 **§ 40701. Research and development initiative**

28 The Administrator may establish an initiative with the objective of devel-
 29 oping, and demonstrating in a relevant environment, technologies to enable
 30 the following commercial aircraft performance characteristics:

31 (1) NOISE LEVELS.—Noise levels on takeoff and on airport approach
 32 and landing that do not exceed ambient noise levels in the absence of
 33 flight operations in the vicinity of airports from which such commercial
 34 aircraft would normally operate.

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

1 (3) EMISSIONS.—Nitrogen oxides on take-off and landing that are
2 significantly reduced, without adversely affecting hydrocarbons and
3 smoke, relative to aircraft in commercial service as of December 30,
4 2005.

5 **§ 40702. Additional research and development initiative**

6 The Administrator shall establish an initiative involving the Administra-
7 tion, universities, industry, and other research organizations as appropriate,
8 of research, development, and demonstration, in a relevant environment, of
9 technologies to enable the following commercial aircraft performance charac-
10 teristics:

11 (1) NOISE LEVELS.—Noise levels on takeoff and on airport approach
12 and landing that do not exceed ambient noise levels in the absence of
13 flight operations in the vicinity of airports from which such commercial
14 aircraft would normally operate, without increasing energy consumption
15 or nitrogen oxide emissions compared to aircraft in commercial service
16 as of October 15, 2008.

17 (2) GREENHOUSE GAS EMISSIONS.—Significant reductions in green-
18 house gas emissions compared to aircraft in commercial services as of
19 October 15, 2008.

20 **§ 40703. Research alignment**

21 In addition to pursuing the research and development initiative described
22 in section 40702 of this title, the Administrator shall, to the maximum ex-
23 tent practicable within available funding, align the fundamental aeronautics
24 research program to address high priority technology challenges of the Na-
25 tional Academies' Decadal Survey of Civil Aeronautics, and shall work to
26 increase the degree of involvement of external organizations, and especially
27 of universities, in the fundamental aeronautics research program.

28 **§ 40704. Research program on perceived impact of sonic
29 booms**

30 (a) ESTABLISHMENT.—The Administrator shall establish a cooperative
31 research program with industry, including the conduct of flight demonstra-
32 tions in a relevant environment, to collect data on the perceived impact of
33 sonic booms. The data could enable the promulgation of appropriate stand-
34 ards for overland commercial supersonic flight operations.

35 (b) COORDINATION.—The Administrator shall ensure that sonic boom re-
36 search is coordinated as appropriate with the Administrator of the Federal
37 Aviation Administration, and as appropriate make use of the expertise of
38 the Partnership for Air Transportation Noise and Emissions Reduction
39 Center of Excellence sponsored by the Administration and the Federal Avia-
40 tion Administration.

CHAPTER 409—MISCELLANEOUS

1

Sec.

40901. Science, Space, and Technology Education Trust Fund.
 40902. National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund.
 40903. Experimental Program to Stimulate Competitive Research—merit grant competition requirements.
 40904. Microgravity research.
 40905. Program to expand distance learning in rural underserved areas.
 40906. Equal access to the Administration’s education programs.
 40907. Museums.
 40908. Continuation of certain education programs.
 40909. Compliance with title IX of Education Amendments of 1972.

2 **§ 40901. Science, Space, and Technology Education Trust**
 3 **Fund**

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

24 **§ 40902. National Aeronautics and Space Administration En-**
 25 **deavor Teacher Fellowship Trust Fund**

26 (a) ESTABLISHMENT.—There is established in the Treasury of the United
 27 States, in tribute to the dedicated crew of the Space Shuttle Challenger, a
 28 trust fund to be known as the National Aeronautics and Space Administra-
 29 tion Endeavor Teacher Fellowship Trust Fund (hereafter in this section re-
 30 ferred to as the “Trust Fund”). The Trust Fund shall consist of amounts
 31 which may from time to time, at the discretion of the Administrator, be
 32 transferred from the National Aeronautics and Space Administration Gifts
 33 and Donations Trust Fund.

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

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

17 **§ 40903. Experimental Program to Stimulate Competitive**
18 **Research—merit grant competition requirements**

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

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

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

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

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

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

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

1 (d) INFORMATION IN ANNUAL BUDGET SUBMISSION.—In order to ensure
 2 that research expertise and talent throughout the Nation is developed and
 3 engaged in Administration research and education activities, the Adminis-
 4 tration shall, as part of its annual budget submission, detail additional steps
 5 that can be taken to further integrate the participating eligible States in
 6 both existing and new or emerging Administration research programs and
 7 center activities.

8 **§ 40904. Microgravity research**

9 The Administrator shall—

10 (1) ensure the capacity to support ground-based research leading to
 11 space-based basic and applied scientific research in a variety of dis-
 12 ciplines with potential direct national benefits and applications that can
 13 be advanced significantly from the uniqueness of microgravity and the
 14 space environment; and

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

21 **§ 40905. Program to expand distance learning in rural un-**
 22 **derserved areas**

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

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

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

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

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

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

35 **§ 40906. Equal access to the Administration's education pro-**
 36 **grams**

37 (a) IN GENERAL.—The Administrator shall strive to ensure equal access
 38 for minority and economically disadvantaged students to the Administra-
 39 tion's education programs.

40 (b) REPORT.—Every 2 years, the Administrator shall submit a report to
 41 the Committee on Science and Technology of the House of Representatives

1 and the Committee on Commerce, Science, and Transportation of the Sen-
 2 ate describing the efforts by the Administrator to ensure equal access for
 3 minority and economically disadvantaged students under this section and
 4 the results of such efforts. As part of the report, the Administrator shall
 5 provide—

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

8 (A) elementary and secondary education;

9 (B) undergraduate education; and

10 (C) graduate education; and

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

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

17 **§ 40907. Museums**

18 The Administrator may provide grants to, and enter into cooperative
 19 agreements with, museums and planetariums to enable them to enhance
 20 programs related to space exploration, aeronautics, space science, Earth
 21 science, or microgravity.

22 **§ 40908. Continuation of certain education programs**

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

30 **§ 40909. Compliance with title IX of Education Amendments**
 31 **of 1972**

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

35 **Subtitle V—Programs Targeting**
 36 **Commercial Opportunities**

37 **CHAPTER 501—SPACE COMMERCE**

SUBCHAPTER I—GENERAL

Sec.
 50101. Definitions.

SUBCHAPTER II—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

- 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.

SUBCHAPTER I—GENERAL

§ 50101. Definitions

In this chapter:

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

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

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

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

(5) **SPACE TRANSPORTATION VEHICLE.**—The term “space transportation vehicle” means any vehicle constructed for the purpose of operating in, or transporting a payload to, from, or within, outer space, or in suborbital trajectory, and includes any component of such vehicle not specifically designed or adapted for a payload.

(6) **STATE.**—The term “State” means each of the several States of the Union, 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.

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

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

5 (B) a subsidiary of a foreign company and the Secretary of
6 Transportation finds that—

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

9 (I) investments in the United States in long-term re-
10 search, development, and manufacturing (including the
11 manufacture of major components and subassemblies);
12 and

13 (II) significant contributions to employment in the
14 United States; and

15 (ii) the country or countries in which such foreign company
16 is incorporated or organized, and, if appropriate, in which it
17 principally conducts its business, affords reciprocal treatment
18 to companies described in subparagraph (A) comparable to
19 that afforded to such foreign company’s subsidiary in the
20 United States, as evidenced by—

21 (I) providing comparable opportunities for companies
22 described in subparagraph (A) to participate in Govern-
23 ment-sponsored research and development similar to that
24 authorized under this chapter;

25 (II) providing no barriers, to companies described in
26 subparagraph (A) with respect to local investment oppor-
27 tunities, that are not provided to foreign companies in
28 the United States; and

29 (III) providing adequate and effective protection for
30 the intellectual property rights of companies described in
31 subparagraph (A).

32 SUBCHAPTER II—PROMOTION OF COMMERCIAL SPACE
33 OPPORTUNITIES

34 **§ 50111. Commercialization of Space Station**

35 (a) POLICY.—Congress declares that a priority goal of constructing the
36 International Space Station is the economic development of Earth orbital
37 space. Congress further declares that free and competitive markets create
38 the most efficient conditions for promoting economic development, and
39 should therefore govern the economic development of Earth orbital space.
40 Congress further declares that the use of free market principles in oper-
41 ating, servicing, allocating the use of, and adding capabilities to the Space

1 Station, and the resulting fullest possible engagement of commercial pro-
2 viders and participation of commercial users, will reduce Space Station oper-
3 ational costs for all partners and the Federal Government's share of the
4 United States burden to fund operations.

5 (b) USE OF UNITED STATES COMMERCIALY PROVIDED SERVICES.—

6 (1) IN GENERAL.—In order to stimulate commercial use of space,
7 help maximize the utility and productivity of the International Space
8 Station, and enable a commercial means of providing crew transfer and
9 crew rescue services for the International Space Station, the Adminis-
10 tration shall—

11 (A) make use of United States commercially provided Inter-
12 national Space Station crew transfer and crew rescue services to
13 the maximum extent practicable, if those commercial services have
14 demonstrated the capability to meet Administration-specified as-
15 cent, entry, and International Space Station proximity operations
16 safety requirements;

17 (B) limit, to the maximum extent practicable, the use of the
18 Crew Exploration Vehicle to missions carrying astronauts beyond
19 low Earth orbit once commercial crew transfer and crew rescue
20 services that meet safety requirements become operational;

21 (C) facilitate, to the maximum extent practicable, the transfer
22 of Administration-developed technologies to potential United
23 States commercial crew transfer and rescue service providers, con-
24 sistent with United States law; and

25 (D) issue a notice of intent, not later than 180 days after Octo-
26 ber 15, 2008, to enter into a funded, competitively awarded Space
27 Act Agreement with 2 or more commercial entities for a Phase 1
28 Commercial Orbital Transportation Services crewed vehicle dem-
29 onstration program.

30 (2) CONGRESSIONAL INTENT.—It is the intent of Congress that
31 funding for the program described in paragraph (1)(D) shall not come
32 at the expense of full funding of the amounts authorized under section
33 101(3)(A) of the National Aeronautics and Space Administration Au-
34 thorization Act of 2008 (Public Law 110–422, 122 Stat. 4783), and
35 for future fiscal years, for Orion Crew Exploration Vehicle develop-
36 ment, Ares I Crew Launch Vehicle development, or International Space
37 Station cargo delivery.

38 (3) ADDITIONAL TECHNOLOGIES.—The Administration shall make
39 International Space Station-compatible docking adaptors and other rel-
40 evant technologies available to the commercial crew providers selected
41 to service the International Space Station.

1 (4) CREW TRANSFER AND CREW RESCUE SERVICES CONTRACT.—If
 2 a commercial provider demonstrates the capability to provide Inter-
 3 national Space Station crew transfer and crew rescue services and to
 4 satisfy Administration ascent, entry, and International Space Station
 5 proximity operations safety requirements, the Administration shall
 6 enter into an International Space Station crew transfer and crew res-
 7 cue services contract with that commercial provider for a portion of the
 8 Administration’s anticipated International Space Station crew transfer
 9 and crew rescue requirements from the time the commercial provider
 10 commences operations under contract with the Administration through
 11 calendar year 2016, with an option to extend the period of performance
 12 through calendar year 2020.

13 **§ 50112. Promotion of United States Global Positioning Sys-**
 14 **tem standards**

15 In order to support and sustain the Global Positioning System in a man-
 16 ner that will most effectively contribute to the national security, public safe-
 17 ty, scientific, and economic interests of the United States, Congress encour-
 18 ages the President to—

19 (1) ensure the operation of the Global Positioning System on a con-
 20 tinuous worldwide basis free of direct user fees;

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

23 (A) establish the Global Positioning System and its augmenta-
 24 tions as an acceptable international standard; and

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

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

30 (A) achieve and sustain efficient management of the electro-
 31 magnetic spectrum used by the Global Positioning System; and

32 (B) protect that spectrum from disruption and interference.

33 **§ 50113. Acquisition of space science data**

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

36 (1) the elemental and mineralogical resources of the moon, asteroids,
 37 planets and their moons, and comets;

38 (2) microgravity acceleration; and

39 (3) solar storm monitoring.

40 (b) ACQUISITION FROM COMMERCIAL PROVIDERS.—The Administrator
 41 shall, to the extent possible and while satisfying the scientific or educational

1 requirements of the Administration, and where appropriate, of other Federal
2 agencies and scientific researchers, acquire, where cost effective, space
3 science data from a commercial provider.

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

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

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

19 **§ 50114. Administration of commercial space centers**

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

23 **§ 50115. Sources of Earth science data**

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

30 (b) TREATMENT AS COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Ac-
31 quisitions by the Administrator of the data, services, distribution, and appli-
32 cations referred to in subsection (a) shall be carried out in accordance with
33 applicable acquisition laws and regulations (including chapters 137 and 140
34 of title 10). For purposes of such law and regulations, such data, services,
35 distribution, and applications shall be considered to be a commercial item.
36 Nothing in this subsection shall be construed to preclude the United States
37 from acquiring, through contracts with commercial providers, sufficient
38 rights in data to meet the needs of the scientific and educational community
39 or the needs of other government activities.

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

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

7 **§ 50116. Commercial technology transfer program**

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

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

22 SUBCHAPTER III—FEDERAL ACQUISITION OF SPACE
 23 TRANSPORTATION SERVICES

24 **§ 50131. Requirement to procure commercial space trans-
 25 portation services**

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

32 (b) EXCEPTIONS.—The Federal Government shall not be required to ac-
 33 quire space transportation services under subsection (a) if, on a case-by-case
 34 basis, the Administrator or, in the case of a national security issue, the Sec-
 35 retary of the Air Force, determines that—

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

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

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

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

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

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

12 (7) a payload can make use of the available cargo space on a space
13 shuttle mission as a secondary payload, and such payload is consistent
14 with the requirements of research, development, demonstration, sci-
15 entific, commercial, and educational programs authorized by the Ad-
16 ministrator.

17 (e) AGREEMENTS WITH FOREIGN ENTITIES.—Nothing in this section
18 shall prevent the Administrator from planning or negotiating agreements
19 with foreign entities for the launch of Federal Government payloads for
20 international collaborative efforts relating to science and technology.

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

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

29 **§ 50132. Acquisition of commercial space transportation**
30 **services**

31 (a) TREATMENT OF COMMERCIAL SPACE TRANSPORTATION SERVICES AS
32 COMMERCIAL ITEM UNDER ACQUISITION LAWS.—Acquisitions of space
33 transportation services by the Federal Government shall be carried out in
34 accordance with applicable acquisition laws and regulations (including chap-
35 ters 137 and 140 of title 10). For purposes of such law and regulations,
36 space transportation services shall be considered to be a commercial item.

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

§ 50133. Shuttle privatization

The Administrator shall prepare for an orderly transition from the Federal operation, or Federal management of contracted operation, of space transportation systems to the Federal purchase of commercial space transportation services for all nonemergency space transportation requirements for transportation to and from Earth orbit, including human, cargo, and mixed payloads. In those preparations, the Administrator shall take into account the need for short-term economies, as well as the goal of restoring the Administration's research focus and its mandate to promote the fullest possible commercial use of space. As part of those preparations, the Administrator shall plan for the potential privatization of the space shuttle program. Such plan shall keep safety and cost effectiveness as high priorities. Nothing in this section shall prohibit the Administration from studying, designing, developing, or funding upgrades or modifications essential to the safe and economical operation of the space shuttle fleet.

§ 50134. Use of excess intercontinental ballistic missiles

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

(1) convert any missile described in subsection (c) to a space transportation vehicle configuration; or

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

(b) AUTHORIZED FEDERAL USES.—

(1) IN GENERAL.—A missile described in subsection (c) may be converted for use as a space transportation vehicle by the Federal Government if, except as provided in paragraph (2) and at least 30 days before such conversion, the agency seeking to use the missile as a space transportation vehicle transmits to the Committee on Armed Services and the Committee on Science and Technology of the House of Representatives, and to the Committee on Armed Services and the Committee on Commerce, Science, and Transportation of the Senate, a certification that the use of such missile—

(A) would result in cost savings to the Federal Government when compared to the cost of acquiring space transportation services from United States commercial providers;

(B) meets all mission requirements of the agency, including performance, schedule, and risk requirements;

(C) is consistent with international obligations of the United States; and

(D) is approved by the Secretary of Defense or the designee of the Secretary of Defense.

1 (2) EXCEPTION TO REQUIREMENT THAT CERTIFICATION BE TRANS-
 2 MITTED 30 DAYS BEFORE CONVERSION.—The requirement under para-
 3 graph (1) that the certification described in that paragraph must be
 4 transmitted at least 30 days before conversion of the missile shall not
 5 apply if the Secretary of Defense determines that compliance with that
 6 requirement would be inconsistent with meeting immediate national se-
 7 curity requirements.

8 (c) MISSILES REFERRED TO.—The missiles referred to in this section are
 9 missiles owned by the United States that—

10 (1) were formerly used by the Department of Defense for national
 11 defense purposes as intercontinental ballistic missiles; and

12 (2) have been declared excess to United States national defense
 13 needs and are in compliance with international obligations of the
 14 United States.

15 **CHAPTER 503—COMMERCIAL REUSABLE IN-SPACE**
 16 **TRANSPORTATION**

Sec.

50301. Definitions.

50302. Loan guarantees for production of commercial reusable in-space transportation.

17 **§ 50301. Definitions**

18 In this chapter:

19 (1) COMMERCIAL PROVIDER.—The term “commercial provider”
 20 means any person or entity providing commercial reusable in-orbit
 21 space transportation services or systems, primary control of which is
 22 held by persons other than the Federal Government, a State or local
 23 government, or a foreign government.

24 (2) IN-SPACE TRANSPORTATION SERVICES.—The term “in-space
 25 transportation services” means operations and activities involved in the
 26 direct transportation or attempted transportation of a payload or object
 27 from one orbit to another by means of an in-space transportation vehi-
 28 cle.

29 (3) IN-SPACE TRANSPORTATION SYSTEM.—The term “in-space trans-
 30 portation system” means the space and ground elements, including in-
 31 space transportation vehicles and support space systems, and ground
 32 administration and control facilities and associated equipment, nec-
 33 essary for the provision of in-space transportation services.

34 (4) IN-SPACE TRANSPORTATION VEHICLE.—The term “in-space
 35 transportation vehicle” means a vehicle designed—

36 (A) to be based and operated in space;

37 (B) to transport various payloads or objects from one orbit to
 38 another orbit; and

1 (C) to be reusable and refueled in space.

2 (5) SECRETARY.—The term “Secretary” means the Secretary of De-
3 fense.

4 (6) UNITED STATES COMMERCIAL PROVIDER.—The term “United
5 States commercial provider” means any commercial provider organized
6 under the laws of the United States that is more than 50 percent
7 owned by United States nationals.

8 **§ 50302. Loan guarantees for production of commercial reus-**
9 **able in-space transportation**

10 (a) AUTHORITY TO MAKE LOAN GUARANTEES.—The Secretary may
11 guarantee loans made to eligible United States commercial providers for
12 purposes of producing commercial reusable in-space transportation services
13 or systems.

14 (b) ELIGIBLE UNITED STATES COMMERCIAL PROVIDERS.—The Secretary
15 shall prescribe requirements for the eligibility of United States commercial
16 providers for loan guarantees under this section. Such requirements shall
17 ensure that eligible providers are financially capable of undertaking a loan
18 guaranteed under this section.

19 (c) LIMITATION ON LOANS GUARANTEED.—The Secretary may not guar-
20 antee a loan for a United States commercial provider under this section un-
21 less the Secretary determines that credit would not otherwise be reasonably
22 available at the time of the guarantee for the commercial reusable in-space
23 transportation service or system to be produced utilizing the proceeds of the
24 loan.

25 (d) CREDIT SUBSIDY.—

26 (1) COLLECTION REQUIRED.—The Secretary shall collect from each
27 United States commercial provider receiving a loan guarantee under
28 this section an amount equal to the amount, as determined by the Sec-
29 retary, to cover the cost, as defined in section 502(5) of the Federal
30 Credit Reform Act of 1990 (2 U.S.C. 661a(5)), of the loan guarantee.

31 (2) PERIODIC DISBURSEMENTS.—In the case of a loan guarantee in
32 which proceeds of the loan are disbursed over time, the Secretary shall
33 collect the amount required under this subsection on a pro rata basis,
34 as determined by the Secretary, at the time of each disbursement.

35 (e) OTHER TERMS AND CONDITIONS.—

36 (1) PROHIBITION ON SUBORDINATION.—A loan guaranteed under
37 this section may not be subordinated to another debt contracted by the
38 United States commercial provider concerned, or to any other claims
39 against such provider.

40 (2) RESTRICTION ON INCOME.—A loan guaranteed under this section
41 may not—

1 (A) provide income which is excluded from gross income for
2 purposes of chapter 1 of the Internal Revenue Code of 1986 (26
3 U.S.C. 1 et seq.); or

4 (B) provide significant collateral or security, as determined by
5 the Secretary, for other obligations the income from which is so
6 excluded.

7 (3) TREATMENT OF GUARANTEE.—The guarantee of a loan under
8 this section shall be conclusive evidence of the following:

9 (A) That the guarantee has been properly obtained.

10 (B) That the loan qualifies for the guarantee.

11 (C) That, but for fraud or material misrepresentation by the
12 holder of the loan, the guarantee is valid, legal, and enforceable.

13 (4) OTHER TERMS AND CONDITIONS.—The Secretary may establish
14 any other terms and conditions for a guarantee of a loan under this
15 section as the Secretary considers appropriate to protect the financial
16 interests of the United States.

17 (f) ENFORCEMENT OF RIGHTS.—

18 (1) IN GENERAL.—The Attorney General may take any action the
19 Attorney General considers appropriate to enforce any right accruing
20 to the United States under a loan guarantee under this section.

21 (2) FORBEARANCE.—The Attorney General may, with the approval
22 of the parties concerned, forbear from enforcing any right of the
23 United States under a loan guaranteed under this section for the ben-
24 efit of a United States commercial provider if such forbearance will not
25 result in any cost, as defined in section 502(5) of the Federal Credit
26 Reform Act of 1990 (2 U.S.C. 661a(5)), to the United States.

27 (3) UTILIZATION OF PROPERTY.—Notwithstanding any other provi-
28 sion of law and subject to the terms of a loan guaranteed under this
29 section, upon the default of a United States commercial provider under
30 the loan, the Secretary may, at the election of the Secretary—

31 (A) assume control of the physical asset financed by the loan;
32 and

33 (B) complete, recondition, reconstruct, renovate, repair, main-
34 tain, operate, or sell the physical asset.

35 (g) CREDIT INSTRUMENTS.—

36 (1) AUTHORITY TO ISSUE INSTRUMENTS.—Notwithstanding any
37 other provision of law, the Secretary may, subject to such terms and
38 conditions as the Secretary considers appropriate, issue credit instru-
39 ments to United States commercial providers of in-space transportation
40 services or systems, with the aggregate cost (as determined under the
41 provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et

1 seq.) of such instruments not to exceed \$1,500,000,000, but only to
 2 the extent that new budget authority to cover such costs is provided
 3 in subsequent appropriations Acts or authority is otherwise provided in
 4 subsequent appropriations Acts.

5 (2) CREDIT SUBSIDY.—The Secretary shall provide a credit subsidy
 6 for any credit instrument issued under this subsection in accordance
 7 with the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C.
 8 661 et seq.).

9 (3) CONSTRUCTION.—The eligibility of a United States commercial
 10 provider of in-space transportation services or systems for a credit in-
 11 strument under this subsection is in addition to any eligibility of such
 12 provider for a loan guarantee under other provisions of this section.

13 **CHAPTER 505—COMMERCIAL SPACE COMPETITIVENESS**

Sec.

50501. Definitions.

50502. Launch voucher demonstration program.

50503. Anchor tenancy and termination liability.

50504. Use of Government facilities.

50505. Test facilities.

50506. Commercial Space Achievement Award.

14 **§ 50501. Definitions**

15 In this chapter:

16 (1) AGENCY.—The term “agency” means an executive agency as de-
 17 fined in section 105 of title 5.

18 (2) ANCHOR TENANCY.—The term “anchor tenancy” means an ar-
 19 rangement in which the United States Government agrees to procure
 20 sufficient quantities of a commercial space product or service needed
 21 to meet Government mission requirements so that a commercial ven-
 22 ture is made viable.

23 (3) COMMERCIAL.—The term “commercial” means having—

24 (A) private capital at risk; and

25 (B) primary financial and management responsibility for the ac-
 26 tivity reside with the private sector.

27 (4) COST EFFECTIVE.—The term “cost effective” means costing no
 28 more than the available alternatives, determined by a comparison of all
 29 related direct and indirect costs including, in the case of Government
 30 costs, applicable Government labor and overhead costs as well as con-
 31 tractor charges, and taking into account the ability of each alternative
 32 to accommodate mission requirements as well as the related factors of
 33 risk, reliability, schedule, and technical performance.

34 (5) LAUNCH.—The term “launch” means to place, or attempt to
 35 place, a launch vehicle and its payload, if any, in a suborbital trajec-
 36 tory, in Earth orbit in outer space, or otherwise in outer space.

1 (6) LAUNCH SERVICES.—The term “launch services” means activi-
2 ties involved in the preparation of a launch vehicle and its payload for
3 launch and the conduct of a launch.

4 (7) LAUNCH SUPPORT FACILITIES.—The term “launch support fa-
5 cilities” means facilities located at launch sites or launch ranges that
6 are required to support launch activities, including launch vehicle as-
7 sembly, launch vehicle operations and control, communications, flight
8 safety functions, and payload operations, control, and processing.

9 (8) LAUNCH VEHICLE.—The term “launch vehicle” means any vehi-
10 cle constructed for the purpose of operating in or placing a payload in
11 outer space or in suborbital trajectories, and includes components of
12 that vehicle.

13 (9) PAYLOAD.—The term “payload” means an object which a person
14 undertakes to launch, and includes subcomponents of the launch vehicle
15 specifically designed or adapted for that object.

16 (10) PAYLOAD INTEGRATION SERVICES.—The term “payload inte-
17 gration services” means activities involved in integrating multiple pay-
18 loads into a single payload for launch or integrating a payload with a
19 launch vehicle.

20 (11) SPACE RECOVERY SUPPORT FACILITIES.—The term “space re-
21 covery support facilities” means facilities required to support activities
22 related to the recovery of payloads returned from space to a space re-
23 covery site, including operations and control, communications, flight
24 safety functions, and payload processing.

25 (12) SPACE TRANSPORTATION INFRASTRUCTURE.—The term “space
26 transportation infrastructure” means facilities, associated equipment,
27 and real property (including launch sites, launch support facilities,
28 space recovery sites, and space recovery support facilities) required to
29 perform launch or space recovery activities.

30 (13) STATE.—The term “State” means the several States, the Dis-
31 trict of Columbia, Puerto Rico, American Samoa, the United States
32 Virgin Islands, Guam, the Northern Mariana Islands, and any other
33 commonwealth, territory, or possession of the United States.

34 (14) UNITED STATES.—The term “United States” means the States,
35 collectively.

36 **§ 50502. Launch voucher demonstration program**

37 (a) REQUIREMENT TO ESTABLISH PROGRAM.—The Administrator shall
38 establish a demonstration program to award vouchers for the payment of
39 commercial launch services and payload integration services for the purpose
40 of launching payloads funded by the Administration.

1 (b) AWARD OF VOUCHERS.—The Administrator shall award vouchers
2 under subsection (a) to appropriate individuals as a part of grants adminis-
3 tered by the Administration for the launch of—

- 4 (1) payloads to be placed in suborbital trajectories; and
- 5 (2) small payloads to be placed in orbit.

6 (c) ASSISTANCE.—The Administrator may provide voucher award recipi-
7 ents with such assistance (including contract formulation and technical sup-
8 port during the proposal evaluation) as may be necessary to ensure the pur-
9 chase of cost effective and reasonably reliable commercial launch services
10 and payload integration services.

11 **§ 50503. Anchor tenancy and termination liability**

12 (a) ANCHOR TENANCY CONTRACTS.—Subject to appropriations, the Ad-
13 ministrator or the Administrator of the National Oceanic and Atmospheric
14 Administration may enter into multiyear anchor tenancy contracts for the
15 purchase of a good or service if the appropriate Administrator determines
16 that—

- 17 (1) the good or service meets the mission requirements of the Admin-
18 istration or the National Oceanic and Atmospheric Administration, as
19 appropriate;
- 20 (2) the commercially procured good or service is cost effective;
- 21 (3) the good or service is procured through a competitive process;
- 22 (4) existing or potential customers for the good or service other than
23 the United States Government have been specifically identified;
- 24 (5) the long-term viability of the venture is not dependent upon a
25 continued Government market or other nonreimbursable Government
26 support; and
- 27 (6) private capital is at risk in the venture.

28 (b) TERMINATION LIABILITY.—

29 (1) IN GENERAL.—Contracts entered into under subsection (a) may
30 provide for the payment of termination liability in the event that the
31 Government terminates such contracts for its convenience.

32 (2) FIXED SCHEDULE OF PAYMENTS AND LIMITATION ON LIABIL-
33 ITY.—Contracts that provide for the payment of termination liability,
34 as described in paragraph (1), shall include a fixed schedule of such
35 termination liability payments. Liability under such contracts shall not
36 exceed the total payments which the Government would have made
37 after the date of termination to purchase the good or service if the con-
38 tract were not terminated.

39 (3) USE OF FUNDS.—Subject to appropriations, funds available for
40 such termination liability payments may be used for purchase of the
41 good or service upon successful delivery of the good or service pursuant

1 to the contract. In such case, sufficient funds shall remain available to
2 cover any remaining termination liability.

3 (c) LIMITATIONS.—

4 (1) DURATION.—Contracts entered into under this section shall not
5 exceed 10 years in duration.

6 (2) FIXED PRICE.—Such contracts shall provide for delivery of the
7 good or service on a firm, fixed price basis.

8 (3) PERFORMANCE SPECIFICATIONS.—To the extent practicable, rea-
9 sonable performance specifications shall be used to define technical re-
10 quirements in such contracts.

11 (4) FAILURE TO PERFORM.—In any such contract, the appropriate
12 Administrator shall reserve the right to completely or partially termi-
13 nate the contract without payment of such termination liability because
14 of the contractor’s actual or anticipated failure to perform its contrac-
15 tual obligations.

16 **§ 50504. Use of Government facilities**

17 (a) AUTHORITY.—

18 (1) IN GENERAL.—Federal agencies, including the Administration
19 and the Department of Defense, may allow non-Federal entities to use
20 their space-related facilities on a reimbursable basis if the Adminis-
21 trator, the Secretary of Defense, or the appropriate agency head deter-
22 mines that—

23 (A) the facilities will be used to support commercial space activi-
24 ties;

25 (B) such use can be supported by existing or planned Federal
26 resources;

27 (C) such use is compatible with Federal activities;

28 (D) equivalent commercial services are not available on reason-
29 able terms; and

30 (E) such use is consistent with public safety, national security,
31 and international treaty obligations.

32 (2) CONSULTATION.—In carrying out paragraph (1)(E), each agency
33 head shall consult with appropriate Federal officials.

34 (b) REIMBURSEMENT PAYMENT.—

35 (1) AMOUNT.—The reimbursement referred to in subsection (a) may
36 be an amount equal to the direct costs (including salaries of United
37 States civilian and contractor personnel) incurred by the United States
38 as a result of the use of such facilities by the private sector. For the
39 purposes of this paragraph, the term “direct costs” means the actual
40 costs that can be unambiguously associated with such use, and would

1 not be borne by the United States Government in the absence of such
2 use.

3 (2) CREDIT TO APPROPRIATION.—The amount of any payment re-
4 ceived by the United States for use of facilities under this subsection
5 shall be credited to the appropriation from which the cost of providing
6 such facilities was paid.

7 **§ 50505. Test facilities**

8 (a) CHARGES.—The Administrator shall establish a policy of charging
9 users of the Administration’s test facilities for the costs associated with
10 their tests at a level that is competitive with alternative test facilities. The
11 Administrator shall not implement a policy of seeking full cost recovery for
12 a facility until at least 30 days after transmitting a notice to the Committee
13 on Science and Technology of the House of Representatives and the Com-
14 mittee on Commerce, Science, and Transportation of the Senate.

15 (b) FUNDING ACCOUNT.—In planning and budgeting, the Administrator
16 shall establish a funding account that shall be used for all test facilities.
17 The account shall be sufficient to maintain the viability of test facilities dur-
18 ing periods of low utilization.

19 **§ 50506. Commercial Space Achievement Award**

20 (a) ESTABLISHMENT.—There is established a Commercial Space Achieve-
21 ment Award. The award shall consist of a medal, which shall be of such
22 design and materials and bear such inscriptions as determined by the Sec-
23 retary of Commerce. A cash prize may also be awarded if funding for the
24 prize is available under subsection (d).

25 (b) CRITERIA FOR AWARD.—The Secretary of Commerce shall periodi-
26 cally make awards under this section to individuals, corporations, corporate
27 divisions, or corporate subsidiaries substantially engaged in commercial
28 space activities that in the opinion of the Secretary of Commerce best meet
29 the following criteria:

30 (1) NON-GOVERNMENTAL REVENUE.—For corporate entities, at least
31 half of the revenues from the space-related activities of the corporation,
32 division, or subsidiary is derived from sources other than the United
33 States Government.

34 (2) SUBSTANTIAL CONTRIBUTION.—The activities and achievements
35 of the individual, corporation, division, or subsidiary have substantially
36 contributed to the United States gross national product and the stature
37 of United States industry in international markets, with due consider-
38 ation for both the economic magnitude and the technical quality of the
39 activities and achievements.

40 (3) SUBSTANTIAL ADVANCEMENT OF TECHNOLOGY.—The individual,
41 corporation, division, or subsidiary has substantially advanced space

1 technology and space applications directly related to commercial space
2 activities.

3 (c) LIMITATIONS.—No individual or corporate entity may receive an
4 award under this section more than once every 5 years.

5 (d) FUNDING FOR AWARD.—The Secretary of Commerce may seek and
6 accept gifts of money from public and private sources for the purpose of
7 making cash prize awards under this section. Such money may be used only
8 for that purpose, and only such money may be used for that purpose. The
9 Secretary of Commerce shall make publicly available an itemized list of the
10 sources of such funding.

11 **CHAPTER 507—OFFICE OF SPACE COMMERCIALIZATION**

Sec.

50701. Definition of Office.

50702. Establishment.

50703. Annual report.

12 **§ 50701. Definition of Office**

13 In this chapter, the term “Office” means the Office of Space Commer-
14 cialization established in section 50702 of this title.

15 **§ 50702. Establishment**

16 (a) IN GENERAL.—There is established within the Department of Com-
17 merce an Office of Space Commercialization.

18 (b) DIRECTOR.—The Office shall be headed by a Director, who shall be
19 a senior executive and shall be compensated at a level in the Senior Execu-
20 tive Service under section 5382 of title 5 as determined by the Secretary
21 of Commerce.

22 (c) FUNCTIONS OF OFFICE.—The Office shall be the principal unit for
23 the coordination of space-related issues, programs, and initiatives within the
24 Department of Commerce.

25 (d) DUTIES OF DIRECTOR.—The primary responsibilities of the Director
26 in carrying out the functions of the Office shall include—

27 (1) promoting commercial provider investment in space activities by
28 collecting, analyzing, and disseminating information on space markets,
29 and conducting workshops and seminars to increase awareness of com-
30 mercial space opportunities;

31 (2) assisting United States commercial providers in the efforts of
32 those providers to conduct business with the United States Govern-
33 ment;

34 (3) acting as an industry advocate within the executive branch of the
35 Federal Government to ensure that the Federal Government meets the
36 space-related requirements of the Federal Government, to the fullest
37 extent feasible, using commercially available space goods and services;

1 (4) ensuring that the United States Government does not compete
 2 with United States commercial providers in the provision of space hard-
 3 ware and services otherwise available from United States commercial
 4 providers;

5 (5) promoting the export of space-related goods and services;

6 (6) representing the Department of Commerce in the development of
 7 United States policies and in negotiations with foreign countries to en-
 8 sure free and fair trade internationally in the area of space commerce;
 9 and

10 (7) seeking the removal of legal, policy, and institutional impedi-
 11 ments to space commerce.

12 **§ 50703. Annual report**

13 The Secretary of Commerce shall submit an annual report on the activi-
 14 ties of the Office, including planned programs and expenditures, to the
 15 Committee on Commerce, Science, and Transportation of the Senate and
 16 the Committee on Science and Technology of the House of Representatives.

17 **Subtitle VI—Earth Observations**

18 **CHAPTER 601—LAND REMOTE SENSING POLICY**

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SUBCHAPTER I—GENERAL

§ 60101. Definitions

In this chapter:

(1) COST OF FULFILLING USER REQUESTS.—The term “cost of fulfilling user requests” means the incremental costs associated with providing product generation, reproduction, and distribution of unenhanced data in response to user requests and shall not include any acquisition, amortization, or depreciation of capital assets originally paid for by the United States Government or other costs not specifically attributable to fulfilling user requests.

(2) DATA CONTINUITY.—The term “data continuity” means the continued acquisition and availability of unenhanced data which are, from the point of view of the user—

(A) sufficiently consistent (in terms of acquisition geometry, coverage characteristics, and spectral characteristics) with previous Landsat data to allow comparisons for global and regional change detection and characterization; and

(B) compatible with such data and with methods used to receive and process such data.

(3) DATA PREPROCESSING.—The term “data preprocessing”—

(A) may include—

(i) rectification of system and sensor distortions in land remote sensing data as it is received directly from the satellite in preparation for delivery to a user;

(ii) registration of such data with respect to features of the Earth; and

(iii) calibration of spectral response with respect to such data; but

(B) does not include conclusions, manipulations, or calculations derived from such data, or a combination of such data with other data.

(4) LAND REMOTE SENSING.—The term “land remote sensing” means the collection of data which can be processed into imagery of surface features of the Earth from an unclassified satellite or satellites, other than an operational United States Government weather satellite.

(5) LANDSAT PROGRAM MANAGEMENT.—The term “Landsat Program Management” means the integrated program management structure—

(A) established by, and responsible to, the Administrator and the Secretary of Defense pursuant to section 60111(a) of this title; and

1 (B) consisting of appropriate officers and employees of the Ad-
2 ministration, the Department of Defense, and any other United
3 States Government agencies the President designates as respon-
4 sible for the Landsat program.

5 (6) LANDSAT SYSTEM.—The term “Landsat system” means
6 Landsats 1, 2, 3, 4, 5, and 6, and any follow-on land remote sensing
7 system operated and owned by the United States Government, along
8 with any related ground equipment, systems, and facilities owned by
9 the United States Government.

10 (7) LANDSAT 6 CONTRACTOR.—The term “Landsat 6 contractor”
11 means the private sector entity which was awarded the contract for
12 spacecraft construction, operations, and data marketing rights for the
13 Landsat 6 spacecraft.

14 (8) LANDSAT 7.—The term “Landsat 7” means the follow-on sat-
15 ellite to Landsat 6.

16 (9) NATIONAL SATELLITE LAND REMOTE SENSING DATA ARCHIVE.—
17 The term “National Satellite Land Remote Sensing Data Archive”
18 means the archive established by the Secretary of the Interior pursuant
19 to the archival responsibilities defined in section 60142 of this title.

20 (10) NONCOMMERCIAL PURPOSES.—The term “noncommercial pur-
21 poses” means activities undertaken by individuals or entities on the
22 condition, upon receipt of unenhanced data, that—

23 (A) such data shall not be used in connection with any bid for
24 a commercial contract, development of a commercial product, or
25 any other non-United States Government activity that is expected,
26 or has the potential, to be profitmaking;

27 (B) the results of such activities are disclosed in a timely and
28 complete fashion in the open technical literature or other method
29 of public release, except when such disclosure by the United States
30 Government or its contractors would adversely affect the national
31 security or foreign policy of the United States or violate a provi-
32 sion of law or regulation; and

33 (C) such data shall not be distributed in competition with
34 unenhanced data provided by the Landsat 6 contractor.

35 (11) SECRETARY.—The term “Secretary” means the Secretary of
36 Commerce.

37 (12) UNENHANCED DATA.—The term “unenhanced data” means
38 land remote sensing signals or imagery products that are unprocessed
39 or subject only to data preprocessing.

40 (13) UNITED STATES GOVERNMENT AND ITS AFFILIATED USERS.—
41 The term “United States Government and its affiliated users” means—

1 (A) United States Government agencies;

2 (B) researchers involved with the United States Global Change
3 Research Program and its international counterpart programs;
4 and

5 (C) other researchers and international entities that have signed
6 with the United States Government a cooperative agreement in-
7 volving the use of Landsat data for noncommercial purposes.

8 SUBCHAPTER II—LANDSAT

9 **§ 60111. Landsat Program Management**

10 (a) ESTABLISHMENT.—The Administrator and the Secretary of Defense
11 shall be responsible for management of the Landsat program. Such respon-
12 sibility shall be carried out by establishing an integrated program manage-
13 ment structure for the Landsat system.

14 (b) MANAGEMENT PLAN.—The Administrator, the Secretary of Defense,
15 and any other United States Government official the President designates
16 as responsible for part of the Landsat program shall establish, through a
17 management plan, the roles, responsibilities, and funding expectations for
18 the Landsat program of the appropriate United States Government agen-
19 cies. The management plan shall—

20 (1) specify that the fundamental goal of the Landsat Program Man-
21 agement is the continuity of unenhanced Landsat data through the ac-
22 quisition and operation of a Landsat 7 satellite as quickly as prac-
23 ticable which is, at a minimum, functionally equivalent to the Landsat
24 6 satellite, with the addition of a tracking and data relay satellite com-
25 munications capability;

26 (2) include a baseline funding profile that—

27 (A) is mutually acceptable to the Administration and the De-
28 partment of Defense for the period covering the development and
29 operation of Landsat 7; and

30 (B) provides for total funding responsibility of the Administra-
31 tion and the Department of Defense, respectively, to be approxi-
32 mately equal to the funding responsibility of the other as spread
33 across the development and operational life of Landsat 7;

34 (3) specify that any improvements over the Landsat 6 functional
35 equivalent capability for Landsat 7 will be funded by a specific spon-
36 soring agency or agencies, in a manner agreed to by the Landsat Pro-
37 gram Management, if the required funding exceeds the baseline funding
38 profile required by paragraph (2), and that additional improvements
39 will be sought only if the improvements will not jeopardize data con-
40 tinuity; and

1 (4) provide for a technology demonstration program whose objective
2 shall be the demonstration of advanced land remote sensing tech-
3 nologies that may potentially yield a system which is less expensive to
4 build and operate, and more responsive to data users, than is the cur-
5 rent Landsat system.

6 (c) RESPONSIBILITIES.—The Landsat Program Management shall be re-
7 sponsible for—

8 (1) Landsat 7 procurement, launch, and operations;

9 (2) ensuring that the operation of the Landsat system is responsive
10 to the broad interests of the civilian, national security, commercial, and
11 foreign users of the Landsat system;

12 (3) ensuring that all unenhanced Landsat data remain unclassified
13 and that, except as provided in subsections (a) and (b) of section
14 60146 of this title, no restrictions are placed on the availability of
15 unenhanced data;

16 (4) ensuring that land remote sensing data of high priority locations
17 will be acquired by the Landsat 7 system as required to meet the needs
18 of the United States Global Change Research Program, as established
19 in the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.),
20 and to meet the needs of national security users;

21 (5) Landsat data responsibilities pursuant to this chapter;

22 (6) oversight of Landsat contracts entered into under sections 102
23 and 103 of the Land Remote Sensing Policy Act of 1992 (Public Law
24 102–555, 106 Stat. 4168);

25 (7) coordination of a technology demonstration program pursuant to
26 section 60133 of this title; and

27 (8) ensuring that copies of data acquired by the Landsat system are
28 provided to the National Satellite Land Remote Sensing Data Archive.

29 (d) AUTHORITY TO CONTRACT.—The Landsat Program Management
30 may, subject to appropriations and only under the existing contract author-
31 ity of the United States Government agencies that compose the Landsat
32 Program Management, enter into contracts with the private sector for serv-
33 ices such as satellite operations and data preprocessing.

34 (e) LANDSAT ADVISORY PROCESS.—

35 (1) ADVICE AND COMMENTS.—The Landsat Program Management
36 shall seek impartial advice and comments regarding the status, effec-
37 tiveness, and operation of the Landsat system, using existing advisory
38 committees and other appropriate mechanisms. Such advice shall be
39 sought from individuals who represent—

40 (A) a broad range of perspectives on basic and applied science
41 and operational needs with respect to land remote sensing data;

1 (B) the full spectrum of users of Landsat data, including rep-
 2 resentatives from United States Government agencies, State and
 3 local government agencies, academic institutions, nonprofit organi-
 4 zations, value-added companies, the agricultural, mineral extrac-
 5 tion, and other user industries, and the public; and

6 (C) a broad diversity of age groups, sexes, and races.

7 (2) REPORTS.—The Landsat Program Management shall prepare
 8 and submit biennially a report to Congress which—

9 (A) reports the public comments received pursuant to paragraph
 10 (1); and

11 (B) includes—

12 (i) a response to the public comments received pursuant to
 13 paragraph (1);

14 (ii) information on the volume of use, by category, of data
 15 from the Landsat system; and

16 (iii) any recommendations for policy or programmatic
 17 changes to improve the utility and operation of the Landsat
 18 system.

19 **§ 60112. Transfer of Landsat 6 program responsibilities**

20 The responsibilities of the Secretary with respect to Landsat 6 shall be
 21 transferred to the Landsat Program Management, as agreed to between the
 22 Secretary and the Landsat Program Management, pursuant to section
 23 60111 of this title.

24 **§ 60113. Data policy for Landsat 7**

25 (a) LANDSAT 7 DATA POLICY.—The Landsat Program Management, in
 26 consultation with other appropriate United States Government agencies,
 27 shall develop a data policy for Landsat 7 which should—

28 (1) ensure that unenhanced data are available to all users at the cost
 29 of fulfilling user requests;

30 (2) ensure timely and dependable delivery of unenhanced data to the
 31 full spectrum of civilian, national security, commercial, and foreign
 32 users and the National Satellite Land Remote Sensing Data Archive;

33 (3) ensure that the United States retains ownership of all
 34 unenhanced data generated by Landsat 7;

35 (4) support the development of the commercial market for remote
 36 sensing data;

37 (5) ensure that the provision of commercial value-added services
 38 based on remote sensing data remains exclusively the function of the
 39 private sector; and

1 (6) to the extent possible, ensure that the data distribution system
2 for Landsat 7 is compatible with the Earth Observing System Data
3 and Information System.

4 (b) ADDITIONAL DATA POLICY CONSIDERATIONS.—In addition, the data
5 policy for Landsat 7 may provide for—

6 (1) United States private sector entities to operate ground receiving
7 stations in the United States for Landsat 7 data;

8 (2) other means for direct access by private sector entities to
9 unenhanced data from Landsat 7; and

10 (3) the United States Government to charge a per image fee, license
11 fee, or other such fee to entities operating ground receiving stations or
12 distributing Landsat 7 data.

13 SUBCHAPTER III—LICENSING OF PRIVATE REMOTE SENSING 14 SPACE SYSTEMS

15 § 60121. General licensing authority

16 (a) LICENSING AUTHORITY OF SECRETARY.—

17 (1) IN GENERAL.—In consultation with other appropriate United
18 States Government agencies, the Secretary is authorized to license pri-
19 vate sector parties to operate private remote sensing space systems for
20 such period as the Secretary may specify and in accordance with the
21 provisions of this subchapter.

22 (2) LIMITATION WITH RESPECT TO SYSTEM USED FOR OTHER PUR-
23 POSSES.—In the case of a private space system that is used for remote
24 sensing and other purposes, the authority of the Secretary under this
25 subchapter shall be limited only to the remote sensing operations of
26 such space system.

27 (b) COMPLIANCE WITH LAW, REGULATIONS, INTERNATIONAL OBLIGA-
28 TIONS, AND NATIONAL SECURITY.—

29 (1) IN GENERAL.—No license shall be granted by the Secretary un-
30 less the Secretary determines in writing that the applicant will comply
31 with the requirements of this chapter, any regulations issued pursuant
32 to this chapter, and any applicable international obligations and na-
33 tional security concerns of the United States.

34 (2) LIST OF REQUIREMENTS FOR COMPLETE APPLICATION.—The
35 Secretary shall publish in the Federal Register a complete and specific
36 list of all information required to comprise a complete application for
37 a license under this subchapter. An application shall be considered
38 complete when the applicant has provided all information required by
39 the list most recently published in the Federal Register before the date
40 the application was first submitted. Unless the Secretary has, within
41 30 days after receipt of an application, notified the applicant of infor-

1 mation necessary to complete an application, the Secretary may not
2 deny the application on the basis of the absence of any such informa-
3 tion.

4 (e) DEADLINE FOR ACTION ON APPLICATION.—The Secretary shall re-
5 view any application and make a determination thereon within 120 days of
6 the receipt of such application. If final action has not occurred within such
7 time, the Secretary shall inform the applicant of any pending issues and of
8 actions required to resolve them.

9 (d) IMPROPER BASIS FOR DENIAL.—The Secretary shall not deny such
10 license in order to protect any existing licensee from competition.

11 (e) REQUIREMENT TO PROVIDE UNENHANCED DATA.—

12 (1) DESIGNATION OF DATA.—The Secretary, in consultation with
13 other appropriate United States Government agencies and pursuant to
14 paragraph (2), shall designate in a license issued pursuant to this sub-
15 chapter any unenhanced data required to be provided by the licensee
16 under section 60122(b)(3) of this title.

17 (2) PRELIMINARY DETERMINATION.—The Secretary shall make a
18 designation under paragraph (1) after determining that—

19 (A) such data are generated by a system for which all or a sub-
20 stantial part of the development, fabrication, launch, or operations
21 costs have been or will be directly funded by the United States
22 Government; or

23 (B) it is in the interest of the United States to require such
24 data to be provided by the licensee consistent with section
25 60122(b)(3) of this title, after considering the impact on the li-
26 censee and the importance of promoting widespread access to re-
27 mote sensing data from United States and foreign systems.

28 (3) CONSISTENCY WITH CONTRACT OR OTHER ARRANGEMENT.—A
29 designation made by the Secretary under paragraph (1) shall not be
30 inconsistent with any contract or other arrangement entered into be-
31 tween a United States Government agency and the licensee.

32 **§ 60122. Conditions for operation**

33 (a) LICENSE REQUIRED FOR OPERATION.—No person that is subject to
34 the jurisdiction or control of the United States may, directly or through any
35 subsidiary or affiliate, operate any private remote sensing space system
36 without a license pursuant to section 60121 of this title.

37 (b) LICENSING REQUIREMENTS.—Any license issued pursuant to this
38 subchapter shall specify that the licensee shall comply with all of the re-
39 quirements of this chapter and shall—

40 (1) operate the system in such manner as to preserve the national
41 security of the United States and to observe the international obliga-

1 tions of the United States in accordance with section 60146 of this
2 title;

3 (2) make available to the government of any country (including the
4 United States) unenhanced data collected by the system concerning the
5 territory under the jurisdiction of such government as soon as such
6 data are available and on reasonable terms and conditions;

7 (3) make unenhanced data designated by the Secretary in the license
8 pursuant to section 60121(e) of this title available in accordance with
9 section 60141 of this title;

10 (4) upon termination of operations under the license, make disposi-
11 tion of any satellites in space in a manner satisfactory to the President;

12 (5) furnish the Secretary with complete orbit and data collection
13 characteristics of the system, and inform the Secretary immediately of
14 any deviation; and

15 (6) notify the Secretary of any significant or substantial agreement
16 the licensee intends to enter with a foreign nation, entity, or consor-
17 tium involving foreign nations or entities.

18 (c) ADDITIONAL LICENSING REQUIREMENTS FOR LANDSAT 6 CON-
19 TRACTOR.—In addition to the requirements of subsection (b), any license
20 issued pursuant to this subchapter to the Landsat 6 contractor shall specify
21 that the Landsat 6 contractor shall—

22 (1) notify the Secretary of any value added activities (as defined by
23 the Secretary by regulation) that will be conducted by the Landsat 6
24 contractor or by a subsidiary or affiliate; and

25 (2) if such activities are to be conducted, provide the Secretary with
26 a plan for compliance with section 60141 of this title.

27 **§ 60123. Administrative authority of Secretary**

28 (a) FUNCTIONS.—In order to carry out the responsibilities specified in
29 this subchapter, the Secretary may—

30 (1) grant, condition, or transfer licenses under this chapter;

31 (2) seek an order of injunction or similar judicial determination from
32 a district court of the United States with personal jurisdiction over the
33 licensee to terminate, modify, or suspend licenses under this subchapter
34 and to terminate licensed operations on an immediate basis, if the Sec-
35 retary determines that the licensee has substantially failed to comply
36 with any provisions of this chapter, with any terms, conditions, or re-
37 strictions of such license, or with any international obligations or na-
38 tional security concerns of the United States;

39 (3) provide penalties for noncompliance with the requirements of li-
40 censes or regulations issued under this subchapter, including civil pen-

1 alties not to exceed \$10,000 (each day of operation in violation of such
2 licenses or regulations constituting a separate violation);

3 (4) compromise, modify, or remit any such civil penalty;

4 (5) issue subpoenas for any materials, documents, or records, or for
5 the attendance and testimony of witnesses for the purpose of con-
6 ducting a hearing under this section;

7 (6) seize any object, record, or report pursuant to a warrant from
8 a magistrate based on a showing of probable cause to believe that such
9 object, record, or report was used, is being used, or is likely to be used
10 in violation of this chapter or the requirements of a license or regula-
11 tion issued thereunder; and

12 (7) make investigations and inquiries and administer to or take from
13 any person an oath, affirmation, or affidavit concerning any matter re-
14 lating to the enforcement of this chapter.

15 (b) REVIEW OF AGENCY ACTION.—Any applicant or licensee that makes
16 a timely request for review of an adverse action pursuant to paragraph (1),
17 (3), (5), or (6) of subsection (a) shall be entitled to adjudication by the Sec-
18 retary on the record after an opportunity for any agency hearing with re-
19 spect to such adverse action. Any final action by the Secretary under this
20 subsection shall be subject to judicial review under chapter 7 of title 5.

21 **§ 60124. Regulatory authority of Secretary**

22 The Secretary may issue regulations to carry out this subchapter. Such
23 regulations shall be promulgated only after public notice and comment in
24 accordance with the provisions of section 553 of title 5.

25 **§ 60125. Agency activities**

26 (a) LICENSE APPLICATION AND ISSUANCE.—A private sector party may
27 apply for a license to operate a private remote sensing space system which
28 utilizes, on a space-available basis, a civilian United States Government sat-
29 ellite or vehicle as a platform for such system. The Secretary, pursuant to
30 this subchapter, may license such system if it meets all conditions of this
31 subchapter and—

32 (1) the system operator agrees to reimburse the Government in a
33 timely manner for all related costs incurred with respect to such utili-
34 zation, including a reasonable and proportionate share of fixed, plat-
35 form, data transmission, and launch costs; and

36 (2) such utilization would not interfere with or otherwise compromise
37 intended civilian Government missions, as determined by the agency re-
38 sponsible for such civilian platform.

39 (b) ASSISTANCE.—The Secretary may offer assistance to private sector
40 parties in finding appropriate opportunities for such utilization.

1 (c) AGREEMENTS.—To the extent provided in advance by appropriation
 2 Acts, any United States Government agency may enter into agreements for
 3 such utilization if such agreements are consistent with such agency’s mis-
 4 sion and statutory authority, and if such remote sensing space system is li-
 5 censed by the Secretary before commencing operation.

6 (d) APPLICABILITY.—This section does not apply to activities carried out
 7 under subchapter IV.

8 (e) EFFECT ON FCC AUTHORITY.—Nothing in this subchapter shall af-
 9 fect the authority of the Federal Communications Commission pursuant to
 10 the Communications Act of 1934 (47 U.S.C. 151 et seq.).

11 SUBCHAPTER IV—RESEARCH, DEVELOPMENT, AND
 12 DEMONSTRATION

13 **§ 60131. Continued Federal research and development**

14 (a) ROLES OF ADMINISTRATION AND DEPARTMENT OF DEFENSE.—

15 (1) IN GENERAL.—The Administrator and the Secretary of Defense
 16 are directed to continue and to enhance programs of remote sensing
 17 research and development.

18 (2) ADMINISTRATION ACTIVITIES AUTHORIZED AND ENCOURAGED.—
 19 The Administrator is authorized and encouraged to—

20 (A) conduct experimental space remote sensing programs (in-
 21 cluding applications demonstration programs and basic research at
 22 universities);

23 (B) develop remote sensing technologies and techniques, includ-
 24 ing those needed for monitoring the Earth and its environment;
 25 and

26 (C) conduct such research and development in cooperation with
 27 other United States Government agencies and with public and pri-
 28 vate research entities (including private industry, universities, non-
 29 profit organizations, State and local governments, foreign govern-
 30 ments, and international organizations) and to enter into arrange-
 31 ments (including joint ventures) which will foster such coopera-
 32 tion.

33 (b) ROLES OF DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF
 34 THE INTERIOR.—

35 (1) IN GENERAL.—In order to enhance the ability of the United
 36 States to manage and utilize its renewable and nonrenewable resources,
 37 the Secretary of Agriculture and the Secretary of the Interior are au-
 38 thorized and encouraged to conduct programs of research and develop-
 39 ment in the applications of remote sensing using funds appropriated
 40 for such purposes.

1 (2) ACTIVITIES THAT MAY BE INCLUDED.—Such programs may in-
2 clude basic research at universities, demonstrations of applications, and
3 cooperative activities involving other Government agencies, private sec-
4 tor parties, and foreign and international organizations.

5 (c) ROLE OF OTHER FEDERAL AGENCIES.—Other United States Govern-
6 ment agencies are authorized and encouraged to conduct research and devel-
7 opment on the use of remote sensing in the fulfillment of their authorized
8 missions, using funds appropriated for such purposes.

9 **§ 60132. Availability of federally gathered unenhanced data**

10 (a) IN GENERAL.—All unenhanced land remote sensing data gathered
11 and owned by the United States Government, including unenhanced data
12 gathered under the technology demonstration program carried out pursuant
13 to section 60133 of this title, shall be made available to users in a timely
14 fashion.

15 (b) PROTECTION FOR COMMERCIAL DATA DISTRIBUTOR.—The President
16 shall seek to ensure that unenhanced data gathered under the technology
17 demonstration program carried out pursuant to section 60133 of this title
18 shall, to the extent practicable, be made available on terms that would not
19 adversely affect the commercial market for unenhanced data gathered by
20 the Landsat 6 spacecraft.

21 **§ 60133. Technology demonstration program**

22 (a) ESTABLISHMENT.—As a fundamental component of a national land
23 remote sensing strategy, the President shall establish, through appropriate
24 United States Government agencies, a technology demonstration program.
25 The goals of the program shall be to—

26 (1) seek to launch advanced land remote sensing system components
27 within 5 years after October 28, 1992;

28 (2) demonstrate within such 5-year period advanced sensor capabili-
29 ties suitable for use in the anticipated land remote sensing program;
30 and

31 (3) demonstrate within such 5-year period an advanced land remote
32 sensing system design that could be less expensive to procure and oper-
33 ate than the Landsat system projected to be in operation through the
34 year 2000, and that therefore holds greater potential for private sector
35 investment and control.

36 (b) EXECUTION OF PROGRAM.—In executing the technology demonstra-
37 tion program, the President shall seek to apply technologies associated with
38 United States National Technical Means of intelligence gathering, to the ex-
39 tent that such technologies are appropriate for the technology demonstration
40 and can be declassified for such purposes without causing adverse harm to
41 United States national security interests.

1 (c) BROAD APPLICATION.—To the greatest extent practicable, the tech-
 2 nology demonstration program established under subsection (a) shall be de-
 3 signed to be responsive to the broad civilian, national security, commercial,
 4 and foreign policy needs of the United States.

5 (d) PRIVATE SECTOR FUNDING.—The technology demonstration program
 6 under this section may be carried out in part with private sector funding.

7 (e) LANDSAT PROGRAM MANAGEMENT COORDINATION.—The Landsat
 8 Program Management shall have a coordinating role in the technology dem-
 9 onstration program carried out under this section.

10 **§ 60134. Preference for private sector land remote sensing**
 11 **system**

12 (a) IN GENERAL.—If a successor land remote sensing system to Landsat
 13 7 can be funded and managed by the private sector while still achieving the
 14 goals stated in subsection (b) without jeopardizing the domestic, national se-
 15 curity, and foreign policy interests of the United States, preference should
 16 be given to the development of such a system by the private sector without
 17 competition from the United States Government.

18 (b) GOALS.—The goals referred to in subsection (a) are—

19 (1) to encourage the development, launch, and operation of a land
 20 remote sensing system that adequately serves the civilian, national se-
 21 curity, commercial, and foreign policy interests of the United States;

22 (2) to encourage the development, launch, and operation of a land
 23 remote sensing system that maintains data continuity with the Landsat
 24 system; and

25 (3) to incorporate system enhancements, including any such enhance-
 26 ments developed under the technology demonstration program under
 27 section 60133 of this title, which may potentially yield a system that
 28 is less expensive to build and operate, and more responsive to data
 29 users, than is the Landsat system otherwise projected to be in oper-
 30 ation in the future.

31 SUBCHAPTER V—GENERAL PROVISIONS

32 **§ 60141. Nondiscriminatory data availability**

33 (a) IN GENERAL.—Except as provided in subsection (b), any unenhanced
 34 data generated by the Landsat system or any other land remote sensing sys-
 35 tem funded and owned by the United States Government shall be made
 36 available to all users without preference, bias, or any other special arrange-
 37 ment (except on the basis of national security concerns pursuant to section
 38 60146 of this title) regarding delivery, format, pricing, or technical consid-
 39 erations which would favor one customer or class of customers over another.

40 (b) EXCEPTIONS.—Unenhanced data generated by the Landsat system or
 41 any other land remote sensing system funded and owned by the United

1 States Government may be made available to the United States Government
2 and its affiliated users at reduced prices, in accordance with this chapter,
3 on the condition that such unenhanced data are used solely for noncommercial
4 purposes.

5 **§ 60142. Archiving of data**

6 (a) PUBLIC INTEREST.—It is in the public interest for the United States
7 Government to—

8 (1) maintain an archive of land remote sensing data for historical,
9 scientific, and technical purposes, including long-term global environmental
10 monitoring;

11 (2) control the content and scope of the archive; and

12 (3) ensure the quality, integrity, and continuity of the archive.

13 (b) ARCHIVING PRACTICES.—The Secretary of the Interior, in consultation
14 with the Landsat Program Management, shall provide for long-term
15 storage, maintenance, and upgrading of a basic, global, land remote sensing
16 data set (hereafter in this section referred to as the “basic data set”) and
17 shall follow reasonable archival practices to ensure proper storage and preservation
18 of the basic data set and timely access for parties requesting data.

19 (c) DETERMINATION OF CONTENT OF BASIC DATA SET.—In determining
20 the initial content of, or in upgrading, the basic data set, the Secretary of
21 the Interior shall—

22 (1) use as a baseline the data archived on October 28, 1992;

23 (2) take into account future technical and scientific developments
24 and needs, paying particular attention to the anticipated data requirements
25 of global environmental change research;

26 (3) consult with and seek the advice of users and producers of remote
27 sensing data and data products;

28 (4) consider the need for data which may be duplicative in terms of
29 geographical coverage but which differ in terms of season, spectral
30 bands, resolution, or other relevant factors;

31 (5) include, as the Secretary of the Interior considers appropriate,
32 unenhanced data generated either by the Landsat system, pursuant to
33 subchapter II, or by licensees under subchapter III;

34 (6) include, as the Secretary of the Interior considers appropriate,
35 data collected by foreign ground stations or by foreign remote sensing
36 space systems; and

37 (7) ensure that the content of the archive is developed in accordance
38 with section 60146 of this title.

39 (d) PUBLIC DOMAIN.—After the expiration of any exclusive right to sell,
40 or after relinquishment of such right, the data provided to the National Satellite
41 Land Remote Sensing Data Archive shall be in the public domain and

1 shall be made available to requesting parties by the Secretary of the Interior
2 at the cost of fulfilling user requests.

3 **§ 60143. Nonreproduction**

4 Unenhanced data distributed by any licensee under subchapter III may
5 be sold on the condition that such data will not be reproduced or dissemi-
6 nated by the purchaser for commercial purposes.

7 **§ 60144. Reimbursement for assistance**

8 The Administrator, the Secretary of Defense, and the heads of other
9 United States Government agencies may provide assistance to land remote
10 sensing system operators under the provisions of this chapter. Substantial
11 assistance shall be reimbursed by the operator, except as otherwise provided
12 by law.

13 **§ 60145. Acquisition of equipment**

14 The Landsat Program Management may, by means of a competitive proce-
15 ss, allow a licensee under subchapter III or any other private party to buy,
16 lease, or otherwise acquire the use of equipment from the Landsat system,
17 when such equipment is no longer needed for the operation of such system
18 or for the sale of data from such system. Officials of other United States
19 Government civilian agencies are authorized and encouraged to cooperate
20 with the Secretary in carrying out this section.

21 **§ 60146. Radio frequency allocation**

22 (a) APPLICATION TO FEDERAL COMMUNICATIONS COMMISSION.—To the
23 extent required by the Communications Act of 1934 (47 U.S.C. 151 et
24 seq.), an application shall be filed with the Federal Communications Com-
25 mission for any radio facilities involved with commercial remote sensing
26 space systems licensed under subchapter III.

27 (b) DEADLINE FOR FCC ACTION.—It is the intent of Congress that the
28 Federal Communications Commission complete the radio licensing process
29 under the Communications Act of 1934 (47 U.S.C. 151 et seq.), upon the
30 application of any private sector party or consortium operator of any com-
31 mercial land remote sensing space system subject to this chapter, within
32 120 days of the receipt of an application for such licensing. If final action
33 has not occurred within 120 days of the receipt of such an application, the
34 Federal Communications Commission shall inform the applicant of any
35 pending issues and of actions required to resolve them.

36 (c) DEVELOPMENT AND CONSTRUCTION OF UNITED STATES SYSTEMS.—
37 Authority shall not be required from the Federal Communications Commis-
38 sion for the development and construction of any United States land remote
39 sensing space system (or component thereof), other than radio transmitting
40 facilities or components, while any licensing determination is being made.

1 (d) CONSISTENCY WITH INTERNATIONAL OBLIGATIONS AND PUBLIC IN-
2 TEREST.—Frequency allocations made pursuant to this section by the Fed-
3 eral Communications Commission shall be consistent with international obli-
4 gations and with the public interest.

5 **§ 60147. Consultation**

6 (a) CONSULTATION WITH SECRETARY OF DEFENSE.—The Secretary and
7 the Landsat Program Management shall consult with the Secretary of De-
8 fense on all matters under this chapter affecting national security. The Sec-
9 retary of Defense shall be responsible for determining those conditions, con-
10 sistent with this chapter, necessary to meet national security concerns of the
11 United States and for notifying the Secretary and the Landsat Program
12 Management promptly of such conditions.

13 (b) CONSULTATION WITH SECRETARY OF STATE.—

14 (1) IN GENERAL.—The Secretary and the Landsat Program Man-
15 agement shall consult with the Secretary of State on all matters under
16 this chapter affecting international obligations. The Secretary of State
17 shall be responsible for determining those conditions, consistent with
18 this chapter, necessary to meet international obligations and policies of
19 the United States and for notifying promptly the Secretary and the
20 Landsat Program Management of such conditions.

21 (2) INTERNATIONAL AID.—Appropriate United States Government
22 agencies are authorized and encouraged to provide remote sensing data,
23 technology, and training to developing nations as a component of pro-
24 grams of international aid.

25 (3) REPORTING DISCRIMINATORY DISTRIBUTION.—The Secretary of
26 State shall promptly report to the Secretary and Landsat Program
27 Management any instances outside the United States of discriminatory
28 distribution of Landsat data.

29 (c) STATUS REPORT.—The Landsat Program Management shall, as often
30 as necessary, provide to Congress complete and updated information about
31 the status of ongoing operations of the Landsat system, including timely no-
32 tification of decisions made with respect to the Landsat system in order to
33 meet national security concerns and international obligations and policies of
34 the United States Government.

35 (d) REIMBURSEMENTS.—If, as a result of technical modifications imposed
36 on a licensee under subchapter III on the basis of national security con-
37 cerns, the Secretary, in consultation with the Secretary of Defense or with
38 other Federal agencies, determines that additional costs will be incurred by
39 the licensee, or that past development costs (including the cost of capital)
40 will not be recovered by the licensee, the Secretary may require the agency
41 or agencies requesting such technical modifications to reimburse the licensee

1 for such additional or development costs, but not for anticipated profits. Re-
2 imbursements may cover costs associated with required changes in system
3 performance, but not costs ordinarily associated with doing business abroad.

4 **§ 60148. Enforcement**

5 (a) IN GENERAL.—In order to ensure that unenhanced data from the
6 Landsat system received solely for noncommercial purposes are not used for
7 any commercial purpose, the Secretary (in collaboration with private sector
8 entities responsible for the marketing and distribution of unenhanced data
9 generated by the Landsat system) shall develop and implement a system for
10 enforcing this prohibition, in the event that unenhanced data from the
11 Landsat system are made available for noncommercial purposes at a dif-
12 ferent price than such data are made available for other purposes.

13 (b) AUTHORITY OF SECRETARY.—Subject to subsection (d), the Secretary
14 may impose any of the enforcement mechanisms described in subsection (c)
15 against a person that—

16 (1) receives unenhanced data from the Landsat system under this
17 chapter solely for noncommercial purposes (and at a different price
18 than the price at which such data are made available for other pur-
19 poses); and

20 (2) uses such data for other than noncommercial purposes.

21 (c) ENFORCEMENT MECHANISMS.—Enforcement mechanisms referred to
22 in subsection (b) may include civil penalties of not more than \$10,000 (per
23 day per violation), denial of further unenhanced data purchasing privileges,
24 and any other penalties or restrictions the Secretary considers necessary to
25 ensure, to the greatest extent practicable, that unenhanced data provided
26 for noncommercial purposes are not used to unfairly compete in the com-
27 mercial market against private sector entities not eligible for data at the
28 cost of fulfilling user requests.

29 (d) PROCEDURES AND REGULATIONS.—The Secretary shall issue any reg-
30 ulations necessary to carry out this section and shall establish standards
31 and procedures governing the imposition of enforcement mechanisms under
32 subsection (b). The standards and procedures shall include a procedure for
33 potentially aggrieved parties to file formal protests with the Secretary alleg-
34 ing instances where such unenhanced data have been, or are being, used for
35 commercial purposes in violation of the terms of receipt of such data. The
36 Secretary shall promptly act to investigate any such protest, and shall re-
37 port annually to Congress on instances of such violations.

1 SUBCHAPTER VI—PROHIBITION OF COMMERCIALIZATION OF
2 WEATHER SATELLITES

3 **§ 60161. Prohibition**

4 Neither the President nor any other official of the Government shall make
5 any effort to lease, sell, or transfer to the private sector, or commercialize,
6 any portion of the weather satellite systems operated by the Department of
7 Commerce or any successor agency.

8 **§ 60162. Future considerations**

9 Regardless of any change in circumstances subsequent to October 28,
10 1992, even if such change makes it appear to be in the national interest
11 to commercialize weather satellites, neither the President nor any official
12 shall take any action prohibited by section 60161 of this title unless this
13 subchapter has first been repealed.

14 **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.

15 **§ 60301. Definitions**

16 In this chapter:

17 (1) GEOSPATIAL INFORMATION.—The term “geospatial information”
18 means knowledge of the nature and distribution of physical and cul-
19 tural features on the landscape based on analysis of data from airborne
20 or spaceborne platforms or other types and sources of data.

21 (2) HIGH RESOLUTION.—The term “high resolution” means resolu-
22 tion better than five meters.

23 (3) INSTITUTION OF HIGHER EDUCATION.—The term “institution of
24 higher education” has the meaning given the term in section 101(a)
25 of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

26 **§ 60302. General responsibilities**

27 The Administrator shall—

28 (1) develop a sustained relationship with the United States commer-
29 cial remote sensing industry and, consistent with applicable policies and
30 law, to the maximum practicable, rely on their services; and

31 (2) in conjunction with United States industry and universities, re-
32 search, develop, and demonstrate prototype Earth science applications
33 to enhance Federal, State, local, and tribal governments’ use of govern-
34 ment and commercial remote sensing data, technologies, and other
35 sources of geospatial information for improved decision support to ad-
36 dress their needs.

1 **§ 60303. Pilot projects to encourage public sector applica-**
2 **tions**

3 (a) IN GENERAL.—The Administrator shall establish a program of grants
4 for competitively awarded pilot projects to explore the integrated use of
5 sources of remote sensing and other geospatial information to address State,
6 local, regional, and tribal agency needs.

7 (b) PREFERRED PROJECTS.—In awarding grants under this section, the
8 Administrator shall give preference to projects that—

9 (1) make use of commercial data sets, including high resolution com-
10 mercial satellite imagery and derived satellite data products, existing
11 public data sets where commercial data sets are not available or appli-
12 cable, or the fusion of such data sets;

13 (2) integrate multiple sources of geospatial information, such as geo-
14 graphic information system data, satellite-provided positioning data,
15 and remotely sensed data, in innovative ways;

16 (3) include funds or in-kind contributions from non-Federal sources;

17 (4) involve the participation of commercial entities that process raw
18 or lightly processed data, often merging that data with other geospatial
19 information, to create data products that have significant value added
20 to the original data; and

21 (5) taken together demonstrate as diverse a set of public sector ap-
22 plications as possible.

23 (c) OPPORTUNITIES.—In carrying out this section, the Administrator
24 shall seek opportunities to assist—

25 (1) in the development of commercial applications potentially avail-
26 able from the remote sensing industry; and

27 (2) State, local, regional, and tribal agencies in applying remote
28 sensing and other geospatial information technologies for growth man-
29 agement.

30 (d) DURATION.—Assistance for a pilot project under subsection (a) shall
31 be provided for a period not to exceed 3 years.

32 (e) REPORT.—Each recipient of a grant under subsection (a) shall trans-
33 mit a report to the Administrator on the results of the pilot project within
34 180 days of the completion of that project.

35 (f) WORKSHOP.—Each recipient of a grant under subsection (a) shall, not
36 later than 180 days after the completion of the pilot project, conduct at
37 least one workshop for potential users to disseminate the lessons learned
38 from the pilot project as widely as feasible.

39 (g) REGULATIONS.—The Administrator shall issue regulations estab-
40 lishing application, selection, and implementation procedures for pilot
41 projects, and guidelines for reports and workshops required by this section.

1 **§ 60304. Program evaluation**

2 (a) **ADVISORY COMMITTEE.**—The Administrator shall establish an advisory committee, consisting of individuals with appropriate expertise in State, local, regional, and tribal agencies, the university research community, and the remote sensing and other geospatial information industries, to monitor the program established under section 60303 of this title. The advisory committee shall consult with the Federal Geographic Data Committee and other appropriate industry representatives and organizations. Notwithstanding section 14 of the Federal Advisory Committee Act (5 App. U.S.C.), the advisory committee established under this subsection shall remain in effect until the termination of the program under section 60303 of this title.

12 (b) **EFFECTIVENESS EVALUATION.**—Not later than December 31, 2009, the Administrator shall transmit to Congress an evaluation of the effectiveness of the program established under section 60303 of this title in exploring and promoting the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs. Such evaluation shall have been conducted by an independent entity.

18 **§ 60305. Data availability**

19 The Administrator shall ensure that the results of each of the pilot projects completed under section 60303 of this title shall be retrievable through an electronic, internet-accessible database.

22 **§ 60306. Education**

23 The Administrator shall establish an educational outreach program to increase awareness at institutions of higher education and State, local, regional, and tribal agencies of the potential applications of remote sensing and other geospatial information and awareness of the need for geospatial workforce development.

28 **CHAPTER 605—EARTH SCIENCE**

Sec.

60501. Goal.

60502. Transitioning experimental research into operational services.

60503. Reauthorization of Glory Mission.

60504. Tornadoes and other severe storms.

60505. Coordination with the National Oceanic and Atmospheric Administration.

60506. Sharing of climate related data.

29 **§ 60501. Goal**

30 The goal for the Administration’s Earth Science program shall be to pursue a program of Earth observations, research, and applications activities to better understand the Earth, how it supports life, and how human activities affect its ability to do so in the future. In pursuit of this goal, the Administration’s Earth Science program shall ensure that securing practical benefits for society will be an important measure of its success in addition to securing new knowledge about the Earth system and climate change. In

1 further pursuit of this goal, the Administration shall, together with the Na-
2 tional Oceanic and Atmospheric Administration and other relevant agencies,
3 provide United States leadership in developing and carrying out a coopera-
4 tive international Earth observations-based research program.

5 **§ 60502. Transitioning experimental research into oper-**
6 **ational services**

7 (a) INTERAGENCY PROCESS.—The Director of the Office of Science and
8 Technology Policy, in consultation with the Administrator, the Adminis-
9 trator of the National Oceanic and Atmospheric Administration, and other
10 relevant stakeholders, shall develop a process to transition, when appro-
11 priate, Administration Earth science and space weather missions or sensors
12 into operational status. The process shall include coordination of annual
13 agency budget requests as required to execute the transitions.

14 (b) RESPONSIBLE AGENCY OFFICIAL.—The Administrator and the Ad-
15 ministrator of the National Oceanic and Atmospheric Administration shall
16 each designate an agency official who shall have the responsibility for and
17 authority to lead the Administration’s and the National Oceanic and Atmos-
18 pheric Administration’s transition activities and interagency coordination.

19 (c) PLAN.—For each mission or sensor that is determined to be appro-
20 priate for transition under subsection (a), the Administration and the Na-
21 tional Oceanic and Atmospheric Administration shall transmit to Congress
22 a joint plan for conducting the transition. The plan shall include the strat-
23 egy, milestones, and budget required to execute the transition. The transi-
24 tion plan shall be transmitted to Congress no later than 60 days after the
25 successful completion of the mission or sensor critical design review.

26 **§ 60503. Reauthorization of Glory Mission**

27 Congress reauthorizes the Administration to continue with development of
28 the Glory Mission, which will examine how aerosols and solar energy affect
29 the Earth’s climate.

30 **§ 60504. Tornadoes and other severe storms**

31 The Administrator shall ensure that the Administration gives high pri-
32 ority to those parts of its existing cooperative activities with the National
33 Oceanic and Atmospheric Administration that are related to the study of
34 tornadoes and other severe storms, tornado-force winds, and other factors
35 determined to influence the development of tornadoes and other severe
36 storms, with the goal of improving the Nation’s ability to predict tornados
37 and other severe storms. Further, the Administrator shall examine whether
38 there are additional cooperative activities with the National Oceanic and At-
39 mospheric Administration that should be undertaken in the area of tornado
40 and severe storm research.

1 **§ 60505. Coordination with the National Oceanic and Atmos-**
2 **spheric Administration**

3 (a) JOINT WORKING GROUP.—The Administrator and the Administrator
4 of the National Oceanic and Atmospheric Administration shall appoint a
5 Joint Working Group, which shall review and monitor missions of the two
6 agencies to ensure maximum coordination in the design, operation, and
7 transition of missions where appropriate. The Joint Working Group shall
8 also prepare the plans required by subsection (c).

9 (b) COORDINATION REPORT.—Not later than February 15 of each year,
10 the Administrator and the Administrator of the National Oceanic and At-
11 mospheric Administration shall jointly transmit a report to the Committee
12 on Science and Technology of the House of Representatives and the Com-
13 mittee on Commerce, Science, and Transportation of the Senate on how the
14 Earth science programs of the Administration and the National Oceanic and
15 Atmospheric Administration will be coordinated during the fiscal year fol-
16 lowing the fiscal year in which the report is transmitted.

17 (c) COORDINATION OF TRANSITION PLANNING AND REPORTING.—The
18 Administrator, in conjunction with the Administrator of the National Oee-
19 anic and Atmospheric Administration and in consultation with other rel-
20 evant agencies, shall evaluate relevant Administration science missions for
21 their potential operational capabilities and shall prepare transition plans for
22 the existing and future Earth observing systems found to have potential
23 operational capabilities.

24 (d) LIMITATION.—The Administrator shall not transfer any Administra-
25 tion Earth science mission or Earth observing system to the National Oee-
26 anic and Atmospheric Administration until the plan required under sub-
27 section (c) has been approved by the Administrator and the Administrator
28 of the National Oceanic and Atmospheric Administration and until financial
29 resources have been identified to support the transition or transfer in the
30 President’s budget request for the National Oceanic and Atmospheric Ad-
31 ministration.

32 **§ 60506. Sharing of climate related data**

33 The Administrator shall work to ensure that the Administration’s policies
34 on the sharing of climate related data respond to the recommendations of
35 the Government Accountability Office’s report on climate change research
36 and data-sharing policies and to the recommendations on the processing,
37 distribution, and archiving of data by the National Academies Earth Science
38 Decadal Survey, “Earth Science and Applications from Space”, and other
39 relevant National Academies reports, to enhance and facilitate their avail-
40 ability and widest possible use to ensure public access to accurate and cur-
41 rent data on global warming.

Subtitle VII—Access to Space

CHAPTER 701—USE OF SPACE SHUTTLE OR 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.

§ 70101. Recovery of fair value of placing Department of Defense payloads in orbit with space shuttle

Notwithstanding any other provision of law, or any interagency agreement, the Administrator shall charge such prices as are necessary to recover the fair value of placing Department of Defense payloads into orbit by means of the space shuttle.

§ 70102. Space shuttle use policy

(a) USE POLICY.—

(1) IN GENERAL.—

(A) POLICY.—It shall be the policy of the United States to use the space shuttle—

(i) for purposes that require a human presence;

(ii) for purposes that require the unique capabilities of the space shuttle; or

(iii) when other compelling circumstances exist.

(B) DEFINITION OF COMPELLING CIRCUMSTANCES.—In this paragraph, the term “compelling circumstances” includes, but is not limited to, occasions when the Administrator determines, in consultation with the Secretary of Defense and the Secretary of State, that important national security or foreign policy interests would be served by a shuttle launch.

(2) USING AVAILABLE CARGO SPACE FOR SECONDARY PAYLOADS.—

The policy stated in paragraph (1) shall not preclude the use of available cargo space, on a space shuttle mission otherwise consistent with the policy described in paragraph (1), for the purpose of carrying secondary payloads (as defined by the Administrator) that do not require a human presence if such payloads are consistent with the requirements of research, development, demonstration, scientific, commercial, and educational programs authorized by the Administrator.

(b) ANNUAL REPORT.—At least annually, the Administrator shall submit to Congress a report certifying that the payloads scheduled to be launched on the space shuttle for the next 4 years are consistent with the policy set forth in subsection (a)(1). For each payload scheduled to be launched from the space shuttle that does not require a human presence, the Administrator

1 shall, in the certified report to Congress, state the specific circumstances
 2 that justified the use of the space shuttle. If, during the period between
 3 scheduled reports to Congress, any additions are made to the list of certified
 4 payloads intended to be launched from the shuttle, the Administrator shall
 5 inform Congress of the additions and the reasons therefor within 45 days
 6 of the change.

7 (c) ADMINISTRATION PAYLOADS.—The report described in subsection (b)
 8 shall also include those Administration payloads designed solely to fly on the
 9 space shuttle which have begun the phase C/D of its development cycle.

10 **§ 70103. Commercial payloads on space shuttle**

11 (a) DEFINITIONS.—In this section:

12 (1) LAUNCH VEHICLE.—The term “launch vehicle” means any vehi-
 13 cle constructed for the purpose of operating in, or placing a payload
 14 in, outer space.

15 (2) PAYLOAD.—The term “payload” means an object which a person
 16 undertakes to place in outer space by means of a launch vehicle, and
 17 includes subcomponents of the launch vehicle specifically designed or
 18 adapted for that object.

19 (b) IN GENERAL.—Commercial payloads may not be accepted for launch
 20 as primary payloads on the space shuttle unless the Administrator deter-
 21 mines that—

- 22 (1) the payload requires the unique capabilities of the space shuttle;
 23 or
 24 (2) launching of the payload on the space shuttle is important for
 25 either national security or foreign policy purposes.

26 **CHAPTER 703—SHUTTLE PRICING POLICY FOR** 27 **COMMERCIAL AND FOREIGN USERS**

Sec.

70301. Congressional findings and declarations.

70302. Purpose, policy, and goals.

70303. Definition of additive cost.

70304. Duties of Administrator.

28 **§ 70301. Congressional findings and declarations**

29 Congress finds and declares that—

30 (1) the Space Transportation System is a vital element of the United
 31 States space program, contributing to the United States leadership in
 32 space research, technology, and development;

33 (2) the Space Transportation System is the primary space launch
 34 system for both United States national security and civil government
 35 missions;

1 (3) the Space Transportation System contributes to the expansion of
 2 United States private sector investment and involvement in space and
 3 therefore should serve commercial users;

4 (4) the availability of the Space Transportation System to foreign
 5 users for peaceful purposes is an important means of promoting inter-
 6 national cooperative activities in the national interest and in maintain-
 7 ing access to space for activities which enhance the security and welfare
 8 of humankind;

9 (5) the United States is committed to maintaining world leadership
 10 in space transportation;

11 (6) making the Space Transportation System fully operational and
 12 cost effective in providing routine access to space will maximize the na-
 13 tional economic benefits of the system; and

14 (7) national goals and the objectives for the Space Transportation
 15 System can be furthered by a stable and fair pricing policy for the
 16 Space Transportation System.

17 **§ 70302. Purpose, policy, and goals**

18 The purpose of this chapter is to set, for commercial and foreign users,
 19 the reimbursement pricing policy for the Space Transportation System that
 20 is consistent with the findings included in section 70301 of this title, en-
 21 courages the full and effective use of space, and is designed to achieve the
 22 following goals:

23 (1) The preservation of the role of the United States as a leader in
 24 space research, technology, and development.

25 (2) The efficient and cost effective use of the Space Transportation
 26 System.

27 (3) The achievement of greatly increased commercial space activity.

28 (4) The enhancement of the international competitive position of the
 29 United States.

30 **§ 70303. Definition of additive cost**

31 In this chapter, the term “additive cost” means the average direct and
 32 indirect costs to the Administration of providing additional flights of the
 33 Space Transportation System beyond the costs associated with those flights
 34 necessary to meet the space transportation needs of the United States Gov-
 35 ernment.

36 **§ 70304. Duties of Administrator**

37 (a) ESTABLISHMENT AND IMPLEMENTATION OF REIMBURSEMENT RE-
 38 COVERY SYSTEM.—The Administrator shall establish and implement a pric-
 39 ing system to recover reimbursement in accordance with the pricing policy
 40 under section 70302 of this title from each commercial or foreign user of
 41 the Space Transportation System, which, except as provided in subsections

1 (c), (d), and (e), shall include a base price of not less than \$74,000,000
2 for each flight of the Space Transportation System in 1982 dollars.

3 (b) REPORTS TO CONGRESS.—Each year the Administrator shall submit
4 to the President of the Senate, the Speaker of the House of Representatives,
5 the Committee on Commerce, Science, and Transportation of the Senate,
6 and the Committee on Science and Technology of the House of Representa-
7 tives a report, transmitted contemporaneously with the annual budget re-
8 quest of the President, which shall inform Congress how the policy goals
9 contained in section 70302 of this title are being furthered by the shuttle
10 price for foreign and commercial users.

11 (c) REDUCTION OF BASE PRICE.—

12 (1) AUTHORITY TO REDUCE.—If at any time the Administrator finds
13 that the policy goals contained in section 70302 of this title are not
14 being achieved, the Administrator shall have authority to reduce the
15 base price established in subsection (a) after 45 days following receipt
16 by the President of the Senate, the Speaker of the House of Represent-
17 atives, the Committee on Commerce, Science, and Transportation of
18 the Senate, and the Committee on Science and Technology of the
19 House of Representatives of a notice by the Administrator containing
20 a description of the proposed reduction together with a full and com-
21 plete statement of the facts and circumstances which necessitate such
22 proposed reduction.

23 (2) MINIMUM PRICE.—In no case shall the minimum price estab-
24 lished under paragraph (1) be less than additive cost.

25 (d) LOW OR NO-COST FLIGHTS.—The Administrator may set a price
26 lower than the price determined under subsection (a) or (c), or provide no-
27 cost flights, for any commercial or foreign user of the Space Transportation
28 System that is involved in research, development, or demonstration pro-
29 grams with the Administration.

30 (e) CUSTOMER INCENTIVES.—Notwithstanding the provisions of sub-
31 section (a), the Administrator shall have the authority to offer reasonable
32 customer incentives consistent with the policy goals in section 70302 of this
33 title.

34 **CHAPTER 705—EXPLORATION INITIATIVES**

- Sec.
- 70501. Space shuttle follow-on.
 - 70502. Exploration plan and programs.
 - 70503. Ground-based analog capabilities.
 - 70504. Stepping stone approach to exploration.
 - 70505. Lunar outpost.
 - 70506. Exploration technology research.
 - 70507. Technology development.
 - 70508. Robotic or human servicing of spacecraft.

1 **§ 70501. Space shuttle follow-on**

2 (a) POLICY STATEMENT.—It is the policy of the United States to possess
3 the capability for human access to space on a continuous basis.

4 (b) ANNUAL REPORT.—The Administrator shall transmit an annual re-
5 port 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 describing the progress being made toward developing the
8 Crew Exploration Vehicle and the Crew Launch Vehicle and the estimated
9 time before they will demonstrate crewed, orbital spaceflight.

10 **§ 70502. Exploration plan and programs**

11 The Administrator shall—

12 (1) construct an architecture and implementation plan for the Ad-
13 ministration’s human exploration program that is not critically depend-
14 ent on the achievement of milestones by fixed dates;

15 (2) implement an exploration technology development program to en-
16 able lunar human and robotic operations consistent with section
17 20302(b) of this title, including surface power to use on the Moon and
18 other locations;

19 (3) conduct an in-situ resource utilization technology program to de-
20 velop the capability to use space resources to increase independence
21 from Earth, and sustain exploration beyond low-Earth orbit; and

22 (4) pursue aggressively automated rendezvous and docking capabili-
23 ties that can support the International Space Station and other mission
24 requirements.

25 **§ 70503. Ground-based analog capabilities**

26 (a) IN GENERAL.—The Administrator may establish a ground-based ana-
27 log capability in remote United States locations in order to assist in the de-
28 velopment of lunar operations, life support, and in-situ resource utilization
29 experience and capabilities.

30 (b) ENVIRONMENTAL CHARACTERISTICS.—The Administrator shall select
31 locations for the activities described in subsection (a) that—

32 (1) are regularly accessible;

33 (2) have significant temperature extremes and range; and

34 (3) have access to energy and natural resources (including geo-
35 thermal, permafrost, volcanic, or other potential resources).

36 (c) INVOLVEMENT OF LOCAL POPULATIONS AND PRIVATE SECTOR PART-
37 NERS.—In carrying out this section, the Administrator shall involve local
38 populations, academia, and industrial partners as much as possible to en-
39 sure that ground-based benefits and applications are encouraged and devel-
40 oped.

1 **§ 70504. Stepping stone approach to exploration**

2 In order to maximize the cost-effectiveness of the long-term exploration
3 and utilization activities of the United States, the Administrator shall take
4 all necessary steps, including engaging international partners, to ensure that
5 activities in its lunar exploration program shall be designed and imple-
6 mented in a manner that gives strong consideration to how those activities
7 might also help meet the requirements of future exploration and utilization
8 activities beyond the Moon. The timetable of the lunar phase of the long-
9 term international exploration initiative shall be determined by the avail-
10 ability of funding. However, once an exploration-related project enters its
11 development phase, the Administrator shall seek, to the maximum extent
12 practicable, to complete that project without undue delays.

13 **§ 70505. Lunar outpost**

14 (a) ESTABLISHMENT.—As the Administration works toward the establish-
15 ment of a lunar outpost, the Administration shall make no plans that would
16 require a lunar outpost to be occupied to maintain its viability. Any such
17 outpost shall be operable as a human-tended facility capable of remote or
18 autonomous operation for extended periods.

19 (b) DESIGNATION.—The United States portion of the first human-tended
20 outpost established on the surface of the Moon shall be designated the “Neil
21 A. Armstrong Lunar Outpost”.

22 **§ 70506. Exploration technology research**

23 The Administrator shall carry out a program of long-term exploration-re-
24 lated technology research and development, including such things as in-
25 space propulsion, power systems, life support, and advanced avionics, that
26 is not tied to specific flight projects. The program shall have the funding
27 goal of ensuring that the technology research and development can be com-
28 pleted in a timely manner in order to support the safe, successful, and sus-
29 tainable exploration of the solar system. In addition, in order to ensure that
30 the broadest range of innovative concepts and technologies are captured, the
31 long-term technology program shall have the goal of having a significant
32 portion of its funding available for external grants and contracts with uni-
33 versities, research institutions, and industry.

34 **§ 70507. Technology development**

35 The Administrator shall establish an intra-Directorate long-term tech-
36 nology development program for space and Earth science within the Science
37 Mission Directorate for the development of new technology. The program
38 shall be independent of the flight projects under development. The Adminis-
39 tration shall have a goal of funding the intra-Directorate technology devel-
40 opment program at a level of 5 percent of the total Science Mission Direc-

1 torate annual budget. The program shall be structured to include competi-
2 tively awarded grants and contracts.

3 **§ 70508. Robotic or human servicing of spacecraft**

4 The Administrator shall take all necessary steps to ensure that provision
5 is made in the design and construction of all future observatory-class sci-
6 entific spacecraft intended to be deployed in Earth orbit or at a Lagrangian
7 point in space for robotic or human servicing and repair to the extent prac-
8 ticable and appropriate.

9 **CHAPTER 707—HUMAN SPACE FLIGHT INDEPENDENT**
10 **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.

11 **§ 70701. Definitions**

12 In this chapter:

13 (1) COMMISSION.—The term “Commission” means a Commission es-
14 tablished under this chapter.

15 (2) INCIDENT.—The term “incident” means either an accident or a
16 deliberate act.

17 **§ 70702. Establishment of Commission**

18 (a) ESTABLISHMENT.—The President shall establish an independent,
19 nonpartisan Commission within the executive branch to investigate any inci-
20 dent that results in the loss of—

21 (1) a space shuttle;

22 (2) the International Space Station or its operational viability;

23 (3) any other United States space vehicle carrying humans that is
24 owned by the Federal Government or that is being used pursuant to
25 a contract with the Federal Government; or

26 (4) a crew member or passenger of any space vehicle described in
27 this subsection.

28 (b) DEADLINE FOR ESTABLISHMENT.—The President shall establish a
29 Commission within 7 days after an incident specified in subsection (a).

30 **§ 70703. Tasks of Commission**

31 A Commission established pursuant to this chapter shall, to the extent
32 possible, undertake the following tasks:

33 (1) INVESTIGATION.—Investigate the incident.

1 (2) CAUSE.—Determine the cause of the incident.

2 (3) CONTRIBUTING FACTORS.—Identify all contributing factors to
3 the cause of the incident.

4 (4) RECOMMENDATIONS.—Make recommendations for corrective ac-
5 tions.

6 (5) ADDITIONAL FINDINGS OR RECOMMENDATIONS.—Provide any
7 additional findings or recommendations deemed by the Commission to
8 be important, whether or not they are related to the specific incident
9 under investigation.

10 (6) REPORT.—Prepare a report to Congress, the President, and the
11 public.

12 **§ 70704. Composition of Commission**

13 (a) NUMBER OF COMMISSIONERS.—A Commission established pursuant
14 to this chapter shall consist of 15 members.

15 (b) SELECTION.—The members of a Commission shall be chosen in the
16 following manner:

17 (1) APPOINTMENT BY PRESIDENT.—The President shall appoint the
18 members, and shall designate the Chairman and Vice Chairman of the
19 Commission from among its members.

20 (2) LISTS PROVIDED BY LEADERS OF CONGRESS.—The majority
21 leader of the Senate, the minority leader of the Senate, the Speaker
22 of the House of Representatives, and the minority leader of the House
23 of Representatives shall each provide to the President a list of can-
24 didates for membership on the Commission. The President may select
25 one of the candidates from each of the 4 lists for membership on the
26 Commission.

27 (3) PROHIBITION REGARDING FEDERAL OFFICERS AND EMPLOYEES
28 AND MEMBERS OF CONGRESS.—No officer or employee of the Federal
29 Government or Member of Congress shall serve as a member of the
30 Commission.

31 (4) PROHIBITION REGARDING CONTRACTORS.—No member of the
32 Commission shall have, or have pending, a contractual relationship with
33 the Administration.

34 (5) PROHIBITION REGARDING CONFLICT OF INTEREST.—The Presi-
35 dent shall not appoint any individual as a member of a Commission
36 under this section who has a current or former relationship with the
37 Administrator that the President determines would constitute a conflict
38 of interest.

39 (6) EXPERIENCE.—To the extent practicable, the President shall en-
40 sure that the members of the Commission include some individuals with
41 experience relative to human carrying spacecraft, as well as some indi-

1 individuals with investigative experience and some individuals with legal ex-
2 perience.

3 (7) DIVERSITY.—To the extent practicable, the President shall seek
4 diversity in the membership of the Commission.

5 (e) DEADLINE FOR APPOINTMENT.—All members of a Commission estab-
6 lished under this chapter shall be appointed no later than 30 days after the
7 incident.

8 (d) INITIAL MEETING.—A Commission shall meet and begin operations
9 as soon as practicable.

10 (e) SUBSEQUENT MEETINGS.—After its initial meeting, a Commission
11 shall meet upon the call of the Chairman or a majority of its members.

12 (f) QUORUM.—Eight members of a Commission shall constitute a
13 quorum.

14 (g) VACANCIES.—Any vacancy in a Commission shall not affect its pow-
15 ers, but shall be filled in the same manner in which the original appoint-
16 ment was made.

17 **§ 70705. Powers of Commission**

18 (a) HEARINGS AND EVIDENCE.—A Commission or, on the authority of
19 the Commission, any subcommittee or member thereof, may, for the purpose
20 of carrying out this chapter—

21 (1) hold such hearings and sit and act at such times and places, take
22 such testimony, receive such evidence, administer such oaths; and

23 (2) require, by subpoena or otherwise, the attendance and testimony
24 of such witnesses and the production of such books, records, cor-
25 respondence, memoranda, papers, and documents,

26 as the Commission or such designated subcommittee or member may deter-
27 mine advisable.

28 (b) CONTRACTING.—A Commission may, to such extent and in such
29 amounts as are provided in appropriation Acts, enter into contracts to en-
30 able the Commission to discharge its duties under this chapter.

31 (c) INFORMATION FROM FEDERAL AGENCIES.—

32 (1) IN GENERAL.—A Commission may secure directly from any exec-
33 utive department, bureau, agency, board, commission, office, inde-
34 pendent establishment, or instrumentality of the Government, informa-
35 tion, suggestions, estimates, and statistics for the purposes of this
36 chapter. Each department, bureau, agency, board, commission, office,
37 independent establishment, or instrumentality shall, to the extent au-
38 thorized by law, furnish such information, suggestions, estimates, and
39 statistics directly to the Commission, upon request made by the Chair-
40 man, the chairman of any subcommittee created by a majority of the

1 Commission, or any member designated by a majority of the Commis-
2 sion.

3 (2) RECEIPT, HANDLING, STORAGE, AND DISSEMINATION.—Informa-
4 tion shall only be received, handled, stored, and disseminated by mem-
5 bers of the Commission and its staff consistent with all applicable stat-
6 utes, regulations, and Executive orders.

7 (d) ASSISTANCE FROM FEDERAL AGENCIES.—

8 (1) GENERAL SERVICES ADMINISTRATION.—The Administrator of
9 General Services shall provide to a Commission on a reimbursable basis
10 administrative support and other services for the performance of the
11 Commission’s tasks.

12 (2) OTHER DEPARTMENTS AND AGENCIES.—In addition to the as-
13 sistance prescribed in paragraph (1), departments and agencies of the
14 United States may provide to the Commission such services, funds, fa-
15 cilities, staff, and other support services as they may determine advis-
16 able and as may be authorized by law.

17 (3) ADMINISTRATION ENGINEERING AND SAFETY CENTER.—The Ad-
18 ministration Engineering and Safety Center shall provide data and
19 technical support as requested by the Commission.

20 **§ 70706. Public meetings, information, and hearings**

21 (a) PUBLIC MEETINGS AND RELEASE OF PUBLIC VERSIONS OF RE-
22 PORTS.—A Commission shall—

23 (1) hold public hearings and meetings to the extent appropriate; and

24 (2) release public versions of the reports required under this chapter.

25 (b) PUBLIC HEARINGS.—Any public hearings of a Commission shall be
26 conducted in a manner consistent with the protection of information pro-
27 vided to or developed for or by the Commission as required by any applica-
28 ble statute, regulation, or Executive order.

29 **§ 70707. Staff of Commission**

30 (a) APPOINTMENT AND COMPENSATION.—The Chairman, in consultation
31 with the Vice Chairman, in accordance with rules agreed upon by a Com-
32 mission, may appoint and fix the compensation of a staff director and such
33 other personnel as may be necessary to enable the Commission to carry out
34 its functions.

35 (b) DETAILEES.—Any Federal Government employee, except for an em-
36 ployee of the Administration, may be detailed to a Commission without re-
37 imbursement from the Commission, and such detailee shall retain the rights,
38 status, and privileges of his or her regular employment without interruption.

39 (c) CONSULTANT SERVICES.—A Commission may procure the services of
40 experts and consultants in accordance with section 3109 of title 5, but at
41 rates not to exceed the daily equivalent of the annual rate of basic pay in

1 effect for positions at level IV of the Executive Schedule under section 5315
2 of title 5. An expert or consultant whose services are procured under this
3 subsection shall disclose any contract or association the expert or consultant
4 has with the Administration or any Administration contractor.

5 **§ 70708. Compensation and travel expenses**

6 (a) COMPENSATION.—Each member of a Commission may be com-
7 pensated at a rate not to exceed the daily equivalent of the annual rate of
8 basic pay in effect for positions at level IV of the Executive Schedule under
9 section 5315 of title 5 for each day during which that member is engaged
10 in the actual performance of the duties of the Commission.

11 (b) TRAVEL EXPENSES.—While away from their homes or regular places
12 of business in the performance of services for the Commission, members of
13 a Commission shall be allowed travel expenses, including per diem in lieu
14 of subsistence, in the same manner as persons employed intermittently in
15 the Government service are allowed expenses under section 5703 of title 5.

16 **§ 70709. Security clearances for Commission members and**
17 **staff**

18 The appropriate Federal agencies or departments shall cooperate with a
19 Commission in expeditiously providing to the Commission members and
20 staff appropriate security clearances to the extent possible pursuant to exist-
21 ing procedures and requirements. No person shall be provided with access
22 to classified information under this chapter without the appropriate security
23 clearances.

24 **§ 70710. Reporting requirements and termination**

25 (a) INTERIM REPORTS.—A Commission may submit to the President and
26 Congress interim reports containing such findings, conclusions, and rec-
27 ommendations for corrective actions as have been agreed to by a majority
28 of Commission members.

29 (b) FINAL REPORT.—A Commission shall submit to the President and
30 Congress, and make concurrently available to the public, a final report con-
31 taining such findings, conclusions, and recommendations for corrective ac-
32 tions as have been agreed to by a majority of Commission members. Such
33 report shall include any minority views or opinions not reflected in the ma-
34 jority report.

35 (c) TERMINATION.—

36 (1) IN GENERAL.—A Commission, and all the authorities of this
37 chapter with respect to that Commission, shall terminate 60 days after
38 the date on which the final report is submitted under subsection (b).

39 (2) ADMINISTRATIVE ACTIVITIES BEFORE TERMINATION.—A Com-
40 mission may use the 60-day period referred to in paragraph (1) for the
41 purpose of concluding its activities, including providing testimony to

1 committees of Congress concerning its reports and disseminating the
2 final report.

3 **CHAPTER 709—INTERNATIONAL SPACE STATION**

Sec.

70901. Peaceful uses of space station.

70902. Allocation of International Space Station research budget.

70903. International Space Station research.

70904. International Space Station completion.

70905. National laboratory designation.

70906. International Space Station National Laboratory Advisory Committee.

70907. Maintaining use through at least 2020.

4 **§ 70901. Peaceful uses of space station**

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

12 **§ 70902. Allocation of International Space Station research
13 budget**

14 The Administrator shall allocate at least 15 percent of the funds budg-
15 eted for International Space Station research to ground-based, free-flyer,
16 and International Space Station life and microgravity science research that
17 is not directly related to supporting the human exploration program, con-
18 sistent with section 40904 of this title.

19 **§ 70903. International Space Station research**

20 The Administrator shall—

21 (1) carry out a program of microgravity research consistent with sec-
22 tion 40904 of this title; and

23 (2) consider the need for a life sciences centrifuge and any associated
24 holding facilities.

25 **§ 70904. International Space Station completion**

26 (a) POLICY.—It is the policy of the United States to achieve diverse and
27 growing utilization of, and benefits from, the International Space Station.

28 (b) ELEMENTS, CAPABILITIES, AND CONFIGURATION CRITERIA.—The
29 Administrator shall ensure that the International Space Station will—

30 (1) be assembled and operated in a manner that fulfills international
31 partner agreements, as long as the Administrator determines that the
32 shuttle can safely enable the United States to do so;

33 (2) be used for a diverse range of microgravity research, including
34 fundamental, applied, and commercial research, consistent with section
35 40904 of this title;

1 (3) have an ability to support a crew size of at least 6 persons, un-
 2 less the Administrator transmits to the Committee on Science and
 3 Technology of the House of Representatives and the Committee on
 4 Commerce, Science, and Transportation of the Senate not later than
 5 60 days after December 30, 2005, a report explaining why such a re-
 6 quirement should not be met, the impact of not meeting the require-
 7 ment on the International Space Station research agenda and oper-
 8 ations and international partner agreements, and what additional fund-
 9 ing or other steps would be required to have an ability to support a
 10 crew size of at least 6 persons;

11 (4) support Crew Exploration Vehicle docking and automated dock-
 12 ing of cargo vehicles or modules launched by either heavy-lift or com-
 13 mercially-developed launch vehicles;

14 (5) support any diagnostic human research, on-orbit characterization
 15 of molecular crystal growth, cellular research, and other research that
 16 the Administration believes is necessary to conduct, but for which the
 17 Administration lacks the capacity to return the materials that need to
 18 be analyzed to Earth; and

19 (6) be operated at an appropriate risk level.

20 (e) CONTINGENCIES.—

21 (1) POLICY.—The Administrator shall ensure that the International
 22 Space Station can have available, if needed, sufficient logistics and on-
 23 orbit capabilities to support any potential period during which the
 24 space shuttle or its follow-on crew and cargo systems are unavailable,
 25 and can have available, if needed, sufficient surge delivery capability or
 26 repositioning of spares and other supplies needed to accommodate any
 27 such hiatus.

28 (2) PLAN.—Before making any change in the International Space
 29 Station assembly sequence in effect on December 30, 2005, the Admin-
 30 istrator shall transmit to the Committee on Science and Technology of
 31 the House of Representatives and the Committee on Commerce,
 32 Science, and Transportation of the Senate a plan to carry out the pol-
 33 icy described in paragraph (1).

34 **§ 70905. National laboratory designation**

35 (a) DEFINITION OF UNITED STATES SEGMENT OF THE INTERNATIONAL
 36 SPACE STATION.—In this section the term “United States segment of the
 37 International Space Station” means those elements of the International
 38 Space Station manufactured—

39 (1) by the United States; or

40 (2) for the United States by other nations in exchange for funds or
 41 launch services.

1 (b) DESIGNATION.—To further the policy described in section 70501(a)
 2 of this title, the United States segment of the International Space Station
 3 is hereby designated a national laboratory.

4 (c) MANAGEMENT.—

5 (1) PARTNERSHIPS.—The Administrator shall seek to increase the
 6 utilization of the International Space Station by other Federal entities
 7 and the private sector through partnerships, cost-sharing agreements,
 8 and other arrangements that would supplement Administration funding
 9 of the International Space Station.

10 (2) CONTRACTING.—The Administrator may enter into a contract
 11 with a nongovernmental entity to operate the International Space Sta-
 12 tion national laboratory, subject to all applicable Federal laws and reg-
 13 ulations.

14 **§ 70906. International Space Station National Laboratory**
 15 **Advisory Committee**

16 (a) ESTABLISHMENT.—Not later than one year after October 15, 2008,
 17 the Administrator shall establish under the Federal Advisory Committee Act
 18 a committee to be known as the “International Space Station National Lab-
 19 oratory Advisory Committee” (hereafter in this section referred to as the
 20 “Committee”).

21 (b) MEMBERSHIP.—

22 (1) COMPOSITION.—The Committee shall be composed of individuals
 23 representing organizations that have formal agreements with the Ad-
 24 ministration to utilize the United States portion of the International
 25 Space Station, including allocations within partner elements.

26 (2) CHAIR.—The Administrator shall appoint a chair from among
 27 the members of the Committee, who shall serve for a 2-year term.

28 (c) DUTIES OF THE COMMITTEE.—

29 (1) IN GENERAL.—The Committee shall monitor, assess, and make
 30 recommendations regarding effective utilization of the International
 31 Space Station as a national laboratory and platform for research.

32 (2) ANNUAL REPORT.—The Committee shall submit to the Adminis-
 33 trator, on an annual basis or more frequently as considered necessary
 34 by a majority of the members of the Committee, a report containing
 35 the assessments and recommendations required by paragraph (1).

36 (d) DURATION.—The Committee shall exist for the life of the Inter-
 37 national Space Station.

38 **§ 70907. Maintaining use through at least 2020**

39 The Administrator shall take all necessary steps to ensure that the Inter-
 40 national Space Station remains a viable and productive facility capable of
 41 potential United States utilization through at least 2020 and shall take no

1 steps that would preclude its continued operation and utilization by the
2 United States after 2015.

3 **CHAPTER 711—NEAR-EARTH OBJECTS**

Sec.

71101. Reaffirmation of policy.

71102. Requests for information.

71103. Developing policy and recommending responsible Federal agency.

71104. Planetary radar.

4 **§ 71101. Reaffirmation of policy**

5 Congress reaffirms the policy set forth in section 20102(g) of this title
6 (relating to surveying near-Earth asteroids and comets).

7 **§ 71102. Requests for information**

8 The Administrator shall issue requests for information on—

9 (1) a low-cost space mission with the purpose of rendezvousing with,
10 attaching a tracking device, and characterizing the Apophis asteroid;
11 and

12 (2) a medium-sized space mission with the purpose of detecting near-
13 Earth objects equal to or greater than 140 meters in diameter.

14 **§ 71103. Developing policy and recommending responsible
15 Federal agency**

16 Within 2 years after October 15, 2008, the Director of the Office of
17 Science and Technology Policy shall—

18 (1) develop a policy for notifying Federal agencies and relevant
19 emergency response institutions of an impending near-Earth object
20 threat, if near-term public safety is at risk; and

21 (2) recommend a Federal agency or agencies to be responsible for—

22 (A) protecting the United States from a near-Earth object that
23 is expected to collide with Earth; and

24 (B) implementing a deflection campaign, in consultation with
25 international bodies, should one be necessary.

26 **§ 71104. Planetary radar**

27 The Administrator shall maintain a planetary radar that is comparable
28 to the capability provided through the Deep Space Network Goldstone facil-
29 ity of the Administration.

30 **CHAPTER 713—COOPERATION FOR SAFETY AMONG
31 SPACEFARING NATIONS**

Sec.

71301. Common docking system standard to enable rescue.

71302. Information sharing to avoid physical or radio-frequency interference.

32 **§ 71301. Common docking system standard to enable rescue**

33 In order to maximize the ability to rescue astronauts whose space vehicles
34 have become disabled, the Administrator shall enter into discussions with

1 the appropriate representatives of spacefaring nations who have or plan to
 2 have crew transportation systems capable of orbital flight or flight beyond
 3 low Earth orbit for the purpose of agreeing on a common docking system
 4 standard.

5 **§ 71302. Information sharing to avoid physical or radio-fre-**
 6 **quency interference**

7 The Administrator shall, in consultation with other agencies of the Fed-
 8 eral Government as the Administrator considers appropriate, initiate discus-
 9 sions with the appropriate representatives of spacefaring nations to deter-
 10 mine an appropriate frame-work under which information intended to pro-
 11 mote safe access into outer space, operations in outer space, and return
 12 from outer space to Earth free from physical or radio-frequency interference
 13 can be shared among the nations.

14 **SEC. 4. CONFORMING AMENDMENTS TO OTHER LAWS.**

15 (a) TITLE 5.—Section 9811(a)(1)(E) of title 5, United States Code, is
 16 amended by striking “section 203(c)(2)(A) of the National Aeronautics and
 17 Space Act of 1958 (42 U.S.C. 2473(c)(2)(A))” and substituting “section
 18 20113(b)(1) of title 51”.

19 (b) TITLE 31.—Section 1304(a)(3)(D) of title 31, United States Code,
 20 is amended by striking “section 203 of the National Aeronautics and Space
 21 Act of 1958 (42 U.S.C. 2473)” and substituting “section 20113 of title
 22 51”.

23 (c) TITLE 35.—Section 210(a)(7) of title 35, United States Code, is
 24 amended by striking “section 305 of the National Aeronautics and Space
 25 Act of 1958 (42 U.S.C. 2457)” and substituting “section 20135 of title
 26 51”.

27 (d) TRANSFER OF CHAPTERS 701 AND 703 OF TITLE 49, UNITED
 28 STATES CODE.—

29 (1) TITLE 49, UNITED STATES CODE.—Title 49, United States Code,
 30 is amended as follows:

31 (A) In the analysis for title 49, United States Code, the item
 32 related to subtitle IX is amended to read as follows:
“IX. [TRANSFERRED]”.

33 (B) The heading and analysis for subtitle IX of title 49, United
 34 States Code, are amended to read as follows:

“Subtitle IX—[Transferred]

“Chapter

“701. [Transferred]

“703. [Transferred]”.

Sec.

1 (2) RENUMBERING AND TRANSFER OF CHAPTERS.—Chapters 701
2 and 703 of title 49, United States Code, are renumbered as chapters
3 509 and 511, respectively, of title 51, United States Code, and trans-
4 ferred so as to appear after chapter 507 of title 51, United States
5 Code, as enacted by section 3 of this Act.

6 (3) RENUMBERING OF SECTIONS IN CHAPTER 509 OF TITLE 51,
7 UNITED STATES CODE.—In chapter 509 of title 51, United States
8 Code, as renumbered by paragraph (2), and in the chapter analysis, the
9 sections are renumbered as follows:

10 (A) Section 70101 is renumbered 50901.

11 (B) Section 70102 is renumbered 50902.

12 (C) Section 70103 is renumbered 50903.

13 (D) Section 70104 is renumbered 50904.

14 (E) Section 70105 is renumbered 50905.

15 (F) Section 70105a is renumbered 50906.

16 (G) Section 70106 is renumbered 50907.

17 (H) Section 70107 is renumbered 50908.

18 (I) Section 70108 is renumbered 50909.

19 (J) Section 70109 is renumbered 50910.

20 (K) Section 70109a is renumbered 50911.

21 (L) Section 70110 is renumbered 50912.

22 (M) Section 70111 is renumbered 50913.

23 (N) Section 70112 is renumbered 50914.

24 (O) Section 70113 is renumbered 50915.

25 (P) Section 70114 is renumbered 50916.

26 (Q) Section 70115 is renumbered 50917.

27 (R) Section 70116 is renumbered 50918.

28 (S) Section 70117 is renumbered 50919.

29 (T) Section 70118 is renumbered 50920.

30 (U) Section 70119 is renumbered 50921.

31 (V) Section 70120 is renumbered 50922.

32 (W) Section 70121 is renumbered 50923.

33 (4) RENUMBERING OF SECTIONS IN CHAPTER 511 OF TITLE 51,
34 UNITED STATES CODE.—In chapter 511 of title 51, United States
35 Code, as renumbered by paragraph (2), and in the chapter analysis, the
36 sections are renumbered as follows:

37 (A) Section 70301 is renumbered 51101.

38 (B) Section 70302 is renumbered 51102.

39 (C) Section 70303 is renumbered 51103.

40 (D) Section 70304 is renumbered 51104.

41 (E) Section 70305 is renumbered 51105.

1 (5) CROSS REFERENCES IN CHAPTER 509 OF TITLE 51, UNITED
2 STATES CODE.—

3 (A) Section 50902(11) of title 51, United States Code, as re-
4 numbered by paragraph (3), is amended—

5 (i) by striking “section 70104(c)” and substituting “section
6 50904(c)”; and

7 (ii) by striking “section 70105a” and substituting “section
8 50906”.

9 (B) Section 50902(19) of title 51, United States Code, as re-
10 numbered by paragraph (3), is amended by striking “section
11 70120(c)(2)” and substituting “section 50922(c)(2)”.

12 (C) Section 50904(a)(2) of title 51, United States Code, as re-
13 numbered by paragraph (3), is amended by striking “section
14 70102(1)(A) or (B)” and substituting “section 50902(1)(A) or
15 (B)”.

16 (D) Section 50904(a)(3) of title 51, United States Code, as re-
17 numbered by paragraph (3), is amended by striking “section
18 70102(1)(C)” and substituting “section 50902(1)(C)”.

19 (E) Section 50904(a)(4) of title 51, United States Code, as re-
20 numbered by paragraph (3), is amended by striking “section
21 70102(1)(C)” and substituting “section 50902(1)(C)”.

22 (F) Section 50905(b)(5)(A) of title 51, United States Code, as
23 renumbered by paragraph (3), is amended by striking “section
24 70112(a)(2) and (c)” and substituting “section 50914(a)(2) and
25 (c)”.

26 (G) Section 50906(e) of title 51, United States Code, as renum-
27 bered by paragraph (3), is amended by striking “section
28 70105(b)(2)(C)” and substituting “section 50905(b)(2)(C)”.

29 (H) Section 50906(i) of title 51, United States Code, as renum-
30 bered by paragraph (3), is amended by striking “sections 70106,
31 70107, 70108, 70109, 70110, 70112, 70115, 70116, 70117, and
32 70121” and substituting “sections 50907, 50908, 50909, 50910,
33 50912, 50914, 50917, 50918, 50919, and 50923”.

34 (I) Section 50907(a) of title 51, United States Code, as renum-
35 bered by paragraph (3), is amended by striking “sections
36 70104(c), 70105, and 70105a” and substituting “sections
37 50904(c), 50905, and 50906”.

38 (J) Section 50908(b)(2) of title 51, United States Code, as re-
39 numbered by paragraph (3), is amended by striking “section
40 70105(c)” and substituting “section 50905(e)”.

1 (K) Section 50908(e) of title 51, United States Code, as renum-
2 bered by paragraph (3), is amended by striking “section 70110”
3 and substituting “section 50912”.

4 (L) Section 50909(b) of title 51, United States Code, as renum-
5 bered by paragraph (3), is amended by striking “section 70110”
6 and substituting “section 50912”.

7 (M) Section 50912(a)(1) of title 51, United States Code, as re-
8 numbered by paragraph (3), is amended by striking “section
9 70105(a) or 70105a” and substituting “section 50905(a) or
10 50906”.

11 (N) Section 50912(a)(2) of title 51, United States Code, as re-
12 numbered by paragraph (3), is amended by striking “section
13 70104(c)” and substituting “section 50904(e)”.

14 (O) Section 50912(a)(3)(A) of title 51, United States Code, as
15 renumbered by paragraph (3), is amended by striking “section
16 70107(b) or (c)” and substituting “section 50908(b) or (c)”.

17 (P) Section 50912(a)(3)(B) of title 51, United States Code, as
18 renumbered by paragraph (3), is amended by striking “section
19 70108(a)” and substituting “section 50909(a)”.

20 (Q) Section 50915(a)(1)(A) of title 51, United States Code, as
21 renumbered by paragraph (3), is amended by striking “section
22 70112(a)(1)(A)” and substituting “section 50914(a)(1)(A)”.

23 (R) Section 50915(a)(2) of title 51, United States Code, as re-
24 numbered by paragraph (3), is amended—

25 (i) by striking “section 70112(a)(1)(A)” and substituting
26 “section 50914(a)(1)(A)”; and

27 (ii) by striking “section 70112(a)(1)” and substituting
28 “section 50914(a)(1)”.

29 (S) Section 50916 of title 51, United States Code, as renum-
30 bered by paragraph (3), is amended by striking “section
31 70106(b)” and substituting “section 50907(b)”.

32 (T) Section 50919(b)(2) of title 51, United States Code, as re-
33 numbered by paragraph (3), is amended by striking “the Land
34 Remote Sensing Policy Act of 1992 (15 U.S.C. 5601 et seq.)” and
35 substituting “chapter 601 of this title”.

36 (U) Section 50922(e)(2)(B) of title 51, United States Code, as
37 renumbered by paragraph (3), is amended by striking “section
38 70102” and substituting “section 50902”.

39 (6) CROSS REFERENCES IN CHAPTER 511 OF TITLE 51, UNITED
40 STATES CODE.—

1 (A) Section 51101(1) of title 51, United States Code, as renum-
 2 bered by paragraph (4), is amended by striking “section 502 of
 3 the National Aeronautics and Space Administration Authorization
 4 Act, Fiscal Year 1993 (15 U.S.C. 5802)” and substituting “sec-
 5 tion 50501 of this title”.

6 (B) Section 51104(d)(1) of title 51, United States Code, as re-
 7 numbered by paragraph (4), is amended by striking “section 303
 8 of this title” and substituting “section 303 of title 49”.

9 (7) ANALYSIS FOR TITLE 51, UNITED STATES CODE.—The analysis
 10 for title 51, United States Code, as enacted by section 3 of this Act,
 11 is amended by adding, after the item for chapter 507, the following
 12 items:

13 “509. Commercial Space Launch Activities 50901
 “511. Space Transportation Infrastructure Matching Grants 51101”.

14 (8) DEEMED REFERENCES TO TITLE 49, UNITED STATES CODE.—In
 15 title 49, United States Code, references to “this title” are deemed to
 16 refer also to chapters 509 and 511 of title 51, United States Code.

17 (e) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZA-
 18 TION ACT OF 2005.—Section 304 of the National Aeronautics and Space
 19 Administration Authorization Act of 2005 (42 U.S.C. 16654) is amended
 20 as follows:

21 (1) Subsection (a)(1) is redesignated as subsection (a) and amended
 22 to read as follows:

23 “(a) ASSESSMENT OF CERTAIN MISSIONS.—Not later than 60 days after
 24 the date of enactment of this Act, the Administrator shall carry out an as-
 25 sessment under section 30504 of title 51, United States Code, for at least
 26 the following missions: FAST, TIMED, Cluster, Wind, Geotail, Polar,
 27 TRACE, Ulysses, and Voyager.”.

28 (2) Subsection (b) is amended by striking “subsection (a)(1)” and
 29 substituting “subsection (a)”.

30 **SEC. 5. TRANSITIONAL AND SAVINGS PROVISIONS.**

31 (a) DEFINITIONS.—In this section:

32 (1) SOURCE PROVISION.—The term “source provision” means a pro-
 33 vision of law that is replaced by a title 51 provision.

34 (2) TITLE 51 PROVISION.—The term “title 51 provision” means a
 35 provision of title 51, United States Code, that is enacted by section 3.

36 (b) CUTOFF DATE.—The title 51 provisions replace certain provisions of
 37 law enacted on or before July 1, 2009. If a law enacted after that date
 38 amends or repeals a source provision, that law is deemed to amend or re-
 39 peal, as the case may be, the corresponding title 51 provision. If a law en-
 40 acted after that date is otherwise inconsistent with a title 51 provision or

1 a provision of this Act, that law supersedes the title 51 provision or provi-
 2 sion of this Act to the extent of the inconsistency.

3 (c) ORIGINAL DATE OF ENACTMENT UNCHANGED.—For purposes of de-
 4 termining whether one provision of law supersedes another based on enact-
 5 ment later in time, a title 51 provision is deemed to have been enacted on
 6 the date of enactment of the corresponding source provision.

7 (d) REFERENCES TO TITLE 51 PROVISIONS.—A reference to a title 51
 8 provision is deemed to refer to the corresponding source provision.

9 (e) REFERENCES TO SOURCE PROVISIONS.—A reference to a source pro-
 10 vision, including a reference in a regulation, order, or other law, is deemed
 11 to refer to the corresponding title 51 provision.

12 (f) REGULATIONS, ORDERS, AND OTHER ADMINISTRATIVE ACTIONS.—A
 13 regulation, order, or other administrative action in effect under a source
 14 provision continues in effect under the corresponding title 51 provision.

15 (g) ACTIONS TAKEN AND OFFENSES COMMITTED.—An action taken or
 16 an offense committed under a source provision is deemed to have been taken
 17 or committed under the corresponding title 51 provision.

18 **SEC. 6. REPEALS.**

19 The following provisions of law are repealed, except with respect to rights
 20 and duties that matured, penalties that were incurred, or proceedings that
 21 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(e)	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	42 U.S.C. 2460.

Schedule of Laws Repealed—Continued

Act	Section	United States Code
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. 2466e.
National Space Grant College and Fellowship Act (Title II of Public Law 100-147)	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.
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.
	115(b)	15 U.S.C. 1535.
	123	(not previously classified).
	203	42 U.S.C. 2465e.
	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(a)	42 U.S.C. 2473e(a).
	21(c)	42 U.S.C. 2473e(c).
	21(d)	42 U.S.C. 2473e(d).
	21(e)	42 U.S.C. 2473e(e).
	21(f)	42 U.S.C. 2473e(f).
	21(g)	42 U.S.C. 2473e(g).
	21(h)	42 U.S.C. 2473e(h).

Schedule of Laws Repealed—Continued

Act	Section	United States Code
Land Remote Sensing Policy Act of 1992 (Public Law 102-555)	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.
	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.
	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(b)	42 U.S.C. 14712(b).
	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.
	204	42 U.S.C. 14733.
	205	42 U.S.C. 14734.
	206	42 U.S.C. 14735.
Technology Administration Act of 1998 (Public Law 105-309)	8	15 U.S.C. 1511e.
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)	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.

Schedule of Laws Repealed—Continued

Act	Section	United States Code	
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(2)	42 U.S.C. 16655(2).	
	305(3)	42 U.S.C. 16655(3).	
	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(a)	42 U.S.C. 16761(a).	
	501(b)	42 U.S.C. 16761(b).	
	503	42 U.S.C. 16763.	
	504	42 U.S.C. 16764.	
	505	42 U.S.C. 16765.	
	506(1)	42 U.S.C. 16766(1).	
	506(2)	42 U.S.C. 16766(2).	
	507(a)	42 U.S.C. 16767(a).	
	507(b)	42 U.S.C. 16767(b).	
	507(d)	42 U.S.C. 16767(d).	
	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.	
	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.	
	America COMPETES Act (Public Law 110–69)	2001(a)	42 U.S.C. 16611a(a).
		2001(b)	42 U.S.C. 16611a(b).
		2001(c)	42 U.S.C. 16611a(c).
		2001(e)	42 U.S.C. 16611a(e).
		2002(b)	42 U.S.C. 16712(b).
		2003	42 U.S.C. 16658.
	Science Appropriations Act, 2008 (Pub- lic Law 110–161, div. B, title III)	(7th par. under heading “Administrative Provisions”, at 121 Stat. 1919).	42 U.S.C. 16611b.
	National Aeronautics and Space Admin- istration Authorization Act of 2008 (Public Law 110–422)	201	42 U.S.C. 17711.

Schedule of Laws Repealed—Continued

Act	Section	United States Code
	204(b)	42 U.S.C. 17712(b).
	204(c)	42 U.S.C. 17712(c).
	204(d)	42 U.S.C. 17712(d).
	206(a)	42 U.S.C. 17713(a).
	208	42 U.S.C. 17714.
	302	42 U.S.C. 17721.
	303	42 U.S.C. 17722.
	304(b)	42 U.S.C. 17723(b).
	304(c)	42 U.S.C. 17723(c).
	307	42 U.S.C. 17724.
	403	42 U.S.C. 17731.
	404(a)	42 U.S.C. 17732(a).
	404(b)	42 U.S.C. 17732(b).
	405(b)	42 U.S.C. 17733(b).
	407	42 U.S.C. 17734.
	501	42 U.S.C. 17741.
	502	42 U.S.C. 17742.
	601(a)	42 U.S.C. 17751(a).
	602	42 U.S.C. 17752.
	704(b)	42 U.S.C. 17781(b).
	704(c)	42 U.S.C. 17781(c).
	801(a)	42 U.S.C. 17791(a).
	803	42 U.S.C. 17793.
	804	42 U.S.C. 17794.
	805	42 U.S.C. 17795.
	902	42 U.S.C. 17801.
	1002(a)	42 U.S.C. 17811(a).
	1003(a)	42 U.S.C. 17812(a).
	1102(b)	42 U.S.C. 17821(b).
	1103	42 U.S.C. 17822.
	1104	42 U.S.C. 17823.
	1107	42 U.S.C. 17824.
	1109(e)	42 U.S.C. 17825(c).
	1112	42 U.S.C. 17827.
	1116	42 U.S.C. 17828.
	1117	42 U.S.C. 17829.
Science Appropriations Act, 2009 (Public Law 111-8, div. B, title III	(3d proviso in par. under heading "Cross Agency Support", at 123 Stat. 589).	42 U.S.C. 16611b note.

Calendar No. 371

11TH CONGRESS
2^D SESSION

H. R. 3237

AN ACT

To enact certain laws relating to national and commercial space programs as title 51, United States Code, “National and Commercial Space Programs.”.

MAY 10, 2010

Reported without amendment