Page

SPACE COMMERCIALIZATION PROMOTION ACT OF 1996

SEPTEMBER 17, 1996.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. Walker, from the Committee on Science, submitted the following

REPORT

[To accompany H.R. 3936]

The Committee on Science, to whom was referred the bill (H.R. 3936) to encourage the development of a commercial space industry in the United States, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

CONTENTS

		гage
I.	Amendment	2
	Purpose of the Bill	13
	Background and Need for Legislation	13
IV.	Summary of Hearings	13
	Committee Actions	16
VI.	Sectional Analysis (By Title and Section)	16
VII.	Committee Views	19
	Title I. Promotion of Commercial Space Opportunities	19
	Title II. Remote Sensing	23
	Title III. Federal Acquisition of Space Transportation Services	25
VIII.	Committee Cost Estimates	27
IX.	Congressional Budget Office Cost Estimates	27
X.	Effects of Legislation on Inflation	27

XI. Oversight Findings and Recommendations 27 XII. Oversight Findings and Recommendations by the Committee on Government Reform and Oversight 27 XIII. Changes in Existing Law Made by the Bill, as Reported 28 XIV. Committee Recommendations 52 XV. Proceedings of Full Committee Markup 53 XVI. Committee Correspondence 131		
I. Amendment		
The amendment is as follows: Strike out all after the enacting clause and insert in lieu there- of the following:		
SECTION 1. SHORT TITLE; TABLE OF CONTENTS. (a) SHORT TITLE.—This Act may be cited as the "Space Commercialization Promotion Act of 1996". (b) Table of Contents.—		
Sec. 1. Short title; table of contents. Sec. 2. Definitions.		
TITLE I—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES		
Sec. 101. Commercialization of space station. Sec. 102. Commercial space launch amendments. Sec. 103. Exceptions to employment restrictions. Sec. 104. Launch voucher demonstration program. Sec. 105. Promotion of United States Global Positioning System standards. Sec. 106. Purchase of space science data.		
TITLE II—REMOTE SENSING		
Sec. 201. Land Remote Sensing Policy Act of 1992 amendments. Sec. 202. Acquisition of earth remote sensing data.		
TITLE III—FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES		
Sec. 301. Requirement to procure commercial space transportation services. Sec. 302. Acquisition of space transportation services. Sec. 303. Launch Services Purchase Act of 1990 amendments. Sec. 304. Use of excess intercontinental ballistic missiles.		
SEC. 2. DEFINITIONS.		

For purposes of this Act-

- (1) the term "Administrator" means the Administrator of the National Aeronautics and Space Administration;
- (2) 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 govern-
- (3) 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
- cle itself except for its components which are specifically designed or adapted for that payload;

 (4) the term "space-related activities" includes research and development, manufacturing, processing, service, and other associated and support activities;

 (5) 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;

(6) 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;

(7) the term "State" means each of the several States of the Union, the Dis-

(7) 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; and

(8) the term "United States commercial provider" means a commercial provider, organized under the laws of the United States or of a State, which is—
(A) more than 50 percent owned by United States nationals; or

(A) more than 50 percent owned by Officed States nationals, of (B) a subsidiary of a foreign company and the Secretary of Transpor-

tation finds that—

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

(I) investments in the United States in long-term research, development, and manufacturing (including the manufacture of major components and subassemblies); and

(II) significant contributions to employment in the United

States; and

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

(I) providing comparable opportunities for companies described in subparagraph (A) to participate in Government sponsored research and development similar to that authorized under this Act;

(II) providing no barriers to companies described in subparagraph (A) with respect to local investment opportunities that are not provided to foreign companies in the United States; and

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

TITLE I—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

SEC. 101. COMMERCIALIZATION OF SPACE STATION.

(a) POLICY.—The Congress declares that a priority goal of constructing the International Space Station is the economic development of Earth orbital space. The Congress further declares that free and competitive markets create the most efficient conditions for promoting economic development, and should therefore govern the economic development of Earth orbital space. The Congress further declares that free market principles should be used in operating and adding capabilities to the Space Station whenever possible.

Space Station whenever possible.

(b) Report.—The Administrator shall deliver to the Congress, within 60 days after the date of the enactment of this Act, a market study that examines the role of commercial ventures which could supply, use, service, or augment the International Space Station, the specific policies and initiatives the Administrator is advancing to encourage these commercial opportunities, the cost savings to be realized by the international partnership from applying commercial approaches to cost-shared operations, and the cost reimbursements to the United States Government from commercial users of the Space Station.

SEC. 102. COMMERCIAL SPACE LAUNCH AMENDMENTS.

- (a) AMENDMENTS.—Chapter 701 of title 49, United States Code, is amended—
 (1) in the table of sections—
 - (A) by amending the item relating to section 70104 to read as follows:

"70104. Restrictions on launches, operations, and reentries.";

(B) by amending the item relating to section 70108 to read as follows:

"70108. Prohibition, suspension, and end of launches, operation of launch sites and reentry sites, and reentries.";

(C) by amending the item relating to section 70109 to read as follows:

"70109. Preemption of scheduled launches or reentries.";

(D) by adding at the end the following new items:

"70120. Regulations. "70121. Report to Congress."

(2) in section 70101—

- (A) by inserting "microgravity research," after "information services," in subsection (a)(3):
- (B) by inserting ", reentry," after "launching" both places it appears in subsection (a)(4);
- (C) by inserting ", reentry vehicles," after "launch vehicles" in subsection (a)(5);
- (D) by inserting "and reentry services" after "launch services" in subsection (a)(6);
- (E) by inserting ", reentries," after "launches" both places it appears in subsection (a)(7);
- (F) by inserting ", reentry sites," after "launch sites" in subsection
- (a)(8); (G) by inserting "and reentry services" after "launch services" in subsection (a)(8);
- (H) by inserting "reentry sites," after "launch sites," in subsection (a)(9);
- (I) by inserting "and reentry site" after "launch site" in subsection
- (a)(9); (J) by inserting ", reentry vehicles," after "launch vehicles" in subsection (b)(2);

- (K) by striking "launch" in subsection (b)(2)(A); (L) by inserting "and reentry" after "conduct of commercial launch" in subsection (b)(3)
- (M) by striking "launch" after "and transfer commercial" in subsection (b)(3); and
- (N) by inserting "and development of reentry sites," after "launch-site support facilities," in subsection (b)(4); (3) in section 70102—
- (A) by striking "and any payload" and inserting in lieu thereof "or reentry vehicle and any payload from Earth" in paragraph (3);

(B) in paragraph (5)

(i) by redesignating subparagraphs (A) and (B) as subparagraphs (B) and (C), respectively; and

- (ii) by inserting before subparagraph (B), as so redesignated by clause (i) of this subparagraph, the following new subparagraph:
- (A) activities directly related to the preparation of a launch site or payload facility for one or more launches;";

 (C) by inserting "or reentry vehicle" after "means of a launch vehicle"
- in paragraph (8);
- (D) by redesignating paragraphs (10) through (12) as paragraphs (14) through (16), respectively;

(E) by inserting after paragraph (9) the following new paragraphs: "(10) 'reenter' and 'reentry' mean to return or attempt to return, purposefully, a reentry vehicle and its payload, if any, from Earth orbit or from outer space to Earth.

"(11) 'reentry services' means—

(A) activities involved in the preparation of a reentry vehicle and its payload, if any, for reentry; and

(B) the conduct of a reentry.

- "(12) 'reentry site' means the location on Earth to which a reentry vehicle is intended to return (as defined in a license the Secretary issues or transfers under this chapter).
- '(13) 'reentry vehicle' means a vehicle designed to return from Earth orbit or outer space to Earth, or a reusable launch vehicle designed to return from outer space to Earth, substantially intact."; and
 - (F) by inserting "or reentry services" after "launch services" each place it appears in paragraph (15), as so redesignated by subparagraph (D) of this paragraph;

(4) in section 70103-

(A) by striking "The Secretary" in subsection (a) and inserting in lieu thereof "Except as provided in section 70122, the Secretary"; and

(B) in subsection (b)-

(i) by inserting "AND REENTRIES AND STATE SPONSORED SPACE-

O'N THE THE SPONSORED SPACE-PORTS" after "LAUNCHES" in the subsection heading;

(ii) by striking "by the private sector" in paragraph (1) and inserting in lieu thereof "and reentries by the private sector and State sponsored spaceports" after "space launches"; and

(iii) by inserting "and reentry" after "space launch" in paragraph

(5) in section 70104—

(A) by amending the section designation and heading to read as follows:

"§ 70104. Restrictions on launches, operations, and reentries";

(B) by inserting "or reentry site, or to reenter a reentry vehicle," after "operate a launch site" each place it appears in subsection (a);

(C) by inserting "or reentry" after "launch or operation" in subsection

(a)(3) and (4);

(D) in subsection (b)—
 (i) by striking "launch license" and inserting in lieu thereof "li-

(ii) by inserting "or reenter" after "may launch"; and (iii) by inserting "or reentering" after "related to launching"; and

(E) in subsection (c)-

(i) by amending the subsection heading to read as follows: "PRE-VENTING LAUNCHES AND REENTRIES.

(iii) by inserting "or reentry" after "prevent the launch"; and (iii) by inserting "or reentry" after "decides the launch";

(6) in section 70105-

(A) by inserting "(1)" before "A person may apply" in subsection (a);
(B) by striking "receiving an application" both places it appears in subsection (a) and inserting in lieu thereof "accepting an application in accordance with criteria established pursuant to subsection (b)(2)(D)".

ance with criteria established pursuant to subsection (a)(2)(2)(2),

(C) by inserting at the end of subsection (a) the following: "The Secretary shall submit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a written notice not later than 7 days after any occurrence when a license is not issued within the deadline established by this subsection.";

(D) by adding at the and of subsection (a) the following new paragraph:

(D) by adding at the end of subsection (a) the following new paragraph:

"(2) In carrying out paragraph (1), the Secretary may establish procedures for certification of the safety of launch vehicles, reentry vehicles, safety systems, procedures, services, or personnel that may be used in conducting licensed commercial space launch or reentry activities.";

(E) by inserting "or a reentry site, or the reentry of a reentry vehicle," after "operation of a launch site" in subsection (b)(1);
(F) by striking "or operation" and inserting in lieu thereof ", operation, or reentry" in subsection (b)(2)(A);

(G) by striking "and" at the end of subsection (b)(2)(B);

(H) by striking the period at the end of subsection (b)(2)(C) and inserting in lieu thereof "; and";

(I) by adding at the end of subsection (b)(2) the following new subpara-

graph:
"(D) regulations establishing criteria for accepting or rejecting an application for a license under this chapter within 60 days after receipt of such application."; and

(J) by inserting ", including the requirement to obtain a license," after "waive a requirement" in subsection (b)(3);

(7) in section 70106(a)-

(A) by inserting "or reentry site" after "observer at a launch site":

(B) by inserting "or reentry vehicle" after "assemble a launch vehicle"; and

(C) by inserting "or reentry vehicle" after "with a launch vehicle";

(8) in section 70108

(A) by amending the section designation and heading to read as follows:

"§ 70108. Prohibition, suspension, and end of launches, operation of launch sites and reentry sites, and reentries";

and

 $\begin{array}{c} (B) \ in \ subsection \ (a) \\ (i) \ by \ inserting \ "or \ reentry \ site, \ or \ reentry \ of \ a \ reentry \ vehicle," \\ after "operation of a launch site"; and \end{array}$

(ii) by inserting "or reentry" after "launch or operation";

(9) in section 70109

(A) by amending the section designation and heading to read as follows:

"§ 70109. Preemption of scheduled launches or reentries";

(B) in subsection (a)-

(i) by inserting "or reentry" after "ensure that a launch"; (ii) by inserting ", reentry site," after "United States Government launch site'

(iii) by inserting "or reentry date commitment" after "launch date commitment";

(v) by inserting "or reentry" after "obtained for a launch";
(v) by inserting ", reentry site," after "access to a launch site";
(vi) by inserting ", or services related to a reentry," after "amount for launch services"; and

(vii) by inserting "or reentry" after "the scheduled launch"; and (C) in subsection (c), by inserting "or reentry" after "prompt launching"; (10) in section 70110-

(A) by inserting "or reentry" after "prevent the launch" in subsection (a)(2): and

(B) by inserting "or reentry site, or reentry of a reentry vehicle," after "operation of a launch site" in subsection (a)(3)(B);

(11) in section 70111-

(A) by inserting "or reentry" after "launch" in subsection (a)(1)(A);
(B) by inserting "and reentry services" after "launch services" in subsection (a)(1)(B);

(C) in subsection (a)(1), by inserting after subparagraph (B) the following:

"The Secretary shall establish criteria and procedures for determining the priority of competing requests from the private sector and State governments for property and services under this section."

(D) by inserting "or reentry services" after "or launch services" in subsection (a)(2);

(E) by striking "actual costs" in subsection (b)(1) and inserting in lieu thereof "additive costs only";

(F) by inserting "or reentry" after "commercial launch" both places it appears in subsection (b)(1);

(G) by inserting "or reentry services" after "launch services" in subsection (b)(2)(C);

(H) by inserting after subsection (b)(2) the following new paragraph: "(3) The Secretary shall ensure the establishment of uniform guidelines for, and

consistent implementation of, this section by all Federal agencies. (I) by striking "or its payload for launch" in subsection (d) and inserting in lieu thereof "or reentry vehicle, or the payload of either, for launch or reentry"; and

(J) by inserting ", reentry vehicle," after "manufacturer of the launch vehicle" in subsection (d); (12) in section 70112-

(A) in subsection (a)(1), by inserting "launch, reentry, or site operator" after "(1) When a";
(B) by inserting "or reentry" after "one launch" in subsection (a)(3);

(C) by inserting "or reentry services" after "launch services" in subsection (a)(4):

(D) in subsection (b)(1), by inserting "launch, reentry, or site operator" after "(1) A";

(E) by inserting "or reentry services" after "launch services" each place it appears in subsection (b);

(F) by inserting "applicable" after "carried out under the" in paragraphs (1) and (2) of subsection (b);

(G) by striking ", Space, and Technology" in subsection (d)(1); (H) by inserting "OR REENTRIES" after "LAUNCHES" in the heading for subsection (e);

(I) by inserting "or reentry site or a reentry" after "launch site" in subsection (e); and

(J) in subsection (f), by inserting "launch, reentry, or site operator" after "carried out under a";

(13) in section 70113(a)(1) and (d)(1) and (2), by inserting "or reentry" after "one launch" each place it appears;

(14) in section 70115(b)(1)(D)(i)—

(A) by inserting "reentry site," after "launch site,"; and (B) by inserting "or reentry vehicle" after "launch vehicle" both places it appears;

(15) in section 70117-

(A) by inserting "or reentry site, or to reenter a reentry vehicle" after "operate a launch site" in subsection (a);
(B) by inserting "or reentry" after "approval of a space launch" in sub-

section (d);

(C) by amending subsection (f) to read as follows:

"(f) LAUNCH NOT AN EXPORT; REENTRY NOT AN IMPORT.—A launch vehicle, reentry vehicle, or payload that is launched or reentered is not, because of the launch or reentry, an export or import, respectively, for purposes of a law controlling exports or imports."; and

(D) in subsection (g)—

(i) by striking "operation of a launch vehicle or launch site," in paragraph (1) and inserting in lieu thereof "reentry, operation of a launch vehicle or reentry vehicle, operation of a launch site or reentry

(ii) by inserting "reentry," after "launch," in paragraph (2); and (16) by adding at the end the following new sections:

"§ 70120. Regulations

"The Secretary of Transportation, within 6 months after the date of the enactment of this section, shall issue regulations to carry out this chapter that include-

"(1) guidelines for industry to obtain sufficient insurance coverage for potential damages to third parties;

"(2) procedures for requesting and obtaining licenses to operate a commer-

cial launch vehicle or reentry vehicle;

"(3) procedures for requesting and obtaining operator licenses for launch or reentry;

"(4) procedures for requesting and obtaining launch site or reentry site op-

erator licenses; and

"(5) procedures for the application of government indemnification.

"§ 70121. Report to Congress

"The Secretary of Transportation shall submit to Congress an annual report to accompany the President's budget request that-

(1) describes all activities undertaken under this chapter, including a description of the process for the application for and approval of licenses under this chapter and recommendations for legislation that may further commercial launches and reentries; and

"(2) reviews the performance of the regulatory activities and the effectiveness of the Office of Commercial Space Transportation.".

(b) Effective Date.—The amendments made by subsection (a)(6)(B) shall take effect upon the effective date of final regulations issued pursuant to section 70105(b)(2)(D) of title 49, United States Code, as added by subsection (a)(6)(I).

SEC. 103. EXCEPTIONS TO EMPLOYMENT RESTRICTIONS.

(a) General Rule.—Section 207(a) and (c) of title 18, United States Code, and section 27(f)(1) of the Federal Procurement Policy Act (41 U.S.C. 423(f)(1)) shall not apply to employees or former employees of the National Aeronautics and Space Administration seeking employment with an entity that is awarded the Space Flight Operations Contract for the Space Shuttle.

(b) Exceptions.—Subsection (a) shall not apply to an employee who, while employed with the National Aeronautics and Space Administration, was actively and significantly involved in the selection of the entity that is awarded the Space Flight

Operations Contract for the Space Shuttle.

SEC. 104. LAUNCH VOUCHER DEMONSTRATION PROGRAM.

Section 504 of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993 (15 U.S.C. 5803) is amended—

(1) in subsection (a)—
(A) by striking "the Office of Commercial Programs within"; and
(B) by striking "Such program shall not be effective after September 30,

(2) by striking subsection (c); and

(3) by redesignating subsections (d) and (e) as subsections (c) and d), respectively.

SEC. 105. PROMOTION OF UNITED STATES GLOBAL POSITIONING SYSTEM STANDARDS.

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

(b) INTERNATIONAL COOPERATION.—The Congress therefore encourages the

President to-

(1) undertake a coordinated effort within the executive branch to promote cooperation with foreign governments and international organizations to advance United States interests with respect to the Global Positioning System standards and augmentations; and

(2) ensure the operation of the Global Positioning System on a continuous

worldwide basis free of direct user fees.

SEC. 106. PURCHASE OF SPACE SCIENCE DATA.

(a) In General.—To the maximum extent possible, while satisfying the National Aeronautics and Space Administration's scientific requirements, the National Aeronautics and Space Administration shall, where cost effective, purchase from the United States private sector space science data. Examples of such data include scientific data concerning the elemental and mineralogical resources of the moon and the planets, Earth environmental data obtained through remote sensing observa-

tions, and solar storm monitoring.

(b) Competitive Bidding.—(1) Contracts for the purchase of space science data under this section shall be awarded in a process of full, fair, and open competitive

(2) Submission of cost data, either for the purposes of supporting the bid or fulfilling the contract, shall not be required of bidders or awardees of the contract, except in cases where only one credible bid meeting the requirements of the solicitation is received.

(3) Reasonable performance specifications, rather than design or construction specifications, shall be used to the maximum extent feasible to define requirements for United States commercial providers with respect to the design, construction, or operation of equipment used in obtaining space science data under contracts entered into under this section. This subsection shall not be construed to prohibit the Federal Government from requiring compliance with applicable safety standards.

(4) Contracts under this section shall not provide for the Federal Government

to obtain ownership of data not specifically sought by the Federal Government.

(c) LIMITATION.—This section does not authorize the National Aeronautics and Space Administration to provide financial assistance for the development of systems for the collection of space science data.

TITLE II—REMOTE SENSING

SEC. 201. LAND REMOTE SENSING POLICY ACT OF 1992 AMENDMENTS.

The Land Remote Sensing Policy Act of 1992 is amended—
(1) in section 2 (15 U.S.C. 5601)—
(A) by amending paragraph (5) to read as follows:
"(5) Commercialization of land remote sensing is a near-term goal, and should remain a long-term goal, of United States policy.";

(B) by tribles are the following that the corresponds (7) through

(B) by striking paragraph (6) and redesignating paragraphs (7) through (16) as paragraphs (6) through (15), respectively; and
(C) in paragraph (11), as so redesignated by subparagraph (B) of this paragraph, by striking "determining the design" and all that follows through "international consortium" and inserting in lieu thereof "ensuring the certificity of Landact quality data": the continuity of Landsat quality data"; (2) in section 101 (15 U.S.C. 5611)—

(A) by inserting the following after subsection (b)(4): "The Director of the Office of Science and Technology Policy shall, no later than 60 days after the date of the enactment of the Space Commercialization Promotion Act

of 1996, transmit the management plan to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(B) in subsection (c)—
(i) by inserting "and" at the end of paragraph (6);

(ii) by striking paragraph (7); and

(iii) by redesignating paragraph (8) as paragraph (7); and

(C) in subsection (e)(1)—

(i) by inserting "and" at the end of subparagraph (A); (ii) by striking ", and" at the end of subparagraph (B) and inserting in lieu thereof a period; and

(iii) by striking subparagraph (C);
(3) in section 201 (15 U.S.C. 5621)—

(A) by inserting "(1)" after "NATIONAL SECURITY.—" in subsection (b); (A) by inserting (1) after NATIONAL SECURITY.— In subsection (b), (B) in subsection (b)(1), as so designated by subparagraph (A) of this paragraph, by striking "No license" and inserting in lieu thereof "Except as provided in paragraph (3), no license";

(C) by adding at the end of subsection (b) the following new para-

graphs:

"(2) The Secretary, within 6 months after the date of the enactment of the Space Commercialization Promotion Act of 1996, shall publish in the Federal Register a complete and specific list of all information required to comprise a complete application for a license under this title. An application shall be considered complete when the applicant has provided all information required by the list most recently published in the Federal Register before the date the application was first submitted. Unless the Secretary has, within 30 days after receipt of an application, notified the applicant of information necessary to complete an application, the Secretary may not deny the application on the basis of the absence of any such information.

"(3) The Secretary shall grant a license under this title to any United States commercial provider (as such term is defined in section 2 of the Space Commercialization Promotion Act of 1996) whose application is in full compliance with the

requirements of this title.

(D) in subsection (c), by amending the second sentence thereof to read as follows: "If the Secretary has not granted the license within such 120day period, the Secretary shall inform the applicant, within such period, of any pending issues and actions required to be carried out by the applicant or the Secretary in order to result in the granting of a license."; and (E) in subsection (e)(2)(B), by striking "and the importance of promoting

widespread access to remote sensing data from United States and foreign

(4) in section 202 (15 U.S.C. 5622)—

(A) by striking "section 506" in subsection (b)(1) and inserting in lieu thereof "section 507";

(B) in subsection (b)(2), by striking "as soon as such data are available and on reasonable terms and conditions" and inserting in lieu thereof "on reasonable terms and conditions, including the provision of such data in a timely manner";

(Č) in subsection (b)(6), by striking "any agreement" and inserting in lieu thereof "any significant or substantial agreement relating to land re-

mote sensing"; and

(D) by inserting after paragraph (6) of subsection (b) the following: "The Secretary may not terminate, modify, or suspend a license issued pursuant to this title on the basis of an agreement the Secretary receives notification of under paragraph (6) unless the Secretary has, within 30 days after receipt of such notification, transmitted to the licensee a statement that such agreement is inconsistent with the national security or international obligations of the United States, including an explanation of such inconsistency.";

(5) in section 203 (15 U.S.C. 5623)—

(A) in subsection (a)(2), by striking "under this title and" and inserting

(A) In subsection (a)(2), by striking under this title and and inserting in lieu thereof "under this title or";

(B) in subsection (a)(3), by striking "provide penalties" and inserting in lieu thereof "seek, in a United States District Court with personal jurisdiction over the licensee, penalties"; and

(C) in subsection (b), by striking "(a)(3),";

(6) in section 204 (15 U.S.C. 5624), by striking "may" and inserting in lieu

thereof "shall";

(7) in section 205(c) (15 U.S.C. 5625(c)), by striking "if such remote sensing space system is licensed by the Secretary before commencing operation" and inserting in lieu thereof "if such private remote sensing space system will be li-censed by the Secretary before commencing its commercial operation";

(8) by adding at the end of title II the following new section:

"(a) LIMITATIONS ON LICENSEE.—Not later than 30 days after a determination by the Secretary to require a licensee to limit collection or distribution of data from

a system licensed under this title, the Secretary shall provide written notification to Congress of such determination, including the reasons therefor, the limitations imposed on the licensee, and the period during which such limitations apply.

"(b) Termination, Modification, or Suspension.—Not later than 30 days after an action by the Secretary to seek an order of injunction or other judicial determination pursuant to section 203(a)(2), the Secretary shall provide written notification to Congress of such action and the reasons therefor.";

(9) in section 301 (15 U.S.C. 5631)—

(A) by inserting ", that are not being commercially developed" after "and its environment" in subsection (a)(2)(B); and

(B) by adding at the end the following new subsection:

"(d) DUPLICATION OF COMMERCIAL SECTOR ACTIVITIES.—The Federal Government shall not undertake activities under this section which duplicate activities available from the commercial sector, unless such activities would result in signifi-cant cost savings to the Federal Government.";

(10) in section 302 (15 U.S.C. 5632)-

(A) by striking "(a) GENERAL RULE.—";
(B) by striking ", including unenhanced data gathered under the technology demonstration program carried out pursuant to section 303," and inserting in lieu thereof "that is not otherwise available from the commercial sector"; and

C) by striking subsection (b);

(11) by repealing section 303 (15 U.S.C. 5633); (12) in section 401(b)(3) (15 U.S.C. 5641(b)(3)), by striking ", including any such enhancements developed under the technology demonstration program under section 303,3

(13) in section 501(a) (15 U.S.C. 5651(a)), by striking "section 506" and inserting in lieu thereof "section 507"; (14) in section 502(c)(7) (15 U.S.C. 5652(c)(7)), by striking "section 506" and

inserting in lieu thereof "section 507"; (15) in section 506 (15 U.S.C. 5656)–

(A) by inserting "(1)" after "COMMUNICATIONS COMMISSION.—" in subsection (a);

(B) by inserting at the end of subsection (a) the following new para-

- graph:

 "(2) The Federal Communications Commission, within 6 months after the date

 Communication Promotion Act of 1996, shall pubof the enactment of the Space Commercialization Promotion Act of 1996, shall publish in the Federal Register a complete and specific list of all information required to comprise a complete application described in paragraph (1). An application shall be considered complete when the applicant has provided all information required by the list most recently published in the Federal Register before the date the application was first submitted. Unless the Federal Communications Commission has, within 30 days after receipt of an application, notified the applicant of information necessary to complete an application, the Federal Communications Commission may not deny the application on the basis of the absence of any such information."; and (C) by adding at the end the following new subsection:
- "(e) FEES.—The Federal Communications Commission shall ensure that any licensing or other fees that a private remote sensing space system operator subject to the licensing requirements of title II is required to pay such Commission shall be proportional to the cost to the Commission of the radio licensing process for such person relative to the cost to the Commission of licensing other entities subject to the fee."; and (16) in section 507 (15 U.S.C. 5657)—

(A) by amending subsection (a) to read as follows:
"(a) RESPONSIBILITY OF THE SECRETARY OF DEFENSE.—The Secretary shall consult with the Secretary of Defense on all matters under this Act affecting national security. The Secretary of Defense shall be responsible for determining those conditions, consistent with this Act, necessary to meet national security concerns of the United States, and for notifying the Secretary promptly of such conditions. Not later than 60 days after receiving a request from the Secretary, the Secretary of Defense shall recommend to the Secretary any conditions for a license issued under title II, consistent with this Act, that the Secretary of Defense determines are needed to protect the national security of the United States. If no such recommendation has been received by the Secretary within such 60-day period, the Secretary shall deem activities proposed in the license application to be consistent with the protection of the national security of the United States.";

(B) by striking subsection (b)(1) and (2) and inserting in lieu thereof the following:

"(b) Responsibility of the Secretary of State.—(1) The Secretary shall consult with the Secretary of State on all matters under this Act affecting international obligations of the United States. The Secretary of State shall be responsible for determining those conditions, consistent with this Act, necessary to meet international obligations of the United States and for notifying the Secretary promptly of such conditions. Not later than 60 days after receiving a request from the Secretary, the Secretary of State shall recommend to the Secretary any conditions for a license issued under title II, consistent with this Act, that the Secretary of State determines are needed to meet international obligations of the United States. If no such recommendation has been received by the Secretary within such 60-day period, the Secretary shall deem activities proposed in the license application to be consistent with the international obligations and policies of the United States.

"(2) Appropriate United States Government agencies are authorized and encour-

aged to provide to developing nations, as a component of international aid, resources for purchasing remote sensing data, training, and analysis from United States com-

mercial providers."; and

(C) in subsection (d), by striking "Secretary may require" and inserting in lieu thereof "Secretary shall, where appropriate, require".

SEC. 202. ACQUISITION OF EARTH REMOTE SENSING DATA.

(a) Acquisition.—To the maximum extent possible, while satisfying the National Aeronautics and Space Administration's scientific requirements, the Administration \dot{x} trator shall, where cost effective, acquire space-based and airborne Earth remote sensing data, services, distribution, and applications provided by the United States private sector to meet Government goals for Mission to Planet Earth.

(b) STUDY.—(1) The Administrator shall conduct a study to determine the extent

to which the baseline scientific requirements of Mission to Planet Earth can be met by the private sector, and how the National Aeronautics and Space Administration

will meet such requirements which cannot be met by the private sector.

(2) The study conducted under this subsection shall-

(A) make recommendations to promote the availability of information from the National Aeronautics and Space Administration to the private sector to enable the private sector to better meet the baseline scientific requirements of Mission to Planet Earth;

(B) make recommendations to promote the dissemination to the private sector of information on advanced technology research and development performed by or for the National Aeronautics and Space Administration; and

(C) identify policy, regulatory, and legislative barriers to the implementation of the recommendations made under this subsection.

(3) The results of the study conducted under this subsection shall be transmit-

to the Congress within 6 months after the date of the enactment of this Act. (c) ADMINISTRATION.—This section shall be carried out as part of the Commercial Remote Sensing Program at the Stennis Space Center.

TITLE III—FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES

SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL SPACE TRANSPORTATION SERVICES.

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

(b) Exceptions.—(1) The Federal Government shall not be required to acquire space transportation services under subsection (a) if, on a case-by-case basis, the Administrator or, in the case of a national security issue, the Secretary of Defense, determines that-

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

(B) space transportation services that meet specific mission requirements would not be reasonably available from United States commercial providers when required;

(C) the use of space transportation services from United States commercial providers poses an unacceptable risk of loss of a unique scientific opportunity;

(D) the use of space transportation services from United States commercial providers is inconsistent with national security objectives; or

- (E) it is more cost effective to transport a payload in conjunction with a test or demonstration of a space transportation vehicle owned by the Federal Government.
- (2) Determinations under paragraph (1) shall be made by the Administrator or the Secretary of the Air Force.

(c) Partnerships.—The acquisition of space transportation services in connection with a payload with respect to which the Federal Government has provided a greater amount of the funding required for construction and operation than any other source, shall be subject to the requirements of this section.

(d) DELAYED EFFECT.—Subsections (a) and (c) shall not apply to space transportation services and space transportation vehicles acquired or owned by the Federal Government before the date of the enactment of this Act, or with respect to which a contract for such acquisition or ownership has been entered into before such date.

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

SEC. 302. ACQUISITION OF SPACE TRANSPORTATION SERVICES.

- (a) COMPETITIVE BIDDING.—(1) Contracts for the acquisition of space transportation services by the Federal Government shall be awarded subject to applicable Federal law requiring full, fair, and open competition, including section 2304 of title 10, United States Code, and section 311 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2459c).
- (2) Bidders for a contract for the acquisition by the Federal Government of space transportation services shall not be required to provide cost data for the purpose of supporting such a bid or fulfilling such a contract, except in cases where only one credible bid meeting the requirements of the solicitation is received.
- (b) Specification Systems.—Reasonable performance specifications, rather than design or construction specifications, shall be used to the maximum extent fea-sible to define requirements for United States commercial providers bidding to provide or providing space transportation services to the Federal Government. This subsection shall not be construed to prohibit the Federal Government from requiring compliance with applicable safety standards.

SEC. 303. LAUNCH SERVICES PURCHASE ACT OF 1990 AMENDMENTS.

The Launch Services Purchase Act of 1990 (42 U.S.C. 2465b et seq.) is amended-

- (1) by striking section 202;(2) in section 203—
- - (A) by striking paragraphs (1) and (2); and
- (B) by redesignating paragraphs (3) and (4) as paragraphs (1) and (2), respectively;
- (3) by striking sections 204 and 205; and (4) in section 206—
- (A) by striking "(a) Commercial Payloads on the Space Shuttle.—
 - (B) by striking subsection (b).

SEC. 304. 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 otherwise use any such missile to place a payload in space; or
- (2) transfer ownership of any such missile to another person,

except as provided in subsection (b).

- (b) AUTHORIZED FEDERAL USES.—(1) A missile described in subsection (c) may be converted for use as a space transportation vehicle by the Federal Government
 - (A) except as provided in paragraph (2), at least 120 days before such conversion the agency seeking to use the missile as a space transportation vehicle transmits to the Committee on National Security and the Committee on Science of the House of Representatives, and to the Committee on Armed Services and the Committee on Commerce, Science, and Transportation of the Senate, a report that contains
 - (i) a certification that the use of such missile-
 - (I) would result in significant cost savings to the Federal Government when compared to the cost of acquiring space transportation services from United States commercial providers; and

(II) meets all mission requirements of the agency, including per-

formance, schedule, and risk requirements; and
(ii) comments obtained from United States commercial providers in response to prior public notice published in the Commerce Business Daily;
(B) the use of such missile is consistent with international obligations of the United States; and

(C) the Secretary of Defense approves of such conversion.

- (2) The requirement under paragraph (1)(A) that the report described in that subparagraph must be transmitted at least 120 days before conversion of the missile shall not apply if the Secretary of Defense determines that compliance with that requirement would be inconsistent with meeting immediate national security requirements.
- (c) MISSILES REFERRED TO.—The missiles referred to in this section are missiles owned by the United States that were formerly used by the Department of Defense for national defense purposes as intercontinental ballistic missiles and that have been retired from service in compliance with international obligations of the United States.

II. PURPOSE OF THE BILL

The purpose of the bill is to encourage the development of a commercial space industry in the United States by streamlining government regulatory procedures and unleashing the creativity and industry of American entrepreneurialism.

III. BACKGROUND AND NEED FOR LEGISLATION

In 1994, commercial space activity in the United States generated \$6.2 billion in revenue. Current estimates indicate that this area of activity generated revenue of some \$7.5 billion in 1995. For most of this decade, commercial space activity has proven recession-proof, providing thousands of high-skilled, well-paying jobs in the nation's aerospace industry, which has borne the burden of cutbacks in federal defense spending since 1986. Besides improving the U.S. industrial base, commercial space business creates new capabilities for using space to enhance the lives of millions of Americans and provides tax revenue that will help balance the federal budget.

Commercial space activity has received bipartisan support for years, resulting in the passage of landmark legislation, such as the Commercial Space Launch Act of 1984, the Launch Services Purchase Act of 1990 and the Land Remote Sensing Policy Act of 1992. While those laws have enabled the U.S. commercial space industry to lead the world in the private development of space, experience and the pace of technological change have demonstrated that the regulatory framework governing commercial space activity needs to be updated and improved. The Space Commercialization Promotion Act of 1996 begins this process.

IV. SUMMARY OF HEARINGS

In developing this bill, the Committee sought input from experts in industry, the executive branch, the academic sector, and citizens' groups. In seeking this input, the Science Committee cast a wide net, combining new approaches of reviewing legislative ideas with more traditional Congressional practices. On March 5, 1996, the Science Committee introduced a new concept for legislative information gathering and held a roundtable on a draft bill entitled, "Omnibus Space Commercialization Act of 1996," and on H.R.

1953, the "Space Business Incentives Act of 1996." The roundtable, co-sponsored by a Washington-based grassroots space advocacy group, the National Space Society, welcomed current and former government officials, industry executives from small, entrepreneurial companies and larger government contractors, policy analysts from various think tanks, and representatives from advocacy groups. Because the forum was unofficial and not highly structured, participants were free to speak more candidly than hearings usually allow. Based on that roundtable and additional comments from other interested parties, the Omnibus Space Commercialization Bill was redrafted, streamlined, renamed the "Space Commercialization Promotion Act of 1996," and introduced by twelve members of the Science Committee on August 1, 1996.

In addition to the roundtable, the Committee held several hearings on commercial space development that were instrumental in developing and finalizing the legislation. On November 8, 1995, the Science Committee held a hearing entitled, "NASA Procurement in the Earth-Space Economy," which examined methods by which NASA could fulfill its missions while stimulating the commercial space industry. Witnesses included: Ms. Deirdre Lee, NASA's Associate Administrator for Procurement; Mr. Rick Dunn, who served in the office of NASA's General Counsel and is currently General Counsel of the Defense Advanced Research Projects Agency; Mr. John Muratore, of the Johnson Space Center; Mr. Dennis Burnett, representing Instrumentation Technology Associates, Inc.; Mr. David Rossi, Senior Vice President of Spacehab, Inc.; Mr. James Frelk, Vice President of Earthwatch Inc.; and Mr. Tom Rogers, President of the Sophron Foundation and advisor to the Space Frontier Foundation.

On June 12, 1996, the Subcommittee on Space and Aeronautics held a hearing, "U.S. Space Launch Strategy," which examined the health of the U.S. space launch industry and the impact of various trade agreements. Witnesses included: the Honorable Dan Goldin, NASA Administrator; Mr. Robert Davis, Deputy Undersecretary of Defense for Space; Mr. Don Eiss, Deputy Assistant U.S. Trade Representative for Industry and Labor; Ms. Catherine Novelli, Deputy Assistant U.S. Trade Representative for Eastern/Central Europe and Eurasia; Mr. Frank Weaver, FAA Associate Administrator for Commercial Space Transportation; Dr. Brian Dailey, Vice President for Business Development of Lockheed-Martin Corporation's Space and Strategic Missiles Sector; Mr. Stanley Ebner, Senior Vice President for Washington Operations of McDonnell Douglas Aerospace; Mr. Edward O'Connor, Executive Director of the Spaceport Florida Authority; Mr. Pat Ladner, Executive Director of the Alaska Aerospace Development Corporation; Mr. Donald Smith, Executive Director of the Western Commercial Space Center; and Mr. David Montanaro, Vice President of Teledesic Corporation. Written statements were accepted from Rockwell International Corporation and Arianespace.

On July 31, 1996, the Subcommittee on Space and Aeronautics held a hearing on the draft legislation entitled "The Space Commercialization Promotion Act of 1996." Witnesses included: the Honorable Lionel S. Johns, Associate Director for Technology of the White House Office of Science and Technology Policy; Lt. Gen. Spence Armstrong (retired), NASA Associate Administrator for Human Resources and Education; Mr. Gil Klinger, Principal Assistant Undersecretary of Defense for Space; Dr. Brian Dailey, Vice President for Business Development of Lockheed-Martin Corporation's Space and Strategic Missiles Sector; Dr. Scott Pace, the RAND Corporation; and Mr. Mark Brender, of ABC News, representing the National Radio and Television News Director's Association's Remote Sensing Task Force. The record was held open after the hearing to accept additional written statements from interested parties. The Subcommittee has received statements from the U.S. GPS Industry Council, the United Space Alliance, the North American Remote Sensing Industries Association, and the

law firm of Reed Smith Shaw & McClay.

Witnesses at the hearing discussed those portions of the bill they thought would be most helpful to U.S. goals for promoting a healthy commercial space industry, and those aspects of the bill they would like to see changed. Mr. Johns noted that the bill was generally consistent with White House policies to promote space commercialization and that the areas of spaceports, Global Positioning System (GPS) policy, and remote sensing paralleled the Administration's policies. However, he noted for the record that the Administration was opposed to legislative relief for NASA employees who are currently prohibited from transitioning from the civil service to the Space Shuttle's single prime contractor for the Space Flight Operations Contract. Chairman Sensenbrenner noted that such relief was necessary to complete the Administration's policy of consolidating Space Shuttle contracts and that it was essential to ensure the safety requirements of a stable Shuttle workforce. General Armstrong, accompanied by Ed Frankle, NASA's General Counsel, discussed personnel issues and the transition of the Space Shuttle to a single prime contractor, which relate directly to section 103 of the bill. He noted that the Executive Branch Office of Personnel Management and the Office of Government Ethics were uncomfortable with some of the steps NASA wanted to take to facilitate the transition of Shuttle operations to a single prime contract. Mr. Klinger indicated that the bill's requirement for the Department of Defense to procure launch services commercially was consistent with the direction of federal policy, but did not believe that the transition should be accelerated by law. He also objected to the bill's provisions that required the Defense Department to report its objections to a commercial remote sensing license to Congress, and said that the President's policy governing the disposition of excess ICBMs was sufficient and did not need to be codified and expanded

Dr. Dailey testified that Lockheed-Martin, which is a partner in the United Space Alliance (the entity that has been selected through a sole-source procurement to manage the Space Flight Operations Contract), supported section 103 of the bill, which lifts post-employment restrictions for NASA employees joining the United Space Alliance. He specifically testified that the bill's commercial remote sensing provisions were necessary to keep U.S. companies ahead of their competition. Dr. Pace endorsed the GPS provisions of the bill, which ensure that the United States speaks with a unified voice overseas; the remote sensing provisions of the bill,

which will streamline the regulatory process; and the provisions dealing with excess ballistic missiles, which reflect national policy. Mr. Brender argued that current policy on remote sensing, which gives the federal government control over privately-owned remote sensing satellites, is inconsistent with the First Amendment. Although the bill under discussion revisits the issue of shutter control, and tends to require a higher standard for the government to exercise that control, Mr. Brender testified that he believed it still violates rules on prior restraint of the media.

V. COMMITTEE ACTIONS

H.R. 3936 was introduced August 1, 1996 by Chairman Walker and co-sponsored by Mr. Sensenbrenner, Mr. Largent, Mr. Weldon of Florida, Mr. Rohrabacher, Mr. Hilleary, Mr. Stockman, Mr. Davis, Mr. Calvert, Mr. Baker of California, Mrs. Seastrand, and Mr. Tiahrt. The bill was referred to the Committee on Science and the Committee on Government Reform and Oversight. Within the Science Committee, the bill was referred to the Subcommittee on Space and Aeronautics. On September 9, 1996 Chairman Sensenbrenner and Ranking Member Hall signed a letter of discharge, releasing the bill from the Subcommittee on Space and Aeronautics to the full Science Committee for consideration.

On September 11, 1996, the Committee on Science marked up H.R. 3936. A quorum being present, the bill was adopted, as amended, by a voice vote and ordered reported, by a voice vote, to the full House for consideration. One amendment, a manager's amendment jointly sponsored by Chairman Walker and Ranking Member Brown, was adopted by a voice vote. The Committee also adopted, by a voice vote, motions to submit supplementary, Minority, or additional views for the legislative report.

Science Committee staff met with representatives of the Committee on Government Reform and Oversight, whose concerns were addressed by the manager's amendment offered during the Science Committee markup of the bill and the amendment to be offered on the Floor under suspension of the rules. On September 16, 1996, Chairman William F. Clinger, Jr. signed a letter of discharge from the Committee on Government Reform and Oversight, releasing the bill for consideration by the House of Representatives.

VI. SECTIONAL ANALYSIS (BY TITLE AND SECTION)

Section 1 Short Title Section 2 Definitions

TITLE I PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

Section 101 Commercialization of Space Station

Directs the NASA Administrator to prepare a market study that examines (a) the role commercial ventures could play in supplying, using, servicing, or augmenting the International Space Station; (b) specific policies and initiatives underway at NASA to encourage such commercial opportunities; and (c) the cost savings that might be realized by the international partnership from applying commer-

cial approaches to cost-shared operations and by the U.S. government from cost reimbursements by commercial users.

Section 102 Commercial Space Launch Amendments

Amends Chapter 701 of title 49, United States Code. The purpose of the section is to establish a regulatory framework for licensing commercial reentry activities by the Secretary of Transportation, clarify certain provisions of Chapter 701, and provide for regulations to accept or reject a license application within 60 days of receipt. The definition of launch services is expanded to those activities directly related to the preparation of a launch site or a payload facility. The House and Senate are to receive written notice within 7 days if a license has not been issued within the deadline. The Secretary is required to coordinate the establishment of criteria and procedures for determining the priority of competing requests from the private sector and State governments for property and services. The term "license" is amended to "launch reentry or site operator license" under section 70112 on liability insurance. The Secretary is required to issue regulations, within 6 months after the date of enactment, to carry out the provisions of Chapter 701. The Secretary is required to submit an annual report to Congress on the activities undertaken pursuant to Chapter 701.

Section 103 Exceptions to Employment Restrictions

Allows exceptions to post-employment restrictions for NASA employees going to work for the entity that is awarded the Space Flight Operations Contract for the Space Shuttle.

Section 104 Launch Voucher Demonstration Program

Section 504 of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993 (15 U.S.C. 5803) is amended by striking outdated references to dates and offices.

Section 105 Promotion of United States Global Positioning System Standards

Reaffirms U.S. policy to make the U.S. Global Positioning System (GPS) the world standard through promotion of international cooperation and the continuous maintenance of a navigation signal, free of direct user fees.

Section 106 Purchase of Space Science Data

Requires NASA, to the maximum extent possible, to purchase space science data where cost effective, from the private sector using reasonable performance specifications. The section allows for satisfying NASA's scientific requirements. NASA is not authorized to provide financial assistance for the development of commercial systems for the collection of space science data.

TITLE II REMOTE SENSING

Section 201 Land Remote Sensing Policy Act of 1992 Amendments Updates the Land Remote Sensing Policy Act of 1992 (15 U.S.C. 5601 et seq.). Directs the Office of Science and Technology Policy to submit to Congress the Landsat Management Plan. Requires the Secretary of Commerce to publish a list of requirements for applicants seeking a license to own and operate a remote sensing satellite. Creates a presumption of approval for license applications

that comply with title requirements. Prevents the Secretary of Commerce from modifying a license agreement based on foreign participation without first transmitting a determination to the licensee that such participation is inconsistent with national security or international obligations. Requires the Secretary of Commerce to notify Congress of any action to limit collection or distribution of data. Requires the Secretary to report to Congress any injunctions that it seeks against a U.S. commercial provider. Prohibits the federal government from duplicating private sector activities unless significant savings can be realized. Requires the Federal Communications Commission (FCC) to publish a public list of requirements needed for any application that a remote sensing system must receive from the FCC. Requires the Secretaries of Defense and State to consult with the Secretary of Commerce regarding license applications and determine whether such applications are consistent with U.S. national security interests and international obligations. Treats the absence of objection from either the Secretary of Defense or State to a license application as confirmation that the application is consistent with U.S national security and international obligations within a specific time period. Encourages the U.S. government to consider providing vouchers for use of U.S. commercial remote sensing services and products to developing nations as a component of U.S. international aid programs.

Section 202 Acquisition of Earth Remote Sensing Data

Requires NASA, to the maximum extent possible, to acquire Earth remote sensing data, services, distribution, and applications, where cost effective, from the private sector to meet Mission to Planet Earth goals. The section allows for satisfying NASA's scientific requirements. Directs the NASA Administrator to conduct a study to determine what baseline science data requirements for Mission to Planet Earth can be met by the private sector and to recommend appropriate steps to improve the private sector's ability to meet U.S. Earth science data requirements. The results of the study are to be transmitted to Congress within 6 months after the date of enactment.

TITLE III FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES

Section 301 Requirement to Procure Commercial Space Transportation Services

Requires the federal government to procure space transportation services from the private sector and, to the maximum practicable extent, plan missions to accommodate the space transportation capabilities of U.S. commercial providers. Exceptions to this policy: the payload requires the unique capabilities of the Space Shuttle; U.S. commercial providers cannot provide cost-effective space transportation services when required; the use of space transportation services from U.S. commercial providers poses an unacceptable risk of loss of a unique scientific opportunity; the use of space transportation services from U.S. commercial providers is inconsistent with U.S. national security objectives; or it is more cost effective to launch a payload in conjunction with the test or demonstration of a space transportation vehicle owned by the federal govern-

ment. Directs only the Secretary of the Air Force or the NASA Administrator to make determinations about when an exception shall be granted. Does not apply to space transportation services and vehicles acquired or owned by the federal government before the enactment date or to contracts for such acquisition or ownership that have been entered into prior to the enactment date.

Section 302 Acquisition of Space Transportation Services Requires competitive bidding for the acquisition of space transportation services using performance specifications.

Section 303 Launch Services Purchase Act of 1990 Amendments Updates the Launch Services Purchase Act of 1990. (42 U.S.C. 2465b et seq.)

Section 304 Use of Excess Intercontinental Ballistic Missiles

A missile may be converted for use as a space transportation vehicle by the federal government if: (a) 120 days prior to conversion, the agency seeking to use the missile transmits a report to Congress certifying that such use would result in significant cost savings to the federal government and would meet all mission requirements; (b) the use of such missile is consistent with international obligations of the U.S.; and (c) the Secretary of Defense approves of such conversion. The report shall also contain Commerce Business Daily comments from U.S. commercial providers. The requirement that the report be submitted within 120 days is waived if the Secretary of Defense determines that compliance would be inconsistent with immediate national security concerns.

VII. COMMITTEE VIEWS

For most of the history of the U.S. space program, U.S. space activity has resulted from government expenditures. While that has resulted in the world's most ambitious and advanced space program, it has also made U.S. activity in space vulnerable to changing political support for the national space program. Given the increasing role that space plays in developing new technology, advancing life on Earth, and protecting our national security, we have a need to encourage non-government development of space by Americans. Commercial space activity will accelerate, bringing the benefits of space activity to Earth to help strengthen our space industrial base. Finally, unleashing the spirit, energy, and work ethic of U.S. entrepreneurialism will do the most to open up the true potential of space to benefit life on Earth.

Title I Promotion of Commercial Space Opportunities.

There are many ways to promote the economic development of outer space. Government can create new technologies, which are then transitioned to the private sector. A prime example is the field of space communications. Government can also develop more creative ways of undertaking its space missions which enable the U.S. private sector to develop space more economically. This has the added benefit of broadening the U.S. space industrial base and creating new capabilities to use space, both of which can lower government's cost of undertaking missions that serve the nation's interest in national security, science, and exploration. Finally, government

can provide a stable business environment, so that entrepreneurs and workers who have solved the capital and technological obstacles to the economic development of space can make rational business decisions and generate the profits that attract more investment in the space sector. Title I focuses on these elements of public policy in promoting commercial space activity in new areas of growth.

Sec. 101. Commercialization of Space Station.

The International Space Station's first element will be launched next year, yet questions remain about how to most effectively use the Station. While NASA does have a solid science program for station utilization, determining how it can be used to support the economic development of space and how private sector capabilities can be used to augment the station's capabilities and lower the federal costs of operating it remains problematic. This section firmly establishes the national goal of using the station to promote commercial development of space. It also requires NASA to report those steps that it is currently considering to meet these goals.

The Committee believes that human space flight activity must ultimately evolve from its present infancy in the cradle of national governments to a mature stage where entrepreneurs lead the way in developing and exploring outer space. Taking the long view, the Committee believes that the International Space Station is capable not only of serving national research needs, but also of sparking the creation of a new economic zone in Earth's orbit. As such, the International Space Station becomes a community in space, however small, which has inherently economic characteristics.

The Committee is aware that NASA would like to use the International Space Station to promote the economic development of space, a goal that the Committee enthusiastically embraces. However, it is not clear that NASA's past practices of simply providing companies access to the Shuttle to perform experiments, sufficiently promotes private sector development of new space capabilities. Sometimes such companies become dependent on the government for access to space; their commercial activities in space are not sufficiently lucrative based on these limited flight opportunities for the companies to privately finance the cost of getting into orbit. As a result, these companies are making commercial use of space, but their activity is not itself expanding the opportunities to use space for commercial activity. Consequently, the Committee encourages NASA to explore creative new ways of promoting economic development in Earth orbit around the Space Station. Just as the Department of Defense saves money by using private sector commercial contractors to perform some maintenance and upgrade activities, NASA may be able to develop means of operating and upgrading the International Space Station through the private sector. In this scenario, the private sector acts as a commercial service provider instead of merely a government contractor. Presumably, such companies would use this base stream of revenue to privately finance new capabilities to use space which can be sold commercially. Thus, the financial base of space activity grows beyond the funds provided by the federal government and lowers the cost of overhead. The market study required by this section is intended to

make clear the wide range of economic opportunities for U.S. commercial firms' interaction with the International Space Station community. It is vital to the future of expanding human civilization into space that the first steps be taken using free market principles, when and where appropriate. The market study required in this bill will form the basis for a national discussion on how and when market principles can govern the development of space.

Sec. 102. Commercial Space Launch Amendments.

When NASA first built the Space Shuttle, the United States government used it to launch commercial payloads into space. While such actions subsidized the growth of the satellite communications industry, they put the U.S. commercial launch industry almost completely out of business. When the Space Shuttle Challenger exploded in 1986, even the short-term benefits to the satellite communications industry evaporated and the long-term consequences proved harmful. Because the U.S. commercial space launch industry was weak and the Shuttle was grounded, the U.S. satellite industry suddenly faced near monopolistic conditions in the number of suppliers it could use to access space. This proved the disastrous consequences of government competition with the U.S. private sector, for both the U.S. government and the private sector.

Since that time, the U.S. commercial launch industry has staged a remarkable recovery and the Shuttle has been limited to government payloads that require a human presence. Nevertheless, the U.S. launch industry uses older technology and faces stiff competition from foreign governments using aggressive mercantilist practices to protect their launch industries. The U.S. response to this situation has several facets. First, the United States government is investing in new, pre-competitive space transportation technology in its Reusable Launch Vehicle (RLV) program. Second, it is updating the space transportation infrastructure in the United States and encouraging the commercial development and augmentation of U.S. space transportation facilities through the creation of commercial spaceports. Finally, it is attempting to provide a stable business environment for U.S. space transportation companies.

To fully implement these measures, the regulatory regime governing space transportation in the United States needs to be updated. This section of the bill updates the Department of Transportation's authority to write regulations that take new technologies into account, such as the reentry of space transportation vehicles, including the RLV. It also recognizes new business activities that are taking place in space in the area of microgravity processing and information services.

In the area of space transportation infrastructure, the Department of Transportation has been disappointing. Initially created to provide a "one-stop shop" for licensing launch operations while protecting public safety, the Department's Office of Commercial Space Transportation (OCST) has not issued regulations governing the licensing of commercial spaceports since beginning the effort nearly a decade ago. Instead, it has issued non-binding guidelines, which are subject to ad hoc changes and do not provide the stable business environment needed to promote the upgrading of the U.S. space transportation infrastructure at private expense. The absence

of regulations which bind both the private sector and the government led the Committee to consider transferring the authority to regulate commercial spaceports to the states, even though such a move might result in a patchwork of different regulations. However, it was decided that continued prodding might prove more productive in the long-run. This bill, as reported, does not transfer such authority to the states. That option, along with the possibility of disbanding OCST and transferring its authority elsewhere, will remain for future legislative consideration.

Sec. 103. Exceptions to Employment Restrictions

In order to reduce costs and streamline operations of the Space Shuttle, the Administration has decided that operations will be managed by the private sector under a single, consolidated prime contract with NASA. In general, Congress has accepted this decision by the Administration, even though the NASA Administrator decided to select the United Space Alliance as the Shuttle operator without a competitive process. In several hearings, NASA officials have testified that this consolidation is in the nation's interests and that safety will not be compromised during the process because NASA employees with critical skills would simply move over to the contractor.

In the course of examining this process, it was discovered that current civil service laws would prevent NASA civil servants from performing their functions as employees of the United Space Alliance. The Science Committee, therefore, drafted a limited exception that will allow members of NASA's civil service Shuttle workforce who did not play a significant role in awarding the single prime contract to seek employment with the United Space Alliance under the Space Flight Operations Contract.

Sec. 104. Launch Voucher Demonstration Program.

The section strikes the sunset date of the Launch Voucher Demonstration Program so that NASA can continue the program if it wishes to, but does not require continuation of the program.

Sec. 105. Promotion of United States Global Positioning System Standards

The Committee congratulates the Administration for its policies regarding use of the Global Positioning System. In general, members of Congress agree that it is in the U.S. interest to encourage continued commercial use of this system, and that it is in the interest of U.S. national security to promote the U.S. GPS system as the world's standard. Consequently, the Congress expresses its support for this policy and encourages the Administration to proceed with international negotiations designed to advance U.S. national interests and support foreign use of the GPS system. Finally, the Committee reasserts its support for ensuring the continuous operation of the GPS signal globally without direct user fees.

Sec. 106. Purchase of Space Science Data

In the future, the Committee believes that increased private sector activity in space will increase the number of opportunities to collect scientific data. Therefore, the Committee directs NASA to purchase such data from the private sector, when doing so is cost effective and consistent with U.S. scientific goals. It is not the Com-

mittee's belief that NASA would implement this decision by providing funds for the development of commercial systems to collect space science data. Instead, it is the Committee's intention that NASA would pay a data provider for data, only upon its satisfactory delivery. The Committee further believes that such a program will expand the number of opportunities for conducting space science and lower the cost of improving our knowledge about this planet and the solar system.

Title II Remote Sensing

Sec. 201. Land Remote Sensing Policy Act of 1992 Amendments

Congress worked on a bipartisan basis to pass the Land Remote Sensing Policy Act of 1992, which President Bush signed. That law enabled the private sector to design, build, own and operate satellites that image the Earth from outer space. Such systems have multiple uses, including land-use planning, construction site management, precision agriculture, pollution detection and environmental cleanup. Several foreign governments are entering this commercial market and could eliminate the technical lead and competitive advantages that U.S. companies have in this multi-billion dollar industry. Given this development and four years experience with the 1992 Act, there is a need to update the law and preserve the competitive advantage that U.S. companies have in this industry. To its credit, the Department of Commerce has improved the licensing process considerably since its first experiences. Both the National Oceanic and Atmospheric Administration and Office of Space Commerce have worked assiduously to draft new regulations and remove obstacles to the industry's accelerated growth. Nevertheless, the need to update existing law remains.

The bill establishes a presumption that a license application which satisfies the requirements of law shall be granted. While this would seem self-evident, it is the Committee's intention to signal its strong support of this area of economic growth. Furthermore, the presumption to grant a license should make it clear that the burden of proof rests with the government. In other words, it is not the license applicant's duty to prove that it should receive a license if it meets all the requirements of current law and regulations.

There is a specific timeline in which the Secretary of Commerce, under current law, has to consider an application for a license to operate a commercial remote sensing satellite. Unfortunately, in the case of most licenses that have been issued under the law, the Commerce Department has exceeded the timeframe in which it is supposed to rule on a license application. Part of the problem has occurred at the beginning of the process, while the Commerce Department and the license applicant negotiate the information that must be included in an application in order to consider it complete. The bill requires the Secretary of Commerce to determine what information is necessary for an application to be considered complete and to make its determination public, so that there is a common frame of reference for all applicants. The bill contains similar measures relating to the Federal Communications Commission (FCC). It also requires that FCC fees for satellite downlinks used on commercial remote sensing satellites be commensurate with the cost of administering them.

Another reason the timeframe for granting or denying an application has been exceeded is the lengthy interagency process for reviewing license applications. Both the Secretary of Defense and the Secretary of State review license applications to ensure that they are consistent with U.S. national security and international obligations, respectively. Both Departments have taken too long to make such determinations. The bill requires that they inform the Secretary of Commerce of any concerns within 60 days of the request from the Secretary of Commerce. Furthermore, if no objections are raised by the Secretaries of Defense and State within this 60 day period, the Secretary of Commerce is to treat the application as consistent with U.S. national security and international obligations. Furthermore, the Committee expects that concerns raised by the Secretaries of Defense or State about a license application or the continued operation of a satellite under an existing license during times when national security or international obligations are involved will be of a sufficient nature to pass a high standard, such as the "clear and present danger" standard that governs prior restraint of the media. The Committee believes that long-term national security interests are best served if U.S. companies dominate the commercial remote sensing industry.

Additionally, under current law, U.S. commercial remote sensing companies are obligated to report business transactions with foreign entities to the United States government. The intention of the original provision was to protect U.S. national security interests by ensuring that a licensee was not controlled by a foreign entity to provide information on which customers are obtaining which images. However, in practice, licensed U.S. commercial remote sensing satellite firms have been required to report financing and investment transactions that do not directly affect corporate control or imaging activities. Additionally, such notification has triggered an interagency review of the original license application and the allowable imaging activities. The Committee believes that this practice exceeds the authority given to the Executive Branch in the original Act and that it should not be continued. Consequently, the bill requires licensees to notify the government only of "significant or substantial" agreements relating to land remote sensing with foreign entities. The bill preserves the ability of the U.S. government to review images taken by a U.S. company and to verify that U.S. licensed companies remain under the control of U.S. persons. It does not require licensees to report every agreement with a foreign entity to the United States government. Therefore, it strikes an appropriate balance between the need to provide a stable business environment with the need to provide effective protection of U.S. national security interests.

Current law also enables the Secretary of Commerce to unilaterally alter a license that has been granted and to impose administrative fees and penalties for noncompliance with the terms of the license. While the Committee believes that the Secretary should have sufficient authority to protect U.S. national interests, it also believes that such authority should only be exercised with consideration to due process. Consequently, while preserving such authority, the bill requires that the Secretary notify licensees and Congress of any reasons it elects to alter a license. Furthermore, the

Secretary's ability to act as prosecutor, judge, and jury in the case of imposing administrative penalties has been altered to provide U.S. companies with due process. Under the bill, the Secretary must seek penalties from a U.S. District Court for noncompliance.

Finally, current law encourages the U.S. government to provide appropriate imagery to countries receiving foreign aid as a component of the foreign aid program. Commercial remote sensing imagery can be very conducive to foreign aid and such imagery can help the developing world more efficiently manage its resources and economic growth. But, the Committee does not believe that the U.S. government should be in competition with the commercial remote sensing business. Therefore, the bill alters this section of the 1992 Act and encourages U.S. departments and agencies that manage foreign aid programs to provide vouchers for developing nations to obtain remote sensing imagery and interpretative training from U.S. commercial providers.

Sec. 202. Acquisition of Earth Remote Sensing Data

The private sector has a very advanced capability to study the Earth. The Geographic Information Systems (GIS) industry is a multi-billion dollar industry that is rapidly developing new capabilities for collecting, processing, analyzing, managing, and storing information about the Earth's surface. Many companies are in the process of building satellites to image the Earth, as the Land Remote Sensing Policy Act of 1992 permitted them to do. The Committee believes that this industry may have the same impact on the commercial space frontier as the communications industry and that it will create new opportunities to image the Earth from space. This section directs NASA to study the capabilities of these commercial remote sensing companies and to explore the mechanisms by which those private capabilities might be used to collect scientifically useful global climate data; and then to purchase such data if it is available and cost effective. The Committee notes that the White House Office of Management and Budget initially directed NASA to start a program of purchasing scientific data from the private sector in the fiscal year 1997 budget request. The Committee had attempted to start such a program in fiscal year 1996 and welcomes the White House decision.

In the past, NASA has sponsored data purchase programs in which NASA provided advance payments to a company to build, launch, own and operate a satellite essentially designed to meet NASA's needs. The Committee does not believe that NASA should provide advance payments to data providers for the construction of hardware. Instead, NASA should only pay data providers for data upon its satisfactory delivery.

Title III Federal Acquisition of Space Transportation Services

Sec. 301. Requirement to Procure Commercial Space Transportation Services

This section requires the federal government to procure space transportation services from the private sector, instead of purchasing them. The section provides exceptions if: (1) a payload requires the unique capabilities of the Space Shuttle; (2) the private sector does not offer space transportation services that meet a mission's unique requirements; (3) use of the private sector's capability would pose an unacceptable risk of loss of a scientific opportunity; (4) use of the private sector's capability is inconsistent with national security objectives; or (5) it is more cost effective to transport a payload in conjunction with a test or demonstration of a vehicle

owned by the government.

This provision is intended to promote the operation of a market in space transportation services that will enable U.S. commercial space transportation companies to focus their business on enhancing the competitive position in relation to foreign competition in providing such services, rather than on increasing the award fee in contracts with the federal government. To its credit, NASA already attempts to purchase space transportation services commercially. The Department of Defense, however, continues to purchase the space transportation vehicles themselves. DoD is concerned that the classified nature of many Defense Department payloads would be at risk if the Department procured commercial space transportation services from the private sector. The private sector actually builds the classified payloads that Department of Defense launches. If the Defense Department can accept that the private sector can build its classified payloads, then it should be able to accept the private sector launching them. In any event, the section does address Defense Department concerns by making an exception to the requirement to purchase commercial space transportation services in cases where that is inconsistent with U.S. national security.

Sec. 302. Acquisition of Space Transportation Services

Consistent with ongoing efforts to reform the federal procurement system and reduce the costs of government activity, this section requires the government to act in the manner of a commercial customer when it procures space transportation services.

Sec. 303. Launch Services Purchase Act of 1990 Amendments

This section updates the Launch Services Purchase Act to conform to other sections of the bill. It also preserves the prohibition against the Space Shuttle launching commercial payloads.

Sec. 304. Use of Excess Intercontinental Ballistic Missiles

In 1994, the White House released the National Space Transportation Policy which made it possible for the federal government to convert retired ICBMs into space transportation vehicles for use by government agencies, if doing so saved money. It is the Committee's understanding that the policy sought to strike a balance between efficient use of government assets and the potential to undermine the health of the U.S. commercial space transportation industry. Wholesale conversions of ICBMs into space transportation vehicles risks placing the government in the position of competing with the private sector and could have long-term consequences similar to the pre-Challenger decision to use the Space Shuttle to launch commercial payloads. At the same time, the taxpayers have a right to expect that the government will take all steps possible to reduce the cost of government activity.

This section of the bill codifies much of the National Space Transportation Policy, with an eye towards bringing cost savings to the taxpayer without undermining the commercial space transportation industry. There are added reporting requirements so that agencies converting ICBMs into space transportation vehicles give careful consideration to the impact of conversion on the health of

the U.S. space transportation industry.

The Defense Department may only convert ICBMs into space transportation vehicles for use by a government agency if it notifies Congress 120 days before conversion. Further, the Defense Department must certify that the use of the converted missile will result in significant cost savings and meets the mission requirements of the agency. And, the Secretary of Defense must approve of the conversion. As part of this process, the Department of Defense is reguired to seek comment from the private sector to determine if any commercial providers could provide the service at a lower cost. The savings are demonstrated by comparing the cost of converting an ICBM to launch a payload with the price offered by the private sector for launching that payload. The government must demonstrate that its cost is significantly lower than the price it would pay commercially in order to convert and use an ICBM as a space transportation vehicle.

VIII. COMMITTEE COST ESTIMATES

The bill does not affect federal revenues or outlays. It should save the government money in the long-run if the private sector increases its investments in the nation's space technology base.

IX. CONGRESSIONAL BUDGET OFFICE COST ESTIMATES

The CBO cost estimate was not available at time of printing.

X. Effects of Legislation on Inflation

In accordance with rule XI, clause 2(1)(4) of the Rules of the House of Representatives, this legislation is assumed to have no inflationary effect on prices and costs in the operation of the national economy.

XI. Oversight Findings and Recommendations

Clause 2(1)(3)(A) of rule XI requires each committee report to contain oversight findings and recommendations required pursuant to clause 2(b)(1) of rule X. The Committee has no oversight findings.

XII. Oversight Findings and Recommendations by the COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT

Clause 2(1)(3)(D) of rule XI requires each committee report to contain a summary of the oversight findings and recommendations made by the House Government Reform and Oversight Committee pursuant to clause 4(c)(2) of rule X, whenever such findings have been timely submitted. The Committee on Science has received no such findings or recommendations from the Committee on Government Reform and Oversight.

XIII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no change is proposed is shown in roman):

CHAPTER 701 OF TITLE 49, UNITED STATES CODE

* * * * * * * *

CHAPTER 701—COMMERCIAL SPACE LAUNCH ACTIVITIES

Sec. 70101. Findings and purposes. Definitions. 70102. General authority. 70103. [70104. Restrictions on launches and operations.] 70104. Restrictions on launches, operations, and reentries. [70108. Prohibition, suspension, and end of launches and operation of launch sites. [70109. Preemption of scheduled launches.] 70108. Prohibition, suspension, and end of launches, operation of launch sites and reentry sites, and reentries. 70109. Preemption of scheduled launches or reentries. 70120. Regulations. 70121. Report to Congress. § 70101. Findings and purposes (a) FINDINGS.—Congress finds that—

(1) * * *

(3) new and innovative equipment and services are being sought, produced, and offered by entrepreneurs in telecommunications, information services, *microgravity research*, and remote sensing technologies;

(4) the private sector in the United States has the capability of developing and providing private satellite launching, *reentry*, and associated services that would complement the launching, *reentry*, and associated services now available from the United States Government;

(5) the development of commercial launch vehicles, reentry vehicles, and associated services would enable the United States to retain its competitive position internationally, contributing to the national interest and economic well-being of the United States;

(6) providing launch services and reentry services by the private sector is consistent with the national security and foreign policy interests of the United States and would be facilitated by stable, minimal, and appropriate regulatory guidelines that are fairly and expeditiously applied;

- (7) the United States should encourage private sector launches, reentries, and associated services and, only to the extent necessary, regulate those launches, reentries, and services to ensure compliance with international obligations of the United States and to protect the public health and safety, safety of property, and national security and foreign policy interests of the United States;
- (8) space transportation, including the establishment and operation of launch sites, reentry sites, and complementary facilities, the providing of launch services and reentry services, the establishment of support facilities, and the providing of support services, is an important element of the transportation system of the United States, and in connection with the commerce of the United States there is a need to develop a strong space transportation infrastructure with significant private sector involvement; and
- (9) the participation of State governments in encouraging and facilitating private sector involvement in space-related activity, particularly through the establishment of a space transportation-related infrastructure, including launch sites, reentry sites, complementary facilities, and launch site and reentry site support facilities, is in the national interest and is of significant public benefit.

(b) PURPOSES.—The purposes of this chapter are—

(1) to promote economic growth and entrepreneurial activity through use of the space environment for peaceful purposes;

(2) to encourage the United States private sector to provide launch vehicles, reentry vehicles, and associated services by-

(A) simplifying and expediting the issuance and transfer of commercial [launch] licenses; and

(B) facilitating and encouraging the use of Govern-

ment-developed space technology;

(3) to provide that the Secretary of Transportation is to oversee and coordinate the conduct of commercial launch and reentry operations, issue and transfer commercial [launch] licenses authorizing those operations, and protect the public health and safety, safety of property, and national security and foreign policy interests of the United States; and

(4) to facilitate the strengthening and expansion of the United States space transportation infrastructure, including the enhancement of United States launch sites and launch-site support facilities, and development of reentry sites, with Government, State, and private sector involvement, to support the full range of United States space-related activities.

§ 70102. Definitions

In this chapter— (1) * *

(3) "launch" means to place or try to place a launch vehicle [and any payload] or reentry vehicle and any payload from Earth-

(A) in a suborbital trajectory;

- (B) in Earth orbit in outer space; or
- (C) otherwise in outer space.
- (4) "launch property" means an item built for, or used in, the launch preparation or launch of a launch vehicle.

(5) "launch services" means-

- (A) activities directly related to the preparation of a launch site or payload facility for one or more launches;
- [(A)] (B) activities involved in the preparation of a launch vehicle and payload for launch; and

[(B)] (*C*) the conduct of a launch.

(8) "payload" means an object that a person undertakes to place in outer space by means of a launch vehicle or reentry vehicle, including components of the vehicle specifically designed or adapted for that object.

(9) "person" means an individual and an entity organized

or existing under the laws of a State or country.

(10) "reenter" and "reentry" mean to return or attempt to return, purposefully, a reentry vehicle and its payload, if any, from Earth orbit or from outer space to Earth.

(11) "reentry services" means—

(A) activities involved in the preparation of a reentry vehicle and its payload, if any, for reentry; and

(B) the conduct of a reentry.

(12) "reentry site" means the location on Earth to which a reentry vehicle is intended to return (as defined in a license the Secretary issues or transfers under this chapter).

(13) "reentry vehicle" means a vehicle designed to return from Earth orbit or outer space to Earth, or a reusable launch vehicle designed to return from outer space to Earth, substan-

[(10)] (14) "State" means a State of the United States, the District of Columbia, and a territory or possession of the United States.

[(11)] (15) "third party" means a person except—

- (A) the United States Government or the Government's contractors or subcontractors involved in launch services or reentry services;
 - (B) a licensee or transferee under this chapter;
- (C) a licensee's or transferee's contractors, subcontractors, or customers involved in launch services or reentry services; or
- (D) the customer's contractors or subcontractors involved in launch services or reentry services.
- [(12)] (16) "United States" means the States of the United States, the District of Columbia, and the territories and possessions of the United States.

§ 70103. General authority

(a) General.—[The Secretary] Except as provided in section 70122, the Secretary of Transportation shall carry out this chapter. (b) Facilitating Commercial Launches and Reentries and State Sponsored Spaceports.—In carrying out this chapter, the Secretary shall—

(1) encourage, facilitate, and promote commercial space launches [by the private sector] and reentries by the private

sector and State sponsored spaceports; and

(2) take actions to facilitate private sector involvement in commercial space transportation activity, and to promote public-private partnerships involving the United States Government, State governments, and the private sector to build, expand, modernize, or operate a space launch and reentry infrastructure.

(c) EXECUTIVE AGENCY ASSISTANCE.—When necessary, the head of an executive agency shall assist the Secretary in carrying out this chapter.

[§ 70104. Restrictions on launches and operations]

§ 70104. Restrictions on launches, operations, and reentries

(a) LICENSE REQUIREMENT.—A license issued or transferred under this chapter is required for the following:

(1) for a person to launch a launch vehicle or to operate a launch site or reentry site, or to reenter a reentry vehicle, in

the United States.

(2) for a citizen of the United States (as defined in section 70102(1)(A) or (B) of this title) to launch a launch vehicle or to operate a launch site or reentry site, or to reenter a reentry vehicle, outside the United States.

(3) for a citizen of the United States (as defined in section 70102(1)(C) of this title) to launch a launch vehicle or to operate a launch site or reentry site, or to reenter a reentry vehicle, outside the United States and outside the territory of a foreign country unless there is an agreement between the United States Government and the government of the foreign country providing that the government of the foreign country has jurisdiction over the launch or operation or reentry.

diction over the launch or operation or reentry.

(4) for a citizen of the United States (as defined in section 70102(1)(C) of this title) to launch a launch vehicle or to operate a launch site or reentry site, or to reenter a reentry vehicle, in the territory of a foreign country if there is an agreement between the United States Government and the government of the foreign country providing that the United States Government has jurisdiction over the launch or operation or reentry.

(b) COMPLIANCE WITH PAYLOAD REQUIREMENTS.—The holder of a [launch license] license under this chapter may launch or reenter a payload only if the payload complies with all requirements of the laws of the United States related to launching or reentering a payload

(c) [PREVENTING LAUNCHES.—] PREVENTING LAUNCHES AND REENTRIES.—The Secretary of Transportation shall establish whether all required licenses, authorizations, and permits required for a payload have been obtained. If no license, authorization, or permit is required, the Secretary may prevent the launch or reentry if the Secretary decides the launch or reentry would jeopardize the

public health and safety, safety of property, or national security or foreign policy interest of the United States.

§ 70105. License applications and requirements

(a) APPLICATIONS.—(1) A person may apply to the Secretary of Transportation for a license or transfer of a license under this chapter in the form and way the Secretary prescribes. Consistent with the public health and safety, safety of property, and national security and foreign policy interests of the United States, the Secretary, not later than 180 days after [receiving an application] accepting an application in accordance with criteria established pursuant to subsection (b)(2)(D), shall issue or transfer a license if the Secretary decides in writing that the applicant complies, and will continue to comply, with this chapter and regulations prescribed under this chapter. The Secretary shall inform the applicant of any pending issue and action required to resolve the issue if the Secretary has not made a decision not later than 120 days after [receiving an application accepting an application in accordance with criteria established pursuant to subsection (b)(2)(D). The Secretary shall submit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a written notice not later than 7 days after any occurrence when a license is not issued within the deadline established by this subsection.

(2) In carrying out paragraph (1), the Secretary may establish procedures for certification of the safety of launch vehicles, reentry vehicles, safety systems, procedures, services, or personnel that may be used in conducting licensed commercial space launch or reentry

activities.

(b) REQUIREMENTS.—(1) Except as provided in this subsection, all requirements of the laws of the United States applicable to the launch of a launch vehicle or the operation of a launch site or a reentry site, or the reentry of a reentry vehicle, are requirements for a license under this chapter.

(2) The Secretary may prescribe—

(A) any term necessary to ensure compliance with this chapter, including on-site verification that a launch [or operation], operation, or reentry complies with representations stated in the application;

(B) an additional requirement necessary to protect the public health and safety, safety of property, national security interests, and foreign policy interests of the United States;

[and]

(C) by regulation that a requirement of a law of the United States not be a requirement for a license if the Secretary, after consulting with the head of the appropriate executive agency, decides that the requirement is not necessary to protect the public health and safety, safety of property, and national security and foreign policy interests of the United States[.]; and

(D) regulations establishing criteria for accepting or rejecting an application for a license under this chapter within 60

days after receipt of such application.

(3) The Secretary may waive a requirement, including the requirement to obtain a license, for an individual applicant if the Sec-

retary decides that the waiver is in the public interest and will not jeopardize the public health and safety, safety of property, and national security and foreign policy interests of the United States.

(c) PROCEDURES AND TIMETABLES.—The Secretary shall establish procedures and timetables that expedite review of a license application and reduce the regulatory burden for an applicant.

§ 70106. Monitoring activities

(a) GENERAL REQUIREMENTS.—A licensee under this chapter must allow the Secretary of Transportation to place an officer or employee of the United States Government or another individual as an observer at a launch site or reentry site the licensee uses, at a production facility or assembly site a contractor of the licensee uses to produce or assemble a launch vehicle or reentry vehicle, or at a site at which a payload is integrated with a launch vehicle or reentry vehicle. The observer will monitor the activity of the licensee or contractor at the time and to the extent the Secretary considers reasonable to ensure compliance with the license or to carry out the duties of the Secretary under section 70104(c) of this title. A licensee must cooperate with an observer carrying out this subsection.

: * * * * * *

[§ 70108. Prohibition, suspension, and end of launches and operation of launch sites]

§ 70108. Prohibition, suspension, and end of launches, operation of launch sites and reentry sites, and reentries

(a) GENERAL AUTHORITY.—The Secretary of Transportation may prohibit, suspend, or end immediately the launch of a launch vehicle or the operation of a launch site or reentry site, or reentry of a reentry vehicle, licensed under this chapter if the Secretary decides the launch or operation or reentry is detrimental to the public health and safety, the safety of property, or a national security or foreign policy interest of the United States.

(b) Effective Periods of Orders.—An order under this section takes effect immediately and remains in effect during a review

under section 70110 of this title.

[§ 70109. Preemption of scheduled launches]

§ 70109. Preemption of scheduled launches or reentries

(a) GENERAL.—With the cooperation of the Secretary of Defense and the Administrator of the National Aeronautics and Space Administration, the Secretary of Transportation shall act to ensure that a launch or reentry of a payload is not preempted from access to a United States Government launch site, reentry site, or launch property, except for imperative national need, when a launch date commitment or reentry date commitment from the Government has been obtained for a launch or reentry licensed under this chapter. A licensee or transferee preempted from access to a launch site, reentry site, or launch property does not have to pay the Government any amount for launch services, or services related to a reentry, at-

tributable only to the scheduled launch or reentry prevented by the preemption.

* * * * * * *

(c) REPORTS.—In cooperation with the Secretary of Transportation, the Secretary of Defense or the Administrator, as appropriate, shall submit to Congress not later than 7 days after a decision to preempt under subsection (a) of this section, a report that includes an explanation of the circumstances justifying the decision and a schedule for ensuring the prompt launching *or reentry* of a preempted payload.

§ 70110. Administrative hearings and judicial review

(a) ADMINISTRATIVE HEARINGS.—The Secretary of Transportation shall provide an opportunity for a hearing on the record to—

- (1) an applicant under this chapter, for a decision of the Secretary under section 70105(a) of this title to issue or transfer a license with terms or deny the issuance or transfer of a license:
- (2) an owner or operator of a payload under this chapter, for a decision of the Secretary under section 70104(c) of this title to prevent the launch *or reentry* of the payload; and

(3) a licensee under this chapter, for a decision of the Sec-

retary under—

(A) section 70107 (b) or (c) of this title to modify, sus-

pend, or revoke a license; or

- (B) section 70108(a) of this title to prohibit, suspend, or end a launch or operation of a launch site or reentry site, or reentry of a reentry vehicle, licensed by the Secretary.
- (b) JUDICIAL REVIEW.—A final action of the Secretary under this chapter is subject to judicial review as provided in chapter 7 of title 5.

§ 70111. Acquiring United States Government property and services

- (a) GENERAL REQUIREMENTS AND CONSIDERATIONS.—(1) The Secretary of Transportation shall facilitate and encourage the acquisition by the private sector and State governments of—
 - (A) launch or reentry property of the United States Government that is excess or otherwise is not needed for public use; and
 - (B) launch services and reentry services, including utilities, of the Government otherwise not needed for public use.

The Secretary shall establish criteria and procedures for determining the priority of competing requests from the private sector and State governments for property and services under this section.

- (2) In acting under paragraph (1) of this subsection, the Secretary shall consider the commercial availability on reasonable terms of substantially equivalent launch property or launch services or reentry services from a domestic source.
- (b) Price.—(1) In this subsection, "direct costs" means the [actual costs] additive costs only that—

(A) can be associated unambiguously with a commercial launch *or reentry* effort; and

(B) the Government would not incur if there were no com-

mercial launch or reentry effort.

(2) In consultation with the Secretary, the head of the executive agency providing the property or service under subsection (a) of this section shall establish the price for the property or service. The price for—

(A) acquiring launch property by sale or transaction in-

stead of sale is the fair market value;

- (B) acquiring launch property (except by sale or transaction instead of sale) is an amount equal to the direct costs, including specific wear and tear and property damage, the Government incurred because of acquisition of the property; and
- (C) launch services *or reentry services* is an amount equal to the direct costs, including the basic pay of Government civilian and contractor personnel, the Government incurred because of acquisition of the services.

(3) The Secretary shall ensure the establishment of uniform guidelines for, and consistent implementation of, this section by all

Federal agencies.

* * * * * * *

(d) COLLECTION BY OTHER GOVERNMENTAL HEADS.—The head of a department, agency, or instrumentality of the Government may collect a payment for an activity involved in producing a launch vehicle [or its payload for launch] or reentry vehicle, or the payload of either, for launch or reentry if the activity was agreed to by the owner or manufacturer of the launch vehicle, or reentry vehicle, or payload.

§ 70112. Liability insurance and financial responsibility requirements

(a) GENERAL REQUIREMENTS.—(1) When a launch, reentry, or site operator license is issued or transferred under this chapter, the licensee or transferee shall obtain liability insurance or demonstrate financial responsibility in amounts to compensate for the maximum probable loss from claims by—

(A) a third party for death, bodily injury, or property damage or loss resulting from an activity carried out under the li-

cense; and

(B) the United States Government against a person for damage or loss to Government property resulting from an activity carried out under the license.

* * * * * * *

(3) For the total claims related to one launch *or reentry*, a licensee or transferee is not required to obtain insurance or demonstrate financial responsibility of more than—

(A)(i) \$500,000,000 under paragraph (1)(A) of this sub-

section; or

(ii) \$100,000,000 under paragraph (1)(B) of this subsection; or

(B) the maximum liability insurance available on the world market at reasonable cost if the amount is less than the

applicable amount in clause (A) of this paragraph.

(4) An insurance policy or demonstration of financial responsibility under this subsection shall protect the following, to the extent of their potential liability for involvement in launch services or reentry services, at no cost to the Government:

(A) the Government.

- (B) executive agencies and personnel, contractors, and subcontractors of the Government.
- (C) contractors, subcontractors, and customers of the licensee or transferee.

(D) contractors and subcontractors of the customer.

(b) Reciprocal Waiver of Claims.—(1) A launch, reentry, or site operator license issued or transferred under this chapter shall contain a provision requiring the licensee or transferee to make a reciprocal waiver of claims with its contractors, subcontractors, and customers, and contractors and subcontractors of the customers, involved in launch services or reentry services under which each party to the waiver agrees to be responsible for property damage or loss it sustains, or for personal injury to, death of, or property damage or loss sustained by its own employees resulting from an

activity carried out under the applicable license.

(2) The Secretary of Transportation shall make, for the Government, executive agencies of the Government involved in launch services or reentry services, and contractors and subcontractors involved in launch services or reentry services, a reciprocal waiver of claims with the licensee or transferee, contractors, subcontractors, and customers of the licensee or transferee, and contractors and subcontractors of the customers, involved in launch services or reentry services under which each party to the waiver agrees to be responsible for property damage or loss it sustains, or for personal injury to, death of, or property damage or loss sustained by its own employees resulting from an activity carried out under the applicable license. The waiver applies only to the extent that claims are more than the amount of insurance or demonstration of financial responsibility required under subsection (a)(1)(B) of this section. After consulting with the Administrator and the Secretary of the Air Force, the Secretary of Transportation may waive, for the Government and a department, agency, and instrumentality of the Government, the right to recover damages for damage or loss to Government property to the extent insurance is not available because of a policy exclusion the Secretary of Transportation decides is usual for the type of insurance involved.

* * * * * * *

(d) ANNUAL REPORT.—(1) Not later than November 15 of each year, the Secretary of Transportation shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science[, Space, and Technology] of the House of Representatives a report on current determinations made under subsection (c) of this section related to all issued licenses and the reasons for the determinations.

* * * * * * *

(e) Launches or Reentries Involving Government Facilities and Personnel.—The Secretary of Transportation shall establish requirements consistent with this chapter for proof of financial responsibility and other assurances necessary to protect the Government and its executive agencies and personnel from liability, death, bodily injury, or property damage or loss as a result of a launch or operation of a launch site or reentry site or a reentry involving a facility or personnel of the Government. The Secretary may not relieve the Government of liability under this subsection for death, bodily injury, or property damage or loss resulting from the willful misconduct of the Government or its agents.

(f) Collection and Crediting Payments.—The head of a department, agency, or instrumentality of the Government shall collect a payment owed for damage or loss to Government property under its jurisdiction or control resulting from an activity carried out under a *launch*, *reentry*, or site operator license issued or transferred under this chapter. The payment shall be credited to the current applicable appropriation, fund, or account of the depart-

ment, agency, or instrumentality.

§ 70113. Paying claims exceeding liability insurance and financial responsibility requirements

- (a) GENERAL REQUIREMENTS.—(1) To the extent provided in advance in an appropriation law or to the extent additional legislative authority is enacted providing for paying claims in a compensation plan submitted under subsection (d) of this section, the Secretary of Transportation shall provide for the payment by the United States Government of a successful claim (including reasonable litigation or settlement expenses) of a third party against a licensee or transferee under this chapter, a contractor, subcontractor, or customer of the licensee or transferee, or a contractor or subcontractor of a customer, resulting from an activity carried out under the license issued or transferred under this chapter for death, bodily injury, or property damage or loss resulting from an activity carried out under the license. However, claims may be paid under this section only to the extent the total amount of successful claims related to one launch or reentry—
 - (A) is more than the amount of insurance or demonstration of financial responsibility required under section 70112(a)(1)(A) of this title; and
 - (B) is not more than \$1,500,000,000 (plus additional amounts necessary to reflect inflation occurring after January 1, 1989) above that insurance or financial responsibility amount.

* * * * * * *

(d) Surveys, Reports, and Compensation Plans.—(1) If as a result of an activity carried out under a license issued or transferred under this chapter the total of claims related to one launch or reentry is likely to be more than the amount of required insurance or demonstration of financial responsibility, the Secretary shall—

(A) survey the causes and extent of damage; and

(B) submit expeditiously to Congress a report on the re-

sults of the survey.

(2) Not later than 90 days after a court determination indicates that the liability for the total of claims related to one launch *or reentry* may be more than the required amount of insurance or demonstration of financial responsibility, the President, on the recommendation of the Secretary, shall submit to Congress a compensation plan that—

(A) outlines the total dollar value of the claims;

(B) recommends sources of amounts to pay for the claims;

(C) includes legislative language required to carry out the plan if additional legislative authority is required; and

(D) for a single event or incident, may not be for more than \$1,500,000,000.

* * * * * * *

§ 70115. Enforcement and penalty

(a) * * *

(b) GENERAL AUTHORITY.—(1) In carrying out this chapter, the Secretary of Transportation may—

(A) conduct investigations and inquiries;

(B) administer oaths;

(C) take affidavits; and

(D) under lawful process—

(i) enter at a reasonable time a launch site, reentry site, production facility, assembly site of a launch vehicle or reentry vehicle, or site at which a payload is integrated with a launch vehicle or reentry vehicle to inspect an object to which this chapter applies or a record or report the Secretary requires be made or kept under this chapter; and

(ii) seize the object, record, or report when there is probable cause to believe the object, record, or report was used, is being used, or likely will be used in violation of this chapter.

* * * * * * *

§ 70117. Relationship to other executive agencies, laws, and international obligations

(a) EXECUTIVE AGENCIES.—Except as provided in this chapter, a person is not required to obtain from an executive agency a license, approval, waiver, or exemption to launch a launch vehicle or operate a launch site or reentry site, or to reenter a reentry vehicle.

* * * * * * *

(d) Consultation.—The Secretary of Transportation is encouraged to consult with a State to simplify and expedite the approval of a space launch *or reentry* activity.

* * * * * * *

[(f) LAUNCH NOT AN EXPORT.—A launch vehicle or payload that is launched is not, because of the launch, an export for purposes of a law controlling exports.]

(f) LAUNCH NOT AN EXPORT; REENTRY NOT AN IMPORT.—A launch vehicle, reentry vehicle, or payload that is launched or reen-

tered is not, because of the launch or reentry, an export or import, respectively, for purposes of a law controlling exports or imports.

(g) NONAPPLICATION.—This chapter does not apply to—

(1) a launch, [operation of a launch vehicle or launch site,] reentry, operation of a launch vehicle or reentry vehicle, operation of a launch site or reentry site, or other space activity the Government carries out for the Government; or

(2) planning or policies related to the launch, reentry, oper-

ation, or activity.

§ 70120. Regulations

The Secretary of Transportation, within 6 months after the date of the enactment of this section, shall issue regulations to carry out this chapter that include-

(1) guidelines for industry to obtain sufficient insurance

coverage for potential damages to third parties;

(2) procedures for requesting and obtaining licenses to oper-

ate a commercial launch vehicle or reentry vehicle;

(3) procedures for requesting and obtaining operator licenses for launch or reentry;

(4) procedures for requesting and obtaining launch site or

reentry site operator licenses; and

(5) procedures for the application of government indemnification.

§ 70121. Report to Congress

The Secretary of Transportation shall submit to Congress an annual report to accompany the President's budget request that-

(1) describes all activities undertaken under this chapter, including a description of the process for the application for and approval of licenses under this chapter and recommendations for legislation that may further commercial launches and reentries; and

(2) reviews the performance of the regulatory activities and the effectiveness of the Office of Commercial Space Transportation.

SECTION 504 OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZATION ACT, FIS-**CAL YEAR 1993**

SEC. 504. LAUNCH VOUCHER DEMONSTRATION PROGRAM.

(a) Commercial Space Voucher Demonstration Program; Effective Period.—The Administrator shall establish a demonstration program to award vouchers for the payment of commercial launch services and payload integration services for the purpose of launching payloads funded by [the Office of Commercial Programs within] the National Aeronautics and Space Administration to become effective October 1, 1993. [Such program shall not be effective after September 30, 1995.

(c) Assumption of Certain Responsibilities.—In carrying out the demonstration program established under subsection (a), the Administrator, in awarding vouchers, is limited to the launch of payloads funded by the Office of Commercial Programs within

the National Aeronautics and Space Administration.]

[(d)] (c) Assistance.—The Administrator may provide voucher award recipients with such assistance, including contract formulation and technical support during the proposal evaluation, as may be necessary, to ensure the purchase of cost effective and reasonably reliable commercial launch services and payload integration services

[(e)] (d) Report.—The Administrator shall conduct an ongoing review of the program established under this section, and shall, not later than January 31, 1995, report to Congress the results of such a review, together with recommendations for further action relating to the program.

LAND REMOTE SENSING POLICY ACT OF 1992

SEC. 2. FINDINGS.

The Congress finds and declares the following: (1)

(5) Given the importance of the Landsat program to the United States, urgent actions, including expedited procurement procedures, are required to ensure data continuity.

[(6) Full commercialization of the Landsat program cannot be achieved within the foreseeable future, and thus should not serve as the near-term goal of national policy on land remote sensing; however, commercialization of land remote sensing should remain a long-term goal of United States policy.]

(5) Commercialization of land remote sensing is a nearterm goal, and should remain a long-term goal, of United

States policy.

[(7)] (6) Despite the success and importance of the Landsat system, funding and organizational uncertainties over the past several years have placed its future in doubt and have jeopardized United States leadership in land remote sensing.

[(8)] (7) Recognizing the importance of the Landsat program in helping to meet national and commercial objectives, the President approved, on February 11, 1992, a National Space Policy Directive which was developed by the National Space Council and commits the United States to ensuring the continuity of Landsat coverage into the 21st century.

[(9)] (8) Because Landsat data are particularly important for national security purposes and global environmental change research, management responsibilities for the program should be transferred from the Department of Commerce to an integrated program management involving the Department of Defense and the National Aeronautics and Space Administration.

[(10)] (9) Regardless of management responsibilities for the Landsat program, the Nation's broad civilian, national security, commercial, and foreign policy interests in remote sensing will best be served by ensuring that Landsat remains an unclassified program that operates according to the principles

of open skies and nondiscriminatory access.

[(11)] (10) Technological advances aimed at reducing the size and weight of satellite systems hold the potential for dramatic reductions in the cost, and substantial improvements in the capabilities, of future land remote sensing systems, but such technological advances have not been demonstrated for land remote sensing and therefore cannot be relied upon as the sole means of achieving data continuity for the Landsat program.

[(12)] (11) A technology demonstration program involving advanced remote sensing technologies could serve a vital role in [determining the design of a follow-on spacecraft to Landsat 7, while also helping to determine whether such a spacecraft should be funded by the United States Government, by the private sector, or by an international consortium] ensuring the

continuity of Landsat quality data.

[(13)] (12) To maximize the value of the Landsat program to the American public, unenhanced Landsat 4 through 6 data should be made available, at a minimum, to United States Government agencies, to global environmental change researchers, and to other researchers who are financially supported by the United States Government, at the cost of fulfilling user requests, and unenhanced Landsat 7 data should be made available to all users at the cost of fulfilling user requests.

[(14)] (13) To stimulate development of the commercial market for unenhanced data and value-added services, the United States Government should adopt a data policy for Landsat 7 which allows competition within the private sector for distribution of unenhanced data and value-added services.

[(15)] (14) Development of the remote sensing market and the provision of commercial value-added services based on remote sensing data should remain exclusively the function of

the private sector.

[(16)] (15) It is in the best interest of the United States to maintain a permanent, comprehensive Government archive of global Landsat and other land remote sensing data for long-term monitoring and study of the changing global environment.

* * * * * * * *

TITLE I—LANDSAT

SEC. 101. LANDSAT PROGRAM MANAGEMENT.

(a) * * *

(b) Management Plan.—The Administrator, the Secretary of Defense, and any other United States Government official the President designates as responsible for part of the Landsat program, shall establish, through a management plan, the roles, re-

sponsibilities, and funding expectations for the Landsat Program of the appropriate United States Government agencies. The management plan shall—

(1) * * *

* * * * * * *

(4) provide for a technology demonstration program whose objective shall be the demonstration of advanced land remote sensing technologies that may potentially yield a system which is less expensive to build and operate, and more responsive to

data users, than is the current Landsat system.

The Director of the Office of Science and Technology Policy shall, no later than 60 days after the date of the enactment of the Space Commercialization Promotion Act of 1996, transmit the management plan to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

(c) RESPONSIBILITIES.—The Landsat Program Management shall be responsible for—

(1) * * * *

* * * * * * *

(6) oversight of Landsat contracts entered into under sections 102 and 103; and

[(7) coordination of a technology demonstration program,

pursuant to section 303; and

[(8)] (7) ensuring that copies of data acquired by the Landsat system are provided to the National Satellite Land Remote Sensing Data Archive.

* * * * * * *

(e) LANDSAT ADVISORY PROCESS.—

(1) ESTABLISHMENT.—The Landsat Program Management shall seek impartial advice and comments regarding the status, effectiveness, and operation of the Landsat system, using existing advisory committees and other appropriate mechanisms. Such advice shall be sought from individuals who represent—

(A) a broad range of perspectives on basic and applied science and operational needs with respect to land remote

sensing data; and

(B) the full spectrum of users of Landsat data, including representatives from United States Government agencies, State and local government agencies, academic institutions, nonprofit organizations, value-added companies, the agricultural, mineral extraction, and other user industries, and the public [, and].

[(C) a broad diversity of age groups, sexes, and races.]

* * * * * * *

TITLE II—LICENSING OF PRIVATE REMOTE SENSING SPACE SYSTEMS

SEC. 201. GENERAL LICENSING AUTHORITY.

(b) COMPLIANCE WITH THE LAW, REGULATIONS, INTERNATIONAL OBLIGATIONS, AND NATIONAL SECURITY.—[No license] (1) Except as provided in paragraph (3), no license shall be granted by the Secretary unless the Secretary determines in writing that the applicant will comply with the requirements of this Act, any regulations issued pursuant to this Act, and any applicable international obligations and national security concerns of the United States.

(2) The Secretary, within 6 months after the date of the enactment of the Space Commercialization Promotion Act of 1996, shall publish in the Federal Register a complete and specific list of all information required to comprise a complete application for a license under this title. An application shall be considered complete when the applicant has provided all information required by the list most recently published in the Federal Register before the date the application was first submitted. Unless the Secretary has, within 30 days after receipt of an application, notified the applicant of information necessary to complete an application, the Secretary may not deny the application on the basis of the absence of any such information.

(3) The Secretary shall grant a license under this title to any United States commercial provider (as such term is defined in section 2 of the Space Commercialization Promotion Act of 1996) whose application is in full compliance with the requirements of this title.

(c) DEADLINE FOR ACTION ON APPLICATION.—The Secretary shall review any application and make a determination thereon within 120 days of the receipt of such application. [If final action has not occurred within such time, the Secretary shall inform the applicant of any pending issues and of actions required to resolve them.] If the Secretary has not granted the license within such 120-day period, the Secretary shall inform the applicant, within such period, of any pending issues and actions required to be carried out by the applicant or the Secretary in order to result in the granting of a license.

* * * * * * *

(e) REQUIREMENT TO PROVIDE UNENHANCED DATA.—(1) * * * (2) The Secretary shall make a designation under paragraph (1) after determining that—

(A) * * *

(B) it is in the interest of the United States to require such data to be provided by the licensee consistent with section 202(b)(3), after considering the impact on the licensee [and the importance of promoting widespread access to remote sensing data from United States and foreign systems].

* * * * * * *

SEC. 202. CONDITIONS FOR OPERATION.

(a) * * *

(b) LICENSING REQUIREMENTS.—Any license issued pursuant to this title shall specify that the licensee shall comply with all of the requirements of this Act and shall—

(1) operate the system in such manner as to preserve the national security of the United States and to observe the international obligations of the United States in accordance with section [506] 507;

(2) make available to the government of any country (including the United States) unenhanced data collected by the system concerning the territory under the jurisdiction of such government [as soon as such data are available and on reasonable terms and conditions] on reasonable terms and conditions, including the provision of such data in a timely manner;

* * * * * * *

(6) notify the Secretary of [any agreement] any significant or substantial agreement relating to land remote sensing the licensee intends to enter with a foreign nation, entity, or consortium involving foreign nations or entities.

The Secretary may not terminate, modify, or suspend a license issued pursuant to this title on the basis of an agreement the Secretary receives notification of under paragraph (6) unless the Secretary has, within 30 days after receipt of such notification, transmitted to the licensee a statement that such agreement is inconsistent with the national security or international obligations of the United States, including an explanation of such inconsistency.

* * * * * * *

SEC. 203. ADMINISTRATIVE AUTHORITY OF THE SECRETARY.

(a) FUNCTIONS.—In order to carry out the responsibilities specified in this title, the Secretary may—

(1) grant, condition, or transfer licenses under this Act;

(2) seek an order of injunction or similar judicial determination from a United States District Court with personal jurisdiction over the licensee to terminate, modify, or suspend licenses [under this title and] under this title or to terminate licensed operations on an immediate basis, if the Secretary determines that the licensee has substantially failed to comply with any provisions of this Act, with any terms, conditions, or restrictions of such license, or with any international obligations or national security concerns of the United States.

(3) [provide penalties] seek, in a United States District Court with personal jurisdiction over the licensee, penalties for noncompliance with the requirements of licenses or regulations issued under this title, including civil penalties not to exceed \$10,000 (each day of operation in violation of such licenses or

regulations constituting a separate violation);

(b) REVIEW OF AGENCY ACTION.—Any applicant or licensee who makes a timely request for review of an adverse action pursuant to subsection (a)(1), [(a)(3),] (a)(5), or (a)(6) shall be entitled to adjudication by the Secretary on the record after an opportunity for any agency hearing with respect to such adverse action. Any final action by the Secretary under this subsection shall be subject to judicial review under chapter 7 of title 5, United States Code.

SEC. 204. REGULATORY AUTHORITY OF THE SECRETARY.

The Secretary [may] *shall* issue regulations to carry out this title. Such regulations shall be promulgated only after public notice and comment in accordance with the provisions of section 553 of title 5, United States Code.

SEC. 205. AGENCY ACTIVITIES.

(a) * * *

* * * * * * *

(c) AGREEMENTS.—To the extent provided in advance by appropriation Acts, any United States Government agency may enter into agreements for such utilization if such agreements are consistent with such agency's mission and statutory authority, and [if such remote sensing space system is licensed by the Secretary before commencing operation] if such private remote sensing space system will be licensed by the Secretary before commencing its commercial operation.

* * * * * * *

SEC. 206. NOTIFICATION.

(a) LIMITATIONS ON LICENSEE.—Not later than 30 days after a determination by the Secretary to require a licensee to limit collection or distribution of data from a system licensed under this title, the Secretary shall provide written notification to Congress of such determination, including the reasons therefor, the limitations imposed on the licensee, and the period during which such limitations apply.

(b) Termination, Modification, or Suspension.—Not later than 30 days after an action by the Secretary to seek an order of injunction or other judicial determination pursuant to section 203(a)(2), the Secretary shall provide written notification to Con-

gress of such action and the reasons therefor.

TITLE III—RESEARCH, DEVELOPMENT, AND DEMONSTRATION

SEC. 301. CONTINUED FEDERAL RESEARCH AND DEVELOPMENT.

(a) Roles of NASA and Department of Defense.—(1) The Administrator and the Secretary of Defense are directed to continue and to enhance programs of remote sensing research and development.

(2) The Administrator is authorized and encouraged to—

- (A) conduct experimental space remote sensing programs (including applications demonstration programs and basic research at universities);
- (B) develop remote sensing technologies and techniques, including those needed for monitoring the Earth and its environment, that are not being commercially developed; and

* * * * * * *

(d) Duplication of Commercial Sector Activities.—The Federal Government shall not undertake activities under this section which duplicate activities available from the commercial sector, unless such activities would result in significant cost savings to the Federal Government.

SEC. 302. AVAILABILITY OF FEDERALLY GATHERED UNENHANCED DATA.

[(a) GENERAL RULE.—]All unenhanced land remote sensing data gathered and owned by the United States Government[, including unenhanced data gathered under the technology dem-

onstration program carried out pursuant to section 303, that is not otherwise available from the commercial sector shall be made available to users in a timely fashion.

[(b) PROTECTION FOR COMMERCIAL DATA DISTRIBUTOR.—The President shall seek to ensure that unenhanced data gathered under the technology demonstration program carried out pursuant to section 303 shall, to the extent practicable, be made available on terms that would not adversely effect the commercial market for unenhanced data gathered by the Landsat 6 spacecraft.

[SEC. 303. TECHNOLOGY DEMONSTRATION PROGRAM.

- [(a) ESTABLISHMENT.—As a fundamental component of a national land remote sensing strategy, the President shall establish, through appropriate United States Government agencies, a technology demonstration program. The goals of such programs shall be to—
 - [(1) seek to launch advanced land remote sensing system components within 5 years after the date of the enactment of this Act.
 - [(2) demonstrate within such 5-year period advanced sensor capabilities suitable for use in the anticipated land remote sensing program; and
 - [(3) demonstrate within such 5-year period an advanced land remote sensing system design that could be less expensive to procure and operate than the Landsat system projected to be in operation through the year 2000, and that therefore holds greater potential for private sector investment and control.
- [(b) EXECUTION OF PROGRAM.—In executing the technology demonstration program, the President shall seek to apply technologies associated with United States National Technical Means of intelligence gathering, to the extent that such technologies are appropriate for the technology demonstration and can be declassified for such purposes without causing adverse harm to United States national security interests.
- [(c) Broad Application.—To the greatest extent practicable, the technology demonstration program established under subsection (a) shall be designed to be responsive to the broad civilian, national security, commercial, and foreign policy needs of the United States.
- [(d) PRIVATE SECTOR FUNDING.—The technology demonstration program under this section may be carried out in part with private sector funding.
- [(e) LANDSAT PROGRAM MANAGEMENT COORDINATION.—The Landsat Program Management shall have a coordinating role in the technology demonstration program carried out under this section.
- [(f) REPORT TO CONGRESS.—The President shall assess the progress of the technology demonstration program under this section and, within 2 years after the date of enactment of this Act, submit a report to the Congress on such progress.]

* * * * * * *

TITLE IV—ASSESSING OPTIONS FOR SUCCESSOR LAND REMOTE SENSING SYSTEM

SEC. 401. ASSESSING OPTIONS FOR SUCCESSOR LAND REMOTE SENSING SYSTEM.

(a) * * *

(b) Goals.—In carrying out subsection (a), the Landsat Program Management shall consider the ability of each of the options to—

(1) * * *

* * * * * * * *

(3) incorporate system enhancements [, including any such enhancements developed under the technology demonstration program under section 303,] which may potentially yield a system that is less expensive to build and operate, and more responsive to data users, than is the Landsat system projected to be in operation through the year 2000.

* * * * * * *

TITLE V—GENERAL PROVISIONS

SEC. 501. NONDISCRIMINATORY DATA AVAILABILITY.

(a) General Rule.—Except as provided in subsection (b) of this section, any unenhanced data generated by the Landsat system or any other land remote sensing system funded and owned by the United States Government shall be made available to all users without preference, bias, or any other special arrangement (except on the basis of national security concerns pursuant to section [506] 507) regarding delivery, format, pricing, or technical considerations which would favor one customer or class of customers over another.

* * * * * * *

SEC. 502. ARCHIVING OF DATA.

(a) * * *

* * * * * * * *

(c) DETERMINATION OF CONTENT OF BASIC DATA SET.—In determining the initial content of, or in upgrading, the basic data set, the Secretary of Interior shall—

(1) * * *

* * * * * * *

(7) ensure that the content of the archive is developed in accordance with section [506] 507.

* * * * * * *

SEC. 506. RADIO FREQUENCY ALLOCATION.

(a) APPLICATION TO FEDERAL COMMUNICATIONS COMMISSION.—
(1) To the extent required by the Communications Act of 1934 (47 U.S.C. 151 et seq.), an application shall be filed with the Federal Communications Commission for any radio facilities involved with commercial remote sensing space systems licensed under title II.

(2) The Federal Communications Commission, within 6 months after the date of the enactment of the Space Commercialization Pro-

motion Act of 1996, shall publish in the Federal Register a complete and specific list of all information required to comprise a complete application described in paragraph (1). An application shall be considered complete when the applicant has provided all information required by the list most recently published in the Federal Register before the date the application was first submitted. Unless the Federal Communications Commission has, within 30 days after receipt of an application, notified the applicant of information necessary to complete an application, the Federal Communications Commission may not deny the application on the basis of the absence of any such information.

* * * * * * *

(e) FEES.—The Federal Communications Commission shall ensure that any licensing or other fees that a private remote sensing space system operator subject to the licensing requirements of title II is required to pay such Commission shall be proportional to the cost to the Commission of the radio licensing process for such person relative to the cost to the Commission of licensing other entities subject to the fee.

SEC. 507. CONSULTATION.

- [(a) CONSULTATION WITH SECRETARY OF DEFENSE.—The Secretary and the Landsat Program Management shall consult with the Secretary of Defense on all matters under this Act affecting national security. The Secretary of Defense shall be responsible for determining those conditions, consistent with this Act, necessary to meet national security concerns of the United States and for notifying the Secretary and the Landsat Program Management promptly of such conditions.
- [(b) Consultation With Secretary of State.—(1) The Secretary and the Landsat Program Management shall consult with the Secretary of State on all matters under this Act affecting international obligations. The Secretary of State shall be responsible for determining those conditions, consistent with this Act, necessary to meet international obligations and policies of the United States and for notifying promptly the Secretary and the Landsat Program Management of such conditions.

[(2) Appropriate United States Government agencies are authorized and encouraged to provide remote sensing data, technology, and training to developing nations as a component of programs of international aid.]

(a) RESPONSIBILITY OF THE SECRETARY OF DEFENSE.—The Secretary shall consult with the Secretary of Defense on all matters under this Act affecting national security. The Secretary of Defense shall be responsible for determining those conditions, consistent with this Act, necessary to meet national security concerns of the United States, and for notifying the Secretary promptly of such conditions. Not later than 60 days after receiving a request from the Secretary, the Secretary of Defense shall recommend to the Secretary any conditions for a license issued under title II, consistent with this Act, that the Secretary of Defense determines are needed to protect the national security of the United States. If no such recommendation has been received by the Secretary within such 60-day period, the Secretary shall deem activities proposed in the license

application to be consistent with the protection of the national secu-

rity of the United States.

(b) Responsibility of the Secretary of State.—(1) The Secretary shall consult with the Secretary of State on all matters under this Act affecting international obligations of the United States. The Secretary of State shall be responsible for determining those conditions, consistent with this Act, necessary to meet international obligations of the United States and for notifying the Secretary promptly of such conditions. Not later than 60 days after receiving a request from the Secretary, the Secretary of State shall recommend to the Secretary any conditions for a license issued under title II, consistent with this Act, that the Secretary of State determines are needed to meet international obligations of the United States. If no such recommendation has been received by the Secretary within such 60-day period, the Secretary shall deem activities proposed in the license application to be consistent with the international obligations and policies of the United States.

(2) Appropriate United States Government agencies are authorized and encouraged to provide to developing nations, as a component of international aid, resources for purchasing remote sensing data, training, and analysis from United States commercial provid-

(d) Reimbursements.—If, as a result of technical modifications imposed on a licensee under title II on the basis of national security concerns, the Secretary, in consultation with the Secretary of Defense or with other Federal agencies, determines that additional costs will be incurred by the licensee, or that past development costs (including the cost of capital) will not be recovered by the licensee, the [Secretary may require] Secretary shall, where appropriate, require the agency or agencies requesting such technical modifications to reimburse the licensee for such additional or development costs, but not for anticipated profits. Reimbursements may cover costs associated with required changes in system performance, but not costs ordinarily associated with doing business abroad.

LAUNCH SERVICES PURCHASE ACT OF 1990

TITLE II—LAUNCH SERVICES **PURCHASE**

SEC. 201. SHORT TITLE.

This title may be cited as the "Launch Services Purchase Act of 1990".

[SEC. 202. FINDINGS.

The Congress finds that—

(1) the United States commercial launch industry is technically capable of providing reliable and cost efficient access to space and is an essential component of national efforts to assure access to space for Government and commercial users;

[(2) the Federal Government should encourage, facilitate, and promote the United States commercial launch industry, including the development and enhancement of commercial launch facilities, in order to ensure United States economic preeminence in space;

[(3) the interests of the United States will be served if the commercial launch industry is competitive in the international

marketplace;

(4) commercial vehicles are effective means to challenge

foreign competition;

[(5) the use by the Federal Government of performance specifically in lieu of detailed specifications relating to vehicle design, construction, and operation will facilitate the efficient operation of the United States commercial launch industry;

[(6) the procurement of commercial launch services in a commercially reasonable manner permits a reduced level of Federal Government regulation and oversight and economies of scale which may result in significant cost savings to the commercial launch industry and to the United States.

[(7) it is the general policy of the Federal Government to purchase needed goods and services, including launch services, from the private sector to the fullest extent feasible; and

[(8) predictable access to National Aeronautics and Space Administration launch markets would encourage continuing United States private sector investment in space and related activities.]

SEC. 203. DEFINITIONS.

For the purposes of this title—

[(1)] the term "commercial provider" means any person providing launch services, but does not include the Federal Government;

[(2) the term "launch services" means activities involved in the preparation of a launch vehicle and its payload for space transport and the conduct of transporting a payload;]

[(3)] (1) the term "launch vehicle" means any vehicle constructed for the purpose of operating in, or placing a payload

in, outer space; and

[(4)] (3) the term "payload" means an object which a person undertakes to place in outer space by means of a launch vehicle, and includes subcomponents of the launch vehicle specifically designed or adapted for that object.

[SEC. 204. REQUIREMENT TO PROCURE COMMERCIAL LAUNCH SERVICES.

- [(a) IN GENERAL.—Except as otherwise provided in this section, the National Aeronautics and Space Administration shall purchase launch services for its primary payloads from commercial providers whenever such services are required in the course of its activities.
- [(b) EXCEPTIONS.—The National Aeronautics and Space Administration shall not be required to purchase launch services as provided in subsection (a) if, on a case by case basis the Adminis-

trator of the National Aeronautics and Space Administration determines that—

- [(1) the payload requires the unique capabilities of the space shuttle;
- [(2) cost effective commercial launch services to meet specific mission requirements are not reasonably available and would not be available when required;
- [(3) the use of commercial launch services poses an unacceptable risk of loss of a unique scientific opportunity; or
- [(4) the payload serves national security or foreign policy purposes.

Upon any such determination, the Administrator shall, within 30 days, notify in writing the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate of the determination and its rationale.

- [(c) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LAUNCH VEHICLES.—Launch vehicles shall be acquired or owned by the National Aeronautics and Space Administration only—
 - [(1) as required under circumstances described in subsection (b); or
 - [(2) by the National Aeronautics and Space Administration for conducting research and development on, and testing of, launch technology.
- **[**(d) Phase-In Period.—Subsections (a) and (c) shall not apply to launch services and launch vehicles purchased by the National Aeronautics and Space Administration before the date of enactment of this Act.
- [(e) HISTORICAL PURPOSES.—This title shall not be interpreted to prohibit the National Aeronautics and Space Administration from acquiring, owning, or maintaining launch vehicles solely for historical display purposes.

[SEC. 205. PURCHASE OF LAUNCH SERVICES.

- [(a) FULL AND OPEN COMPETITION.—(1) Contracts to provide launch services to the National Aeronautics and Space Administration under section 204 shall be awarded on the basis of full, fair, and open competition, consistent with section 2304 of title 10, United States Code, and section 311 of the National Aeronautics and Space Act of 1958.
- **(**(2) The National Aeronautics and Space Administration shall limit its requirements for submission of cost or pricing data in support of a bid or proposal to that data which is reasonably required to protect the interests of the United States.
- [(b) SPECIFICATION SYSTEMS.—Reasonable performance specifications, not detailed Government design or construction specifications, shall be used to the maximum extent feasible to define requirements for a commercial provider bidding to provide launch services. This subsection shall not preclude the National Aeronautics and Space Administration from requiring compliance with applicable safety standards.]

SEC. 206. OTHER ACTIVITIES OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

[(a) COMMERCIAL PAYLOADS ON THE SPACE SHUTTLE.—] Commercial payloads may not be accepted for launch as primary payloads on the space shuttle unless the Administrator of the National Aeronautics and Space Administration determines that—

(1) the payload requires the unique capabilities of the

space shuttle; or

(2) launching of the payload on the space shuttle is important for either national security or foreign policy purposes.

[(b) REPORT.—By March 15, 1991, the Administrator, in consultation with the Office of Federal Procurement Policy, shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report outlining the minimal requirements for documentation and other administrative data needed to procure launch services in a commercially reasonable manner, including—

(1) the need for data to integrate a payload with a launch

vehicle;

[(2) the need for data to carry out mission-specific modi-

fications to the launch vehicle;

- [(3) the need for notification to the National Aeronautics and Space Administration of changes, delays, or difficulties in the construction or preparation of a launch vehicle that may affect the delivery of its payload to its destination at the time and under the conditions provided for under the contract between the United States and its contractors;
 - [(4) the need for data to protect public health and safety;
- [(5) the need for cost or pricing data for the fulfillment of a contract.]

XIV. COMMITTEE RECOMMENDATIONS

On September 11, 1996, a quorum being present, the Committee favorably reported H.R. 3936, the Space Commercialization Promotion Act of 1996, by voice vote, and recommends its enactment.

FULL COMMITTEE MARKUP ON THE SPACE COMMERCIALIZATION PROMOTION ACT OF 1996

WEDNESDAY, SEPTEMBER 11, 1996

U.S. House of Representatives, COMMITTEE ON SCIENCE,

Washington, DC.

The committee met at 12:05 p.m. in Room 2318 of the Rayburn House Office Building, the Honorable Robert F. Walker, chairman of the committee, presiding.

The CHAIRMAN. The Committee will be in order. We are meeting this afternoon pursuant to notice. The Committee on Science is to consider the following measure: H.R. 3936, The Space Commercialization Promotion Act of 1996.

I would begin by asking unanimous consent for the authority to recess. Is there objection?

[No response]

The CHAIRMAN. Hearing none, then I will proceed to a few opening comments here about the nature of the bill that we are under-

This Committee's work to promote commercial space development does not always generate as much interest as the oversight of NASA, but it's one of the most important and exciting things that we do. It's important because America does not revolve around Washington. It does not revolve around only those things that government does; it revolves around what the American people do on their own, without a bureaucrat in Washington watching over their

That is what commercial space development is all about. It's about American citizens taking their money, taking their risks, and taking their reputations to build a better future by using space.

NASA may carry our hopes into space, but it's still a government program that lives or dies by the federal budget decisions. Commercial space may not carry all of our hopes into space, but will

carry our entrepreneurs, our technology, and our future.

Commercial space is what they do outside the Beltway, and that's the future that we're going to be discussing in the bill today. So, how do we pass a bill in Washington and deem it to be a promotion of commercial space development? We all feel a little nervous sometimes when we hear the phrase, "Hi, I'm from the government; I'm here to help you," but that's where this bill comes in.

It does not tell entrepreneurs and aerospace workers that Washington knows how to run their business and make commercial spacecraft better than they do. Instead, it tells them that we want them to succeed and we're not going to get in their way. We're going to provide a stable business environment that they need to invest their money, build commercial space businesses, offer new and better services to the American people, and employ more Americans in high-skilled jobs.

I'll admit that this bill does not have everything in it that I would like to see in it. And it does not have everything that I think is necessarily needed for the United States to fully realize the po-

tential that space holds for our future.

We don't have X prizes, which were used so effectively to open up commercial aviation. We don't have the legal authority to govern property rights in space, or a mechanism that forces NASA to use market forces to expand the space frontier.

But that's okay, because we're building a foundation one step at a time. The futuristic ideas that I mentioned will see their day, but it will come later, after the solid foundation that this bill has laid.

So what steps do we take today? The bill that we have before us amends the Commercial Space Launch Act to take into account the legal and technical advances which have occurred since then. It gives the Department of Transportation the responsibility and authority to license re-entry from orbit because some companies envision returning their commercially developed experiments to earth,

and the reusable launch vehicle is a few years off.

The bill updates the Launch Services Purchase Act of 1990, so that the government will act more like a commercial buyer when it seeks to place payloads into space. And we make some changes in the Land Remote Sensing Policy Act of 1992. That was a landmark piece of legislation that opened up the possibility for an entire industry to get off the ground and image the Earth from space. Credit must certainly be given to the gentleman from California, Mr. Brown, without whom that legislation might never have been

This bill updates the Act to take into account the experience we've gained over the last few years in licensing operators of remote sensing satellites. The bill also eliminates some of the postemployment restrictions that could prevent NASA civil servants who work on the Space Shuttle from transferring to the Shuttles

single prime contractor.

Making that contract successful goes a long way toward reducing and achieving the Administration's goals for downsizing the agency. It is our responsibility to make that transition as easy on the NASA Shuttle work force as we can, out of respect for them and the excellent work they do to ensure that the Shuttle flies safely.

I want to thank the gentleman from Wisconsin, Mr. Sensenbrenner; the gentleman from Florida, Mr. Weldon; and the gentleman from Texas, Mr. Hall, for digging into this issue during the Subcommittee's hearing on the bill, and their efforts in seeing that this provision is incorporated in the legislative process.

Finally, we encourage NASA to purchase their scientific data about Earth and solar systems from the private sector, when they

are as bold as to be providing it so that NASA can get it.

I'd like to express my appreciation to the Chairman and Ranking Member of the Space and Aeronautics Subcommittee, Jim Sensenbrenner and Ralph Hall, for discharging this bill to the Full Committee. The 104th Congress, as we all know, is rapidly drawing to a close, and there's little time left to accomplish our objectives.

Mr. Brown and I have worked closely on a Manager's Amendment to this bill, which we will consider this afternoon. I think this amendment addresses the concerns that he raised, and that we were unable to address in time for the introduction of the original draft. I'm happy to offer that Manager's Amendment with him, and I hope the Committee will pass it unanimously.

I look forward to working with Mr. Brown to continue moving this bill forward on a bipartisan basis. We still have some remaining issues to work out with the Government Reform and Oversight Committee on conforming this bill to the current procurement law, but I understand that the staff discussions are going very well, and I hope to see a rapid resolution.

There are some here today, and maybe even some here on the rostrum and some on the audience, who don't believe that this bill can be sent to the President for his signature before the end of this legislative session. They may be right, and it's certainly a long shot, but it's not at all impossible.

I'm here to tell you that I'm going to try, and I think, based upon the discussions that we've been having with the Senate, we have a very good chance that several of the provisions of this bill will end up being sent to the President for his signature. With the help of the members of this Committee, and perhaps some who are working from the outside with us, I think we can find sponsors in the Senate and get this bill down to the White House.

We've heard so many times before that I can't resist repeating the phrase, if they can put a man on the moon, then we ought to be able to pass a straightforward piece of legislation in Congress and send it to the President before the end of the session this month.

With that, I would turn to Mr. Brown for any opening remarks he might have.

[The text of H.R. 3936 follows:]

104TH CONGRESS 2D SESSION

H. R. 3936

To encourage the development of a commercial space industry in the United States, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

August 1, 1996

Mr. Walker (for himself, Mr. Sensenbrenner, Mr. Largent, Mr. Weldon of Florida, Mr. Rohrabacher, Mr. Hilleary, Mr. Stockman, Mr. Davis, Mr. Calvert, Mr. Baker of California, Mrs. Seastrand, and Mr. Tiahrt) introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on Government Reform and Oversight, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To encourage the development of a commercial space industry in the United States, and for other purposes.

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

l SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
- 3 "Space Commercialization Promotion Act of 1996".
- 4 (b) Table of Contents.—
 - Sec. 1. Short title; table of contents.
 - Sec. 2. Definitions.

TITLE I—PROMOTION OF COMMERCIAL SPACE OPPORTUNITIES

- Sec. 101. Commercialization of space station.
- Sec. 102. Commercial space launch amendments.
- Sec. 103. Exceptions to employment restrictions.
- Sec. 104. Benefits for certain employees transferring from NASA.
- Sec. 105. Promotion of United States Global Positioning System standards.
- Sec. 106. Purchase of space science data.

TITLE II—REMOTE SENSING

- Sec. 201. Land Remote Sensing Policy Act of 1992 amendments.
- Sec. 202. Acquisition of earth remote sensing data.

TITLE III—FEDERAL ACQUISITION OF SPACE TRANSPORTATION SERVICES

- Sec. 301. Requirement to procure commercial space transportation services.
- Sec. 302. Acquisition of space transportation services.
- Sec. 303. Launch Services Purchase Act of 1990 amendments.
- Sec. 304. Use of excess intercontinental ballistic missiles.

5 SEC. 2. DEFINITIONS.

- 6 For purposes of this Act—
- 7 (1) the term "Administrator" means the Ad-
- 8 ministrator of the National Aeronautics and Space
- 9 Administration;

- (2) 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;
 - (3) 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;
 - (4) the term "space-related activities" includes research and development, manufacturing, processing, service, and other associated and support activities;
 - (5) 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;
 - (6) 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;
 - (7) 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;
 - (8) the term "streamlining activities" means management reforms which are designed to increase efficiencies in operations and personnel, principally through consolidation of agency activities and migration of such efforts to the private sector; and
 - (9) the term "United States commercial provider" means a commercial provider, organized

1	under the laws of the United States or of a State,
2	which is—
3	(A) more than 50 percent owned by United
4	States nationals; or
5	(B) a subsidiary of a foreign company and
6	the Secretary of Transportation finds that—
7	(i) such subsidiary has in the past evi-
8	denced a substantial commitment to the
9	United States market through—
10	(I) investments in the United
11	States in long-term research, develop-
12	ment, and manufacturing (including
13	the manufacture of major components
14	and subassemblies); and
15	(II) significant contributions to
16	employment in the United States; and
17	(ii) the country or countries in which
18	such foreign company is incorporated or
19	organized, and, if appropriate, in which it
20	principally conducts its business, affords
21	reciprocal treatment to companies de-

1	scribed in subparagraph (A) comparable to
2	that afforded to such foreign company's
3	subsidiary in the United States, as evi-
4	denced by—
5	(I) providing comparable oppor-
6	tunities for companies described in
7	subparagraph (A) to participate in
8	Government sponsored research and
9	development similar to that authorized
10	under this Act;
11	(II) providing no barriers to com-
12	panies described in subparagraph (A)
13	with respect to local investment op-
14	portunities that are not provided to
15	foreign companies in the United
16	States; and
17	(III) providing adequate and ef-
18	fective protection for the intellectual
19	property rights of companies de-
20	scribed in subparagraph (A).

1 TITLE I—PROMOTION OF COM-

2 MERCIAL SPACE OPPORTUNI-

3 TIES

- 4 SEC. 101. COMMERCIALIZATION OF SPACE STATION.
- 5 (a) Policy.—The Congress declares that a priority
- 6 goal of constructing the International Space Station is the
- 7 economic development of Earth orbital space. The Con-
- 8 gress further declares that the use of free market prin-
- 9 ciples in operating, allocating the use of, and adding capa-
- 10 bilities to the Space Station, and the resulting fullest pos-
- 11 sible engagement of commercial providers and participa-
- 12 tion of commercial users, will reduce Space Station oper-
- 13 ational costs for all partners and the Federal Govern-
- 14 ment's share of the United States burden to fund oper-
- 15 ations.
- 16 (b) Report.—The Administrator shall deliver to the
- 17 Congress, within 60 days after the date of the enactment
- 18 of this Act, a market study that examines the role of com-
- 19 mercial ventures which could supply, use, service, or aug-
- 20 ment the International Space Station, the specific policies
- 21 and initiatives the Administrator is advancing to encour-

age these commercial opportunities, the cost savings to be
realized by the international partnership from applying
commercial approaches to cost-shared operations, and the
cost reimbursements to the United States Government
from commercial users of the Space Station.
SEC. 102. COMMERCIAL SPACE LAUNCH AMENDMENTS.
(a) Amendments.—Chapter 701 of title 49, United
States Code, is amended—
(1) in the table of sections—
(A) by amending the item relating to sec-
tion 70104 to read as follows:
"70104. Restrictions on launches, operations, and reentries.";
(B) by amending the item relating to sec-
tion 70108 to read as follows:
"70108. Prohibition, suspension, and end of launches, operation of launch sites and reentry sites, and reentries.";
(C) by amending the item relating to sec-
tion 70109 to read as follows:
"70109. Preemption of scheduled launches or reentries.";
and
(D) by adding at the end the following new
items:

"70120. Regulations.
"70121. Report to Congress.
"70122. State authority to license commercial spaceports.".

1 (2) in section 70101— (A) by inserting "microgravity research," 2 3 after "information services," in subsection 4 (a)(3);(B) by inserting ", reentry," after "launch-5 6 ing" both places it appears in subsection (a)(4); (C) by inserting ", reentry vehicles," after 7 "launch vehicles" in subsection (a)(5); 8 (D) by inserting "and reentry services" 9 after "launch services" in subsection (a)(6); 10 by inserting ", reentries," after 11 "launches" both places it appears in subsection 12 (a)(7);13 (F) by inserting ", reentry sites," after 14 15 "launch sites" in subsection (a)(8); (G) by inserting "and reentry services" 16 after "launch services" in subsection (a)(8); 17 (H) by inserting "reentry sites," after 18 "launch sites," in subsection (a)(9); 19

1	(1) by inserting and reentry site after
2	"launch site" in subsection (a)(9);
3	(J) by inserting ", reentry vehicles," after
4	"launch vehicles" in subsection (b)(2);
5	(K) by striking "launch" in subsection
6	(b)(2)(A);
7	(L) by inserting "and reentry" after "con-
8	duct of commercial launch" in subsection
9	(b)(3);
10	(M) by striking "launch" after "and trans-
11	fer commercial" in subsection (b)(3); and
12	(N) by inserting "and development of re-
13	entry sites," after "launch-site support facili-
14	ties," in subsection (b)(4);
15	(3) in section 70102—
16	(A) by striking "and any payload" and in-
17	serting in lieu thereof "or reentry vehicle and
18	any payload from Earth" in paragraph (3);
19	(B) in paragraph (5)—

1	(i) by redesignating subparagraphs
2	(A) and (B) as subparagraphs (B) and
3	(C), respectively; and
4	(ii) by inserting before subparagraph
5	(B), as so redesignated by clause (i) of this
6	subparagraph, the following new subpara-
7	graph:
8	"(A) activities directly related to the prep-
9	aration of a launch site or payload facility for
10	one or more launches;";
11	(C) by inserting "or reentry vehicle" after
12	"means of a launch vehicle" in paragraph (8);
13	(D) by redesignating paragraphs (10)
14	through (12) as paragraphs (14) through (16),
15	respectively;
16	(E) by inserting after paragraph (9) the
17	following new paragraphs:
18	"(10) 'reenter' and 'reentry' mean to return or
19	attempt to return, purposefully, a reentry vehicle
20	and its payload, if any, from Earth orbit or from
21	outer space to Earth.

1	"(11) 'reentry services' means—
2	"(A) activities involved in the preparation
3	of a reentry vehicle and its payload, if any, for
4	reentry; and
5	"(B) the conduct of a reentry.
6	"(12) 'reentry site' means the location on Earth
7	to which a reentry vehicle is intended to return (as
8	defined in a license the Secretary issues or transfers
9	under this chapter).
10	"(13) 'reentry vehicle' means a vehicle designed
11	to return from Earth orbit or outer space to Earth,
12	or a reusable launch vehicle designed to return from
13	outer space to Earth, substantially intact."; and
14	(F) by inserting "or reentry services" after
15	"launch services" each place it appears in para-
16	graph (15), as so redesignated by subparagraph
17	(D) of this paragraph;
18	(4) in section 70103—
19	(A) by striking "The Secretary" in sub-
20	section (a) and inserting in lieu thereof "Except

1	as provided in section 70122, the Secretary";
2	and
3	(B) in subsection (b)—
4	(i) by inserting "AND REENTRIES AND
5	STATE SPONSORED SPACEPORTS" after
6	"Launches" in the subsection heading;
7	(ii) by striking "by the private sector"
8	in paragraph (1) and inserting in lieu
9	thereof "and reentries by the private sector
10	and State sponsored spaceports" after
11	"space launches"; and
12	(iii) by inserting "and reentry" after
13	"space launch" in paragraph (2);
14	(5) in section 70104—
15	(A) by amending the section designation
16	and heading to read as follows:
17	"§ 70104. Restrictions on launches, operations, and
18	reentries";
19	(B) by inserting "or reentry site, or to re-
20	enter a reentry vehicle," after "operate a

1	launch site" each place it appears in subsection
2	(a);
3	(C) by inserting "or reentry" after "launch
4	or operation" in subsection (a)(3) and (4);
5	(D) in subsection (b)—
6	(i) by striking "launch license" and
7	inserting in lieu thereof "license";
8	(ii) by inserting "or reenter" after
9	"may launch"; and
10	(iii) by inserting "or reentering" after
11	"related to launching"; and
12	(E) in subsection (c)—
13	(i) by amending the subsection head-
14	ing to read as follows: "Preventing
15	Launches and Reentries.—";
16	(ii) by inserting "or reentry" after
17	"prevent the launch"; and
18	(iii) by inserting "or reentry" after
19	"decides the launch";
20	(6) in section 70105—

1	(A) by inserting "(1)" before "A person
2	may apply" in subsection (a);
3	(B) by striking "receiving an application"
4	both places it appears in subsection (a) and in-
5	serting in lieu thereof "accepting an application
6	in accordance with criteria established pursuant
7	to subsection (b)(2)(D)";
8	(C) by inserting at the end of subsection
9	(a) the following: "The Secretary shall submit
10	to the Committee on Science of the House of
11	Representatives and the Committee on Com-
12	merce, Science, and Transportation of the Sen-
13	ate a written notice not later than 7 days after
14	any occurrence when a license is not issued
15	within the deadline established by this sub-
16	section.";
17	(D) by adding at the end of subsection (a)
18	the following new paragraph:
19	"(2) In carrying out paragraph (1), the Secretary
20	may establish procedures for certification of the safety of
21	launch vehicles, reentry vehicles, safety systems, proce-

1	dures, services, or personnel that may be used in conduct-
2	ing licensed commercial space launch or reentry activi-
3	ties.";
4	(E) by inserting "or a reentry site, or the
5	reentry of a reentry vehicle," after "operation
6	of a launch site" in subsection (b)(1);
7	(F) by striking "or operation" and insert-
8	ing in lieu thereof ", operation, or reentry" in
9	subsection $(b)(2)(A)$;
10	(G) by striking "and" at the end of sub-
11	section $(b)(2)(B)$;
12	(H) by striking the period at the end of
13	subsection (b)(2)(C) and inserting in lieu there-
14	of "; and";
15	(I) by adding at the end of subsection
16	(b)(2) the following new subparagraph:
17	"(D) regulations establishing criteria for ac-
18	cepting or rejecting an application for a license
19	under this chapter within 60 days after receipt of
20	such application."; and

1	(J) by inserting ", including the require-
2	ment to obtain a license," after "waive a re-
3	quirement" in subsection (b)(3);
4	(7) in section 70106(a)—
5	(A) by inserting "or reentry site" after
6	"observer at a launch site";
7	(B) by inserting "or reentry vehicle" after
8	"assemble a launch vehicle"; and
9	(C) by inserting "or reentry vehicle" after
10	"with a launch vehicle";
11	(8) in section 70108—
12	(A) by amending the section designation
13	and heading to read as follows:
14	"§ 70108. Prohibition, suspension, and end of
15	launches, operation of launch sites and
16	reentry sites, and reentries";
17	and
18	(B) in subsection (a)—
19	(i) by inserting "or reentry site, or re-
20	entry of a reentry vehicle," after "oper-
21	ation of a launch site"; and

1	(ii) by inserting "or reentry" after
2	"launch or operation";
3	(9) in section 70109—
4	(A) by amending the section designation
5	and heading to read as follows:
6	"§ 70109. Preemption of scheduled launches or reen-
7	tries";
8	(B) in subsection (a)—
9	(i) by inserting "or reentry" after
10	"ensure that a launch";
11	(ii) by inserting ", reentry site," after
12	"United States Government launch site";
13	(iii) by inserting "or reentry date
14	commitment" after "launch date commit-
15	ment";
16	(iv) by inserting "or reentry" after
17	"obtained for a launch";
18	(v) by inserting ", reentry site," after
19	"access to a launch site";

1	(vi) by inserting ", or services related
2	to a reentry," after "amount for launch
3	services"; and
4	(vii) by inserting "or reentry" after
5	"the scheduled launch"; and
6	(C) in subsection (c), by inserting "or re-
7	entry" after "prompt launching";
8	(10) in section 70110—
9	(A) by inserting "or reentry" after "pre-
10	vent the launch" in subsection (a)(2); and
11	(B) by inserting "or reentry site, or re-
12	entry of a reentry vehicle," after "operation of
13	a launch site" in subsection (a)(3)(B);
14	(11) in section 70111—
15	(A) by inserting "or reentry" after
16	"launch" in subsection (a)(1)(A);
17	(B) by inserting "and reentry services"
18	after "launch services" in subsection (a)(1)(B);
19	(C) in subsection (a)(1), by inserting after
20	subparagraph (B) the following:

1	"The Secretary shall establish criteria and procedures for
2	determining the priority of competing requests from the
3	private sector and State governments for property and
4	services under this section.";
5	(D) by inserting "or reentry services" after
6	"or launch services" in subsection (a)(2);
7	(E) by striking "actual costs" in sub-
8	section $(b)(1)$ and inserting in lieu thereof "ad-
9	ditive costs only";
10	(F) by inserting "or reentry" after "com-
11	mercial launch" both places it appears in sub-
12	section (b)(1);
13	(G) by inserting "or reentry services" after
14	"launch services" in subsection (b)(2)(C);
15	(H) by inserting after subsection (b)(2) the
16	following new paragraph:
17	"(3) The Secretary shall ensure the establishment of
18	uniform guidelines for, and consistent implementation of,
19	this section by all Federal agencies.";
20	(I) by striking "or its payload for launch"
21	in subsection (d) and inserting in lieu thereof

1	"or reentry vehicle, or the payload of either, for
2	launch or reentry"; and
3	(J) by inserting ", reentry vehicle," after
4	"manufacturer of the launch vehicle" in sub-
5	section (d);
6	(12) in section 70112—
7	(A) in subsection $(a)(1)$, by inserting
8	"launch, reentry, or site operator" after "(1)
9	When a'';
10	(B) by inserting "or reentry" after "one
11	launch" in subsection (a)(3);
12	(C) by inserting "or reentry services" after
13	"launch services" in subsection (a)(4);
14	(D) in subsection (b)(1), by inserting
15	"launch, reentry, or site operator" after "(1)
16	$A^{"};$
17	(E) by inserting "or reentry services" after
18	"launch services" each place it appears in sub-
19	section (b):

1	(F) by inserting "applicable" after "car-
2	ried out under the" in paragraphs (1) and (2)
3	of subsection (b);
4	(G) by striking ", Space, and Technology"
5	in subsection (d)(1);
6	(H) by inserting "OR REENTRIES" after
7	"LAUNCHES" in the heading for subsection (e);
8	(I) by inserting "or reentry site or a re-
9	entry" after "launch site" in subsection (e);
10	and
11	(J) in subsection (f), by inserting "launch,
12	reentry, or site operator" after "carried out
13	under a";
14	(13) in section $70113(a)(1)$ and $(d)(1)$ and (2) ,
15	by inserting "or reentry" after "one launch" each
16	place it appears;
17	(14) in section 70115(b)(1)(D)(i)—
18	(A) by inserting "reentry site," after
19	"launch site,"; and
20	(B) by inserting "or reentry vehicle" after
21	"launch vehicle" both places it appears;

1	(15) in section 70117—
2	(A) by inserting "or reentry site, or to re-
3	enter a reentry vehicle" after "operate a launch
4	site" in subsection (a);
5	(B) by inserting "or reentry" after "ap-
6	proval of a space launch" in subsection (d);
7	(C) by amending subsection (f) to read as
8	follows:
9	"(f) Launch Not an Export; Reentry Not an
10	IMPORT.—A launch vehicle, reentry vehicle, or payload
11	that is launched or reentered is not, because of the launch
12	or reentry, an export or import, respectively, for purposes
13	of a law controlling exports or imports."; and
14	(D) in subsection (g)—
15	(i) by striking "operation of a launch
16	vehicle or launch site," in paragraph (1)
17	and inserting in lieu thereof "reentry, op-
18	eration of a launch vehicle or reentry vehi-
19	cle, operation of a launch site or reentry
20	site,"; and

1	(ii) by inserting "reentry," after
2	"launch," in paragraph (2); and
3	(16) by adding at the end the following new
4	sections:
5	"§ 70120. Regulations
6	"The Secretary of Transportation, within 6 months
7	after the date of the enactment of this section, shall issue
8	regulations to carry out this chapter that include—
9	"(1) guidelines for industry to obtain sufficient
10	insurance coverage for potential damages to third
11	parties;
12	"(2) procedures for requesting and obtaining li-
13	censes to operate a commercial launch vehicle or re-
14	entry vehicle;
15	"(3) procedures for requesting and obtaining
16	operator licenses for launch or reentry; and
17	"(4) procedures for the application of govern-
18	ment indemnification.

"§ 70121. Report to Congress

- 2 "The Secretary of Transportation shall submit to
- 3 Congress an annual report to accompany the President's
- 4 budget request that—
- 5 "(1) describes all activities undertaken under
- 6 this chapter, including a description of the process
- 7 for the application for and approval of licenses under
- 8 this chapter and recommendations for legislation
- 9 that may further commercial launches and reentries;
- 10 and
- 11 "(2) reviews the performance of the regulatory
- activities and the effectiveness of the Office of Com-
- 13 mercial Space Transportation.

14 "§ 70122. State authority to license commercial space-

- 15 ports
- 16 "(a) State Authority.—If the Secretary of Trans-
- 17 portation has not issued final regulations governing the
- 18 application for and granting of Federal licenses for the
- 19 operation of a launch site under this chapter, a State gov-
- 20 ernment may carry out this chapter, exercising the author-

- 1 ity of the Secretary regarding the licensing and monitoring
- 2 of launch sites within the territory of that State.
- 3 "(b) Federal Consultation.—A State may not
- 4 issue a license to operate a launch site under subsection
- 5 (a) unless—
- 6 "(1) the Secretary has notified the State that
- 7 the proposed license does not jeopardize the public
- 8 health and safety, safety of property, or national se-
- 9 curity or foreign policy interests of the United
- 10 States; or
- 11 "(2) 90 days have passed after the State has
- requested the Secretary to make a determination
- under paragraph (1), and the Secretary has not re-
- sponded.
- 15 "(c) Effect of State License.—The Secretary
- 16 shall treat a launch site licensed by a State under sub-
- 17 section (a) as having complied with all Federal require-
- 18 ments regarding the licensing and operation of a launch
- 19 site.
- 20 "(d) Cessation of State Authority.—The au-
- 21 thority of a State to issue a license under subsection (a)

- 1 shall cease upon the issuance of Federal regulations gov-
- 2 erning the application for and granting of Federal licenses
- 3 for the operation of a launch site.".
- 4 (b) Effective Date.—The amendments made by
- 5 subsection (a)(6)(B) shall take effect upon the effective
- 6 date of final regulations issued pursuant to section
- 7 70105(b)(2)(D) of title 49, United States Code, as added
- 8 by subsection (a)(6)(I).

9 SEC. 103. EXCEPTIONS TO EMPLOYMENT RESTRICTIONS.

- 10 (a) General Rule.—Section 207(a) and (c) of title
- 11 18, United States Code, and section 27(f)(1) of the Fed-
- 12 eral Procurement Policy Act (41 U.S.C. 423(f)(1)) shall
- 13 not apply to employees or former employees of the Na-
- 14 tional Aeronautics and Space Administration seeking em-
- 15 ployment with an entity that is awarded a single prime
- 16 contract for the Space Shuttle or with an organization re-
- 17 ceiving an award as a result of National Aeronautics and
- 18 Space Administration streamlining activities.
- 19 (b) Exceptions.—Subsection (a) shall not apply to
- 20 an employee who, while employed with the National Aero-
- 21 nautics and Space Administration, served in a position of

1	authority with respect to the selection of the organization
2	with which the employee seeks employment for an award.
3	SEC. 104. BENEFITS FOR CERTAIN EMPLOYEES TRANSFER-
4	RING FROM NASA.
5	(a) Election.—Any employee of the National Aero-
6	nautics and Space Administration who accepts employ-
7	ment with a qualified employer within one year after the
8	award which resulted in the employer becoming a qualified
9	employer, and who is subject to either CSRS or FERS,
10	shall elect to—
11	(1) retain their coverage under either CSRS or
12	FERS, as applicable, in lieu of coverage by the
13	qualified employer's retirement system; or
14	(2) receive a deferred annuity or lump-sum ben-
15	efit payable to a terminated employee under CSRS
16	or FERS, as applicable.
17	Those employees electing under paragraph (2) shall have
18	the option to transfer the balance in their Thrift Savings
19	Plan account to a defined contribution plan under the

20 qualified employer's retirement system, consistent with ap-

- 1 plicable law and the terms of the qualified employer's de-
- 2 fined contribution plan.
- 3 (b) Retirement and Disability Payments.—A
- 4 qualified employer shall transfer to the Civil Service Re-
- 5 tirement and Disability Fund—
- 6 (1) such employee deductions and agency con-
- 7 tributions as are required by sections 8334, 8422,
- 8 and 8423 of title 5, United States Code, for those
- 9 employees who elect to retain their coverage under
- either CSRS or FERS pursuant to subsection
- 11 (a)(1);
- 12 (2) such additional agency contributions as are
- determined necessary by the Office of Personnel
- Management to pay, in combination with the sums
- under paragraph (1), the "normal cost" (determined
- using dynamic assumptions) of retirement benefits
- for those employees who elect to retain their cov-
- erage under CSRS or FERS pursuant to subsection
- 19 (a)(1), with the concept of "normal cost" being used
- 20 consistent with generally accepted actuarial stand-
- 21 ards and principles; and

- 1 (3) such additional amounts, not to exceed 2 2 percent of the aggregate of amounts under para-3 graphs (1) and (2), as are determined necessary by 4 the Office of Personnel Management to pay the cost 5 of administering retirement benefits for employees 6 who retire from the qualified employer under either 7 CSRS or FERS, for their survivors, and for survi-8 vors of employees of the qualified employer who die 9 after the award to the qualified employer (which 10 amounts shall be available to the Office of Personnel Management as provided in section 8348(a)(1)(B) of 11 12 title 5, United States Code).
- 13 (c) Thrift Savings Fund Payments.—A qualified 14 employer shall transfer to the Thrift Savings Fund such 15 employee and agency contributions as are required or au-16 thorized by sections 8432 and 8351 of title 5, United 17 States Code, for those employees who elect to retain their 18 coverage under CSRS or FERS pursuant to subsection 19 (a)(1).
- 20 (d) Health Benefits.—For those National Aero-21 nautics and Space Administration employees who accept

- 1 employment with a qualified employer and who were sub-2 ject at the time of acceptance of that employment to
- 3 FEHBP as Federal employees and who elect to retain
- 4 their coverage under either CSRS or FERS pursuant to
- 5 subsection (a)(1), it shall be their option as to whether
- 6 to receive health benefits from a health benefit plan estab-
- 7 lished by the qualified employer or to continue without
- 8 interruption their coverage under the FEHBP, in lieu of
- 9 coverage by the qualified employer's health benefit system.
- 10 (e) Health Benefits Payments.—A qualified em-
- 11 ployer shall transfer to the Employees Health Benefits
- 12 Fund—
- 13 (1) such employee deductions and agency con-
- tributions as are required by section 8906(a)
- through (f) of title 5, United States Code, for those
- employees who elect to retain their coverage under
- 17 FEHBP pursuant to subsection (d); and
- 18 (2) such amounts as are determined necessary
- by the Office of Personnel Management under sub-
- section (f) to reimburse the Office of Personnel
- 21 Management for contributions under section

- 1 8906(g)(1) of title 5, United States Code, for those
- 2 employees who elect to retain their coverage under
- FEHBP pursuant to subsection (d).
- 4 (f) Government Contributions.—The amounts
- 5 required under subsection (e)(2) shall pay the Government
- 6 contributions for retired employees who retire from the
- 7 qualified employer under either CSRS or FERS, for survi-
- 8 vors of such retired employees, and for survivors of em-
- 9 ployees of the qualified employer, with said amounts pro-
- 10 rated to reflect only that portion of the total service of
- 11 such employees and retired persons that was performed
- 12 as an employee of the qualified employer.
- 13 (g) Definitions.—For purposes of this section, the
- 14 term "qualified employer" means an organization which
- 15 operates the consolidated Space Shuttle operations con-
- 16 tract, and any other organization identified by the Admin-
- 17 istrator as acting in furtherance of streamlining activities.
- 18 SEC. 105. PROMOTION OF UNITED STATES GLOBAL POSI-
- 19 TIONING SYSTEM STANDARDS.
- 20 (a) FINDING.—The Congress finds that the Global
- 21 Positioning System, including satellites, signal equipment,

- 1 ground stations, data links, and associated command and
- 2 control facilities, has become an essential element in civil,
- 3 scientific, and military space development because of the
- 4 emergence of a United States commercial industry which
- 5 provides Global Positioning System equipment and related
- 6 services.
- 7 (b) International Cooperation.—The Congress
- 8 therefore encourages the President to—
- 9 (1) undertake a coordinated effort within the
- 10 executive branch to promote cooperation with foreign
- governments and international organizations to ad-
- vance United States interests with respect to the
- Global Positioning System standards and augmenta-
- tions; and
- 15 (2) ensure the operation of the Global Position-
- ing System on a continuous worldwide basis free of
- direct user fees.
- 18 SEC. 106. PURCHASE OF SPACE SCIENCE DATA.
- 19 (a) In General.—To the maximum extent possible,
- 20 while fully satisfying the National Aeronautics and Space
- 21 Administration's scientific requirements, the National

- 1 Aeronautics and Space Administration shall, where cost
- 2 effective, purchase from the United States private sector
- 3 space science data. Examples of such data include sci-
- 4 entific data concerning the elemental and mineralogical re-
- 5 sources of the moon and the planets, Earth environmental
- 6 data obtained through remote sensing observations, and
- 7 solar storm monitoring.
- 8 (b) Competitive Bidding.—(1) Contracts for the
- 9 purchase of space science data under this section shall be
- 10 awarded in a process of full, fair, and open competitive
- 11 bidding.
- 12 (2) Submission of cost data, either for the purposes
- 13 of supporting the bid or fulfilling the contract, shall not
- 14 be required of bidders or awardees of the contract.
- 15 (3) Reasonable performance specifications, rather
- 16 than design or construction specifications, shall be used
- 17 to the maximum extent feasible to define requirements for
- 18 United States commercial providers with respect to the de-
- 19 sign, construction, or operation of equipment used in ob-
- 20 taining space science data under contracts entered into
- 21 under this section. This subsection shall not be construed

1	to prohibit the Federal Government from requiring com-
2	pliance with applicable safety standards.
3	(4) Contracts under this section shall not provide for
4	the Federal Government to obtain ownership of data not
5	specifically sought by the Federal Government.
6	TITLE II—REMOTE SENSING
7	SEC. 201. LAND REMOTE SENSING POLICY ACT OF 1992
8	AMENDMENTS.
9	The Land Remote Sensing Policy Act of 1992 is
10	amended—
11	(1) in section 2 (15 U.S.C. 5601)—
12	(A) by amending paragraph (5) to read as
13	follows:
14	"(5) Commercialization of land remote sensing
15	is a near-term goal, and should remain a long-term
16	goal, of United States policy.";
17	(B) by striking paragraph (6) and redesig-
18	nating paragraphs (7) through (16) as para-
19	graphs (6) through (15), respectively; and
20	(C) in paragraph (11), as so redesignated
21	by subparagraph (B) of this paragraph, by

1	striking "determining the design" and all that
2	follows through "international consortium" and
3	inserting in lieu thereof "ensuring the continu-
4	ity of Landsat quality data";
5	(2) in section 101 (15 U.S.C. 5611)—
6	(A) by inserting the following after sub-
7	section (b)(4):
8	"The Director of the Office of Science and Technology
9	Policy shall, no later than 60 days after the date of the
10	enactment of the Space Commercialization Promotion Act
11	of 1996, transmit the management plan to the Committee
12	on Science of the House of Representatives and the Com-
13	mittee on Commerce, Science, and Transportation of the
14	Senate.";
15	(B) in subsection (c)—
16	(i) by inserting "and" at the end of
17	paragraph (6);
18	(ii) by striking paragraph (7); and
19	(iii) by redesignating paragraph (8) as
20	paragraph (7); and
21	(C) in subsection (e)(1)—

1	(i) by inserting "and" at the end of
2	subparagraph (A);
3	(ii) by striking ", and" at the end of
4	subparagraph (B) and inserting in lieu
5	thereof a period; and
6	(iii) by striking subparagraph (C);
7	(3) in section 201 (15 U.S.C. 5621)—
8	(A) by inserting "(1)" after "NATIONAL
9	Security.—" in subsection (b);
10	(B) in subsection (b)(1), as so designated
11	by subparagraph (A) of this paragraph, by
12	striking "No license" and inserting in lieu
13	thereof "Except as provided in paragraph (3),
14	no license'';
15	(C) by adding at the end of subsection (b)
16	the following new paragraphs:
17	"(2) The Secretary, within 6 months after the date
18	of the enactment of the Space Commercialization Pro-
19	motion Act of 1996, shall publish in the Federal Register
20	a complete and specific list of all information required to
21	comprise a complete application for a license under this

1	title. An application shall be considered complete when the
2	applicant has provided all information required by the list
3	most recently published in the Federal Register before the
4	date the application was first submitted. Unless the Sec-
5	retary has, within 30 days after receipt of an application,
6	notified the applicant of information necessary to complete
7	an application, the Secretary may not deny the application
8	on the basis of the absence of any such information.
9	"(3) The Secretary shall grant a license under this
10	title to any United States commercial provider (as such
11	term is defined in section 2 of the Space Commercializa-
12	tion Promotion Act of 1996) whose application indicates
13	full compliance with the requirements of this title.";
14	(D) in subsection (c), by amending the sec-
15	ond sentence thereof to read as follows: "If the
16	Secretary has not granted the license within
17	such 120-day period, the Secretary shall inform
18	the applicant, within such period, of any pend-
19	ing issues and actions required to be carried
20	out by the applicant or the Secretary in order
21	to result in the granting of a license."; and

1	(E) in subsection $(e)(2)(B)$, by striking
2	"and the importance of promoting widespread
3	access to remote sensing data from United
4	States and foreign systems";
5	(4) in section 202 (15 U.S.C. 5622)—
6	(A) by striking "section 506" in subsection
7	(b)(1) and inserting in lieu thereof "section
8	507";
9	(B) in subsection (b)(2), by striking "as
10	soon as such data are available and on reason-
1	able terms and conditions" and inserting in lieu
12	thereof "on reasonable terms and conditions
13	including the provision of such data in a timely
14	manner and at prevailing market prices";
15	(C) in subsection (b)(6), by striking "any
16	agreement" and inserting in lieu thereof "any
17	significant or substantial agreement relating to
18	land remote sensing"; and
19	(D) by inserting after paragraph (6) of
20	subsection (b) the following:

1	"The Secretary may not terminate, modify, or suspend a
2	license issued pursuant to this title on the basis of an
3	agreement the Secretary receives notification of under
4	paragraph (6) unless the Secretary has, within 30 days
5	after receipt of such notification, transmitted to the li-
6	censee a statement that such agreement is inconsistent
7	with the national security or international obligations of
8	the United States, including an explanation of such incon-
9	sistency.";
10	(5) in section 203 (15 U.S.C. 5623)—
11	(A) in subsection $(a)(2)$, by striking
12	"under this title and" and inserting in lieu
13	thereof "under this title or";
14	(B) in subsection (a)(3), by striking "pro-
15	vide penalties" and inserting in lieu thereof
16	"seek, in a United States District Court with
17	personal jurisdiction over the licensee, pen-
18	alties"; and
19	(C) in subsection (b), by striking "(a)(3),";
20	(6) in section 204 (15 U.S.C. 5624), by striking
21	"may" and inserting in lieu thereof "shall".

- 1 (7) in section 205(c) (15 U.S.C. 5625(c)), by 2 inserting "commercial" after "Secretary before com-3 mencing"; 4 (8) by adding at the end of title II the following 5 new section: "SEC. 206. NOTIFICATION. "(a) LIMITATIONS ON LICENSEE.—Not later than 30 days after a determination by the Secretary to require a licensee to limit collection or distribution of data from a 10 system licensed under this title, the Secretary shall provide written notification to Congress of such determination, in-11 12 cluding the reasons therefor, the limitations imposed on 13 the licensee, and the period during which such limitations 14 apply. "(b) TERMINATION, MODIFICATION, OR SUSPEN-15 SION.—Not later than 30 days after an action by the Sec-16 17 retary to seek an order of injunction or other judicial determination pursuant to section 203(a)(2), the Secretary 18 19 shall provide written notification to Congress of such ac-20 tion and the reasons therefor.";
- 21 (9) in section 301 (15 U.S.C. 5631)—

1	(A) by inserting ", that are not being com-
2	mercially developed" after "and its environ-
3	ment" in subsection (a)(2)(B); and
4	(B) by adding at the end the following new
5	subsection:
6	"(d) Duplication of Commercial Sector Activi-
7	TIES.—The Federal Government shall not undertake ac-
8	tivities under this section which duplicate activities avail-
9	able from the commercial sector.";
10	(10) in section 302 (15 U.S.C. 5632)—
11	(A) by striking "(a) General Rule.—";
12	(B) by striking ", including unenhanced
13	data gathered under the technology demonstra-
14	tion program carried out pursuant to section
15	303," and inserting in lieu thereof "that is not
16	otherwise available from the commercial sec-
17	tor"; and
18	(C) by striking subsection (b);
19	(11) by repealing section 303 (15 U.S.C. 5633);
20	(12) in section $401(b)(3)$ (15 U.S.C.
21	5641(b)(3)), by striking ", including any such en-

1	hancements developed under the technology dem-
2	onstration program under section 303,";
3	(13) in section 501(a) (15 U.S.C. 5651(a)), by
4	striking "section 506" and inserting in lieu thereof
5	"section 507";
6	(14) in section $502(c)(7)$ (15 U.S.C.
7	5652(c)(7)), by striking "section 506" and inserting
8	in lieu thereof "section 507";
9	(15) in section 506 (15 U.S.C. 5656)—
10	(A) by inserting "(1)" after "COMMUNICA-
11	TIONS COMMISSION.—" in subsection (a);
12	(B) by inserting at the end of subsection
13	(a) the following new paragraph:
14	"(2) The Federal Communications Commission, with-
15	in 6 months after the date of the enactment of the Space
16	Commercialization Promotion Act of 1996, shall publish
17	in the Federal Register a complete and specific list of all
18	information required to comprise a complete application
19	described in paragraph (1). An application shall be consid-
20	ered complete when the applicant has provided all infor-
21	mation required by the list most recently published in the

- 1 Federal Register before the date the application was first
- 2 submitted. Unless the Federal Communications Commis-
- 3 sion has, within 30 days after receipt of an application,
- 4 notified the applicant of information necessary to complete
- 5 an application, the Federal Communications Commission
- 6 may not deny the application on the basis of the absence
- 7 of any such information."; and
- 8 (C) by adding at the end the following new
- 9 subsection:
- 10 "(e) Fees.—The Federal Communications Commis-
- 11 sion shall ensure that any licensing or other fees that a
- 12 private remote sensing space system operator subject to
- 13 the licensing requirements of title II is required to pay
- 14 such Commission shall be proportional to the cost to the
- 15 Commission of the radio licensing process for such person
- 16 relative to the cost to the Commission of licensing other
- 17 entities subject to the fee. In no event shall such a fee
- 18 be required in an amount greater than \$5,000 per ground
- 19 station."; and
- 20 (16) in section 507 (15 U.S.C. 5657)—

1	(A) by amending subsection (a) to read as
2	follows:
3	"(a) Responsibility of the Secretary of De-
4	FENSE.—The Secretary shall consult with the Secretary
5	of Defense on all matters under this Act affecting national
6	security. The Secretary of Defense shall be responsible for
7	determining those conditions, consistent with this Act,
8	necessary to meet national security concerns of the United
9	States, and for notifying the Secretary promptly of such
10	conditions. Not later than 60 days after receiving a re-
11	quest from the Secretary, the Secretary of Defense shall
12	recommend to the Secretary any conditions for a license
13	issued under title II, consistent with this Act, that the Sec-
14	retary of Defense determines are needed to protect the na-
15	tional security of the United States. The Secretary of De-
16	fense shall concurrently transmit such recommendation to
17	the Committee on Science of the House of Representatives
18	and the Committee on Commerce, Science, and Transpor-
19	tation of the Senate. If no such recommendation has been
20	received by the Secretary within such 60-day period, the
21	Secretary shall deem activities proposed in the license ap-

- 1 plication to be consistent with the protection of the na-
- 2 tional security of the United States.";
- 3 (B) by striking subsection (b)(1) and (2)
- 4 and inserting in lieu thereof the following:
- 5 "(b) Responsibility of the Secretary of
- 6 State.—(1) The Secretary shall consult with the Sec-
- 7 retary of State on all matters under this Act affecting
- 8 international obligations of the United States. The Sec-
- 9 retary of State shall be responsible for determining those
- 10 conditions, consistent with this Act, necessary to meet
- 11 international obligations of the United States and for noti-
- 12 fying the Secretary promptly of such conditions. Not later
- 13 than 60 days after receiving a request from the Secretary,
- 14 the Secretary of State shall recommend to the Secretary
- 15 any conditions for a license issued under title II, consist-
- 16 ent with this Act, that the Secretary of State determines
- 17 are needed to meet international obligations of the United
- 18 States. The Secretary of State shall concurrently transmit
- 19 such recommendation to the Committee on Science of the
- 20 House of Representatives and the Committee on Com-
- 21 merce, Science, and Transportation of the Senate. If no

- 1 such recommendation has been received by the Secretary
- 2 within such 60-day period, the Secretary shall deem activi-
- 3 ties proposed in the license application to be consistent
- 4 with the international obligations and policies of the Unit-
- 5 ed States.
- 6 "(2) Appropriate United States Government agencies
- 7 are authorized and encouraged to provide to developing
- 8 nations, as a component of international aid, resources for
- 9 purchasing remote sensing data, training, and analysis
- 10 from United States commercial providers."; and
- 11 (C) in subsection (d), by striking "Sec-
- retary may require" and inserting in lieu there-
- of "Secretary shall, where appropriate, re-
- 14 quire".

15 SEC. 202. ACQUISITION OF EARTH REMOTE SENSING DATA.

- 16 (a) Acquisition.—To the maximum extent possible,
- 17 while fully satisfying the National Aeronautics and Space
- 18 Administration's scientific requirements, the Adminis-
- 19 trator shall, where cost effective, acquire space-based and
- 20 airborne Earth remote sensing data, services, distribution,
- 21 and applications provided by the United States private

- 1 sector to meet Government goals for Mission to Planet
- 2 Earth.
- 3 (b) Study.—(1) The Administrator shall conduct a
- 4 study to determine the extent to which the baseline sci-
- 5 entific requirements of Mission to Planet Earth can be
- 6 met by the private sector, and how the National Aero-
- 7 nautics and Space Administration will meet such require-
- 8 ments which cannot be met by the private sector.
- 9 (2) The study conducted under this subsection
- 10 shall—
- 11 (A) make recommendations to promote the
- availability of information from the National Aero-
- nautics and Space Administration to the private sec-
- tor to enable the private sector to better meet the
- baseline scientific requirements of Mission to Planet
- 16 Earth;
- 17 (B) make recommendations to promote the dis-
- semination to the private sector of information on
- advanced technology research and development per-
- 20 formed by or for the National Aeronautics and
- 21 Space Administration; and

1	(C) identify policy, regulatory, and legislative
2	barriers to the implementation of the recommenda-
3	tions made under this subsection.
4	(3) The results of the study conducted under this
5	subsection shall be transmitted to the Congress within 6
6	months after the date of the enactment of this Act.
7	(c) Administration.—This section shall be carried
8	out as part of the Commercial Remote Sensing Program
9	at the Stennis Space Center.
10	TITLE III—FEDERAL ACQUISI-
	TITLE III—FEDERAL ACQUISITION OF SPACE TRANSPOR-
10	
10 11	TION OF SPACE TRANSPOR-
101112	TION OF SPACE TRANSPOR- TATION SERVICES
10111213	TION OF SPACE TRANSPORTATION SERVICES SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL
10 11 12 13 14	TION OF SPACE TRANSPORTATION SERVICES SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL SPACE TRANSPORTATION SERVICES.
101112131415	TION OF SPACE TRANSPORTATION SERVICES SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL SPACE TRANSPORTATION SERVICES. (a) IN GENERAL.—Except as otherwise provided in
10111213141516	TION OF SPACE TRANSPORTATION SERVICES SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL SPACE TRANSPORTATION SERVICES. (a) IN GENERAL.—Except as otherwise provided in this section, the Federal Government shall acquire space
1011121314151617	TION OF SPACE TRANSPORTATION SERVICES SEC. 301. REQUIREMENT TO PROCURE COMMERCIAL SPACE TRANSPORTATION SERVICES. (a) IN GENERAL.—Except as otherwise provided in this section, the Federal Government shall acquire space transportation services from United States commercial

1	commodate the space transportation services capabilities
2	of United States commercial providers.
3	(b) Exceptions.—(1) The Federal Government shall
4	not be required to acquire space transportation services
5	under subsection (a) if, on a case-by-case basis, the Ad-
6	ministrator or, in the case of a national security issue,
7	the Secretary of Defense, determines that—
8	(A) a payload requires the unique capabilities of
9	the space shuttle;
10	(B) space transportation services that meet spe-
11	cific mission requirements would not be reasonably
12	available from United States commercial providers
13	when required;
14	(C) the use of space transportation services
15	from United States commercial providers poses an
16	unacceptable risk of loss of a unique scientific oppor-
17	tunity;
18	(D) the use of space transportation services
19	from United States commercial providers poses an

unacceptable risk to national security objectives; or

1	(E) it is more cost effective to transport a pay-
2	load in conjunction with a test or demonstration of
3	a space transportation vehicle owned by the Federal
4	Government.
5	(2) Determinations under paragraph (1) shall be
6	made by the Administrator or the Secretary of Defense,
7	and shall not be delegated. Each such determination shall
8	be reported in writing to the Committee on Science and
9	other appropriate committees of the House of Representa-
10	tives, and to the Committee on Commerce, Science, and
11	Transportation and other appropriate committees of the
12	Senate, at least 120 days before the acquisition or provi-
13	sion of space transportation services from or by a source
14	other than United States commercial providers.
15	(c) Partnerships.—The acquisition of space trans-
16	portation services in connection with a payload with re-
17	spect to which the Federal Government has provided a

greater amount of the funding required for construction

and operation than any other source, shall be subject to

20 the requirements of this section.

- 1 (d) Delayed Effect.—Subsections (a) and (c)
- 2 shall not apply to space transportation services and space
- 3 transportation vehicles acquired or owned by the Federal
- 4 Government before the date of the enactment of this Act,
- 5 or with respect to which a contract for such acquisition
- 6 or ownership has been entered into before such date.
- 7 (e) Historical Purposes.—This section shall not
- 8 be construed to prohibit the Federal Government from ac-
- 9 quiring, owning, or maintaining space transportation vehi-
- 10 cles solely for historical display purposes.
- 11 SEC. 302. ACQUISITION OF SPACE TRANSPORTATION SERV-
- 12 **ICES.**
- 13 (a) Competitive Bidding.—(1) Contracts for the
- 14 acquisition of space transportation services by the Federal
- 15 Government shall be awarded subject to applicable Fed-
- 16 eral law requiring full, fair, and open competition, includ-
- 17 ing section 2304 of title 10, United States Code, and sec-
- 18 tion 311 of the National Aeronautics and Space Act of
- 19 1958 (42 U.S.C. 2459c).
- 20 (2) Bidders for a contract for the acquisition by the
- 21 Federal Government of space transportation services shall

- 1 not be required to provide cost data for the purpose of
- 2 supporting such a bid or fulfilling such a contract, except
- 3 in cases where only one credible bid meeting the require-
- 4 ments of the solicitation is received.
- 5 (b) Specification Systems.—Reasonable perform-
- 6 ance specifications, rather than design or construction
- 7 specifications, shall be used to the maximum extent fea-
- 8 sible to define requirements for United States commercial
- 9 providers bidding to provide or providing space transpor-
- 10 tation services to the Federal Government. This subsection
- 11 shall not be construed to prohibit the Federal Government
- 12 from requiring compliance with applicable safety stand-
- 13 ards.
- 14 SEC. 303. LAUNCH SERVICES PURCHASE ACT OF 1990
- 15 AMENDMENTS.
- The Launch Services Purchase Act of 1990 (42)
- 17 U.S.C. 2465b et seq.) is amended—
- 18 (1) by striking section 202;
- 19 (2) in section 203—
- 20 (A) by striking paragraphs (1) and (2);
- 21 and

1	(B) by redesignating paragraphs (3) and			
2	(4) as paragraphs (1) and (2), respectively;			
3	(3) by striking sections 204 and 205; and			
4	(4) in section 206—			
5	(A) by striking "(a) Commercial Pay-			
6	LOADS ON THE SPACE SHUTTLE.—"; and			
7	(B) by striking subsection (b).			
8	SEC. 304. USE OF EXCESS INTERCONTINENTAL BALLIST			
9	MISSILES.			
10	(a) In General.—The Federal Government shall			
11	not—			
12	(1) convert any missile described in subsection			
13	(d) to a space transportation vehicle configuration of			
14	otherwise use any such missile to place a payload in			
15	space; or			
16	(2) transfer ownership of any such missile to			
17	another person,			
18	except as provided in subsection (b) or (c).			
19	(b) Authorized Federal Uses.—(1) A missile de			
20	scribed in subsection (d) may be converted for use as			

1	space transportation vehicle by the Federal Government		
2	if—		
3	(A) except as provided in paragraph (2), at		
4	least 120 days before such conversion the agency		
5	seeking to use the missile as a space transportation		
6	vehicle transmits to the Committee on National Se		
7	curity and the Committee on Science of the House		
8	of Representatives, and to the Committee on Armed		
9	Services and the Committee on Commerce, Science,		
10	and Transportation of the Senate, a report that con		
11	tains—		
12	(i) a certification that the use of such mis-		
13	sile—		
14	(I) would result in significant cost		
15	savings to the Federal Government when		
16	compared to the cost of acquiring space		
17	transportation services from United States		
18	commercial providers; and		
19	(II) meets all mission requirements of		
20	the agency, including performance, sched-		
21	ule, and risk requirements; and		

1	(11) comments obtained from United States			
2	commercial providers in response to prior public			
3	notice published in the Commerce Business			
4	Daily;			
5	(B) the use of such missile is consistent with			
6	international obligations of the United States; and			
7	(C) the Secretary of Defense approves of such			
8	conversion.			
9	(2) The requirement under paragraph (1)(A) that the			
10	report described in that subparagraph must be transmit			
11	ted at least 120 days before conversion of the missile shall			
12	not apply if the Secretary of Defense determines that com-			
13	pliance with that requirement would be inconsistent with			
14	meeting immediate national security requirements.			
15	(c) Authorized Educational Uses.—(1) A mis-			
16	sile described in subsection (d) may be made available for			
17	launching a payload owned and operated by an institution			
18	of higher education for research or education purposes			
19	if—			

1	(A) the payload has no functions that will com-			
2	pete with commercial applications available from			
3	United States commercial providers;			
4	(B) the cost of converting and using the missil-			
5	for such purpose is less than 50 percent of the price			
6	United States commercial providers would charge for			
7	such purpose;			
8	(C) the institution of higher education will pay			
9	the costs of such conversion and launch;			
10	(D) such conversion and launch will be con-			
11	ducted by the institution of higher education or			
12	United States commercial provider; and			
13	(E) the Secretary of Defense approves of suc			
14	conversion and use.			
15	(2) For purposes of this subsection, the term "insti-			
16	tution of higher education" has the meaning given such			
17	term in section 1201(a) of the Higher Education Act of			
18	1965.			
19	(d) Missiles Referred to.—The missiles referred			
20	to in this section are missiles owned by the United States			
21	that were formerly used by the Department of Defense			

- 1 for national defense purposes as intercontinental ballistic
- 2 missiles and that have been retired from service in compli-
- 3 ance with international obligations of the United States.

 \bigcirc

Mr. Brown. Thank you very much, Mr. Chairman. I will make a few brief remarks.

As many of you know, the promotion of a vital and robust commercial space sector has long been a bipartisan objective of the Science Committee. The Chair knows that we've worked together on trying to accomplish this over most of the last two decades. Members, over the years, have shared the belief that we can now begin to capitalize on our past federal investments in the space programs, and look to the private sector to play an increasingly important role. Commercial space activities offer the potential to make a significant contribution to the nation's economic health. One need only look at the multibillion satellite communication industry for a validation of that belief.

From the first limited experiments in communicating by satellite that occurred at the dawn of the space age, we have reached the point at which communication satellites are an integral element of the world's telecommunication infrastructure. The future looks equally exciting, with the prospect of communication satellite constellations offering the promise of the ability to communicate from anywhere to anywhere in the world.

We can take pride in the fact that as a result of wise policy decisions in the 1960s, American companies have achieved a position of dominance in the fast-growing satellite communication market. Now, another space-related industry—commercial remote sensing—seems poised for a similar explosion of activity, in part due to policies enacted by this Committee in the 1980s and early 1990s.

I believe that the legislation before us today, while relatively modest in scope, will continue the bipartisan effort to help ensure the health and growth of the nation's commercial space sector. It updates several provisions of the Land Remote Sensing Act of 1992, and the Commercial Space Launch Act. It also codifies Administration policies on the Global Positioning System, and on the use of excess ballistic missile assets.

Chairman Walker and I will offer a joint amendment to H.R. 3936 that is intended to fix some minor problems with the legislation as introduced. One area of concern not addressed in the joint amendment is the need to ensure that sufficient cost data are available to the Government to evaluate potential data purchase agreement. It's my understanding that this issue will be resolved as part of our discussions with the Government Reform Committee on conforming the bill's provisions to those of existing law. Once the Committees have reached final agreement on H.R. 3936, I believe that the resulting legislation will represent a constructive

step in Congress's continuing efforts to nurture this still-evolving sector of our economy. And that concludes my remarks.

The CHAIRMAN. Thank you, Mr. Brown. Mr. Sensenbrenner, any

kind of opening statement?

Mr. Sensenbrenner. Mr. Chairman, in the interest of saving time, I'm going to ask unanimous consent that my opening statement appear in full in this part of the record.

The CHAIRMAN. Without objection.

Mr. Sensenbrenner. I will just state that both Mr. Hall and I have sent a letter to the Chairman, asking that this bill be discharged from our Subcommittee, so that we can consider it today, because we do think it's important to try to get it passed before we adjourn. I believe we both think that it is not an impossibility.

With that, I'll yield back the balance of my time.

The CHAIRMAN. Thank you, Mr. Sensenbrenner. Mr. Hall, an opening statement?

Mr. HALL. In the interest of time, I waive my opening statement,

and I'll have the statement put in the record.

[The opening statements of Mr. Sensenbrenner and Mr. Hall follow:]

OPENING REMARKS

THE HONORABLE F. JAMES SENSENBRENNER, JR.

CHAIRMAN, SUBCOMMITTEE ON SPACE AND AERONAUTICS

Markup: H.R 3936

September 11, 1996

Earlier this week, the gentleman from Texas and I sent the Chairman a letter discharging H.R. 3936, the Space Commercialization Promotion Act of 1996, from the Subcommittee on Space and Aeronautics to the Committee on Science for markup. We discharged the bill for two reasons. First, we do not have much time left in the legislative year and wanted to move this bill forward quickly. Second, members from both sides of the aisle have had months to consider the various provisions of this bill in draft form, and we've been working well together to resolve any outstanding issues in the manager's amendment. We've been able to do that because I think that we all agree commercial space development is important to our nation's future in space.

In 1994, commercial space activity generated some \$6.3 billion in revenues. Last year, that figure reached nearly \$7.5 billion. This is a growing industry which proves that American competitiveness flourishes when government gives entrepreneurs the chance to create business, employ people, and make a better product.

For most of the space age, federally researched and developed technology was more advanced than anything that existed in the private sector. In many ways, NASA and the Defense Department drove our space capabilities and defined the limits of the possible. We talked about spin-offs as the main economic benefit of our national space program. If the government couldn't accomplish something in space; many thought it couldn't be done. For about the last ten years, there has been a subtle, but significant reversal of roles in the development of new technology.

Now, it has become apparent that in many sectors of the economy, the private sector creates, applies, and integrates new technology faster than the government. Today, we talk about spin-ons instead of spin-offs. This development has several advantages. It means that the government can acquire new technologies at a much lower cost, because federal laboratories don't have to invent them from scratch. It means that we can focus our federal research and development dollars on those things that the private sector can't or won't create. This is part of the reason that the development of a healthy commercial space industry is so important to our future. Not only does this industry provide jobs and promote economic growth, it can also create new space capabilities that will help the government lower its costs and

focus more narrowly on those things that governments do best in space: exploring the solar system, studying the universe, and understanding our environment.

So, I hope that we can pass this bill quickly and remain committed to it until the

So, I hope that we can pass this bill quickly and remain committed to it until the President signs it into law. This is something that I think we all agree is in the best interest of this nation and our future in space.

OPENING STATEMENT

BY

HON. RALPH M. HALL

Markup of H.R. 3936

September 11, 1996

Good afternoon. In the interests of proceeding to the business at hand, I will limit myself to a few brief remarks. As I noted at our recent hearing on H.R. 3936, Members on both sides of the aisle share an interest in doing what we can to help develop a healthy commercial space sector.

It is a fact that government and the private sector have worked together in the past to help make the United States a world leader in aviation, in satellite communications, and a number of other high technology areas. I believe that similar economic growth can occur in commercial remote sensing, commercial space launch services, and other space-related activities in the future if we adopt sensible policies to encourage those activities.

At the same time, we have to ensure that the interests of the American taxpayer are protected in whatever policies we adopt. I am confident that today's markup can result in a bill that makes constructive improvements to existing legislation while recognizing the legitimate interests of both the government and the private sector.

recognizing the legitimate interests of both the government and the private sector. Finally, I would like to note that my agreement to discharge H.R. 3936 from the Subcommittee without a markup does not mean that I don't believe that Subcommittee consideration of this legislation is important. Instead, I recognize that there are only a handful of legislative days left in which to markup this legislation, and I am willing to waive Subcommittee consideration to allow consideration by the Full Committee.

Thank you.

The CHAIRMAN. Thank you very much. I appreciate your cooperation in getting us to this point, as well. I would ask unanimous consent that all members be permitted to enter opening remarks into the record at this point, so that they can have their remarks appear as a part of the opening statements here.

[The opening statements of Mr. Rohrabacher, Mr. Weldon and Mr. Stockman follow:]

Mr. Rohrabacher's statement to Full Committee Mark-up of 1996 Space Commercialization Promotion Act on 9/9/96

Mr. Chairman, I want to take this opportunity to thank you, not just for sponsoring this excellent legislation, but for your long and tireless work to advance the commercialization of the space frontier.

This is another in a long line of Omnibus Space Commercialization bills that Mr. Walker has introduced over the years. Indeed, many of the ideas in those prior bills were passed into law under the leadership of Mr. Brown.

While this Committee may have had its partisan differences, the managers' amendment makes this bill a fully bipartisan initiative which should easily pass the House and could pass the Senate before the end of this Congress.

To that end I would just like to ask all of my colleagues here, on both sides of the aisle, to contact their friends in the other body to request their support for a prompt, unanimous consent passage of this bill. That, followed by a Presidential signature, is the least that this last Bob Walker omnibus space commercialization bill deserves.

In closing, let me just say to my friend and mentor from Pennsylvania that we will miss your energy, your wit, and your vision. And we will work hard to build on the legacy you have left us.

OPENING STATEMENT OF CONGRESSMAN DAVE WELDON (FL-15)

I thank the Chairmen of the Subcommittee and the full Committee for bringing this bill before the full Committee today.

This is legislation that other members of the Committee and I have been working on for more than a year. I believe it is important for ensuring and restoring the vitality of our commercial space sector. With increased competition from international competitors, this legislation will serve our commercial sector well.

I have been very concerned for more than a year about the slow pace shown by the Office of Commercial Space Transportation (OCST) in issuing regulations for commercial spaceports. I am pleased that OCST seems to be moving forward, finally, and has had recent fruitful negotiations with the Florida Spaceport Authority. The Florida Spaceport Authority is just one year away from its first commercial launch and just this week received a firm commitment from Lockheed/Martin for its October 9, 1997 launch. The Spaceport will begin processing for the launch on July 1, 1997.

I am also pleased that the bill includes language I have asked for that will ensure that the National Aeronautics and Space Administration (NASA) is able to ensure that critical shuttle safety civil service employees are able to transfer over to the new single prime contractor for the Space Shuttle program. This language will ensure that critical civil service safety personnel are retained in the Space Shuttle program.

OPENING STATEMENT

вv

HON. STEVE STOCKMAN

SPACE COMMERCIALIZATION ACT OF 1996

September 11, 1996

I am delighted to participate today in this mark-up of the Space Commercialization Promotion Act of 1996. I look forward to advancing this vitally important and timely legislation.

With a few notable exceptions, the space endeavor to date has been a government activity. While NASA has done a tremendous job, many aspects of the space program naturally evolve to a point where they can be best accomplished by commercial entities. That time is now for a number of space activities.

This evolution is in step with the current fiscal situation in our nation. For years NASA has courageously endured large cuts in funding. Though many of us argue that we have already cut more than enough, the reality of the budget morass will very likely keep NASA's funding constrained for several more years to come. Therefore the importance of growing commercial activities and entrepreneurship in space cannot be overemphasized.

This legislation will attempt to advance the evolution already begun in the way that business is undertaken by the aerospace industry. Companies that are quickest to recognize these fundamental changes facing the industry will be tomorrow's big winners. Conversely, companies that continue to operate in the conventional mold will become marginalized or may not survive at all. Tomorrow's leaders in the industry will be those who will be willing to grasp the opportunities these changes represent and position themselves to capture the cutting edge of new commercial opportunities in all segments of the space endeavor.

NASA has already received its wake-up call. NASA has agreed to re-focus its energy to become the premier enabling research and development (R&D) agency in government. To succeed in that task, NASA has committed itself to the purchasing of as many goods and services from the commercial sector as possible in fulfilling its mission. Companies that think ahead and act decisively will capture this evolving marketplace. But they will also do more, for through their actions they will continue and strengthen the routine commercialization of near Earth orbit. The goal of this important legislation is to help such bold entrepreneurs succeed.

Mr. MINGE. Mr. Chairman, I have a question.

The CHAIRMAN. The gentleman will state the question.

Mr. MINGE. I notice that there is a Section 201 and 202 of the bill that deals with remote sensing. We have had discussion and

even a hearing in this Committee on global positioning satellites and the use of that technology in the private sector in this country.

We had the CIA representative, DOD, and others here.

Is there anyone who could explain whether or not this legislation actually advances one of the things we have talked about in the Committee, and that is, making that technology available in the private sector without the need for—without the scrambling of the signal which is currently being done?

[Pause.]

The Chairman. You're talking about Section 201, is that correct? Mr. MINGE. 201 and 202, I notice, deal with remote sensing, and the GPS issue has been before the Committee. And I did not know if this bill-

The Chairman. The GPS situation is that GPS is addressed in Section 105.

Mr. MINGE. Okay.

The Chairman. There we are attempting to set standards that would reflect the American standard for GPS. Now, on remote sensing, that's a different topic, addressed, as you've pointed out correctly, in Section 201 and 202, I believe.

Mr. MINGE. I guess my question is, are we actually making the GPS system available to the private sector in an unscrambled version, so that its accuracy and utilization is not as expensive as it

currently is for the private sector?

The CHAIRMAN. Well, because—we think that that's what we're doing. You'll notice that one of the things that we are trying to do in terms of the international community, is on page 28. We're trying to ensure the operation of the Global Positioning System on a continuous, worldwide basis, free of direct user fees.

Mr. Minge. It was the scrambling of the signal at the request of

the CIA and the DOD.

The Chairman. But we cannot address the scrambling of the signal issue, because that's a DOD issue, not one that we can address in this Committee. It's outside of our jurisdiction. That would have to be done as a part of the Defense Committee's or the National Security Committee's jurisdiction.

We purposefully designed this bill—and former Chairman Brown describes it very well in suggesting that this is a fairly modest bill. But it's a fairly modest bill, in large part because we've kept it within the jurisdiction of this Committee.

We've done everything that we think was in the jurisdiction of this Committee. We have some problems with the Government Reform Committee in trying to work out some procurement language. We've worked with them. We think that that's all going to be done. But we have tried to keep this bill centered upon the jurisdictional scope of this particular Committee.

Mr. Minge. I'd like to simply make a statement for the record. I recognize that the Chairman is a strong advocate of this Committee, and I know that if he felt that this Committee had jurisdiction or could have jurisdiction, he would certainly have asserted it.

Having said that, I'd like to make it clear that not only this Committee, but Congress certainly has a strong interest in promoting the availability of GPS technology in the private sector, and that we strongly encourage our fellow Committees in this body, as well as the relevant federal agencies, to minimize the scrambling of those signals so that we reduce the cost to the private sector in using that technology. Thank you.

The CHAIRMAN. Well, I thank the gentleman. That is certainly the intent of the language that is in the bill with regard to GPS, but we cannot directly act on the specific issue that he talks about.

Well, we will now consider H.R. 3936, The Space Commercialization Promotion Act of 1996.

The bill, at this point, will be open for amendments. Are there amendments to the bill?

The first Amendment that we will offer will be the Manager's Amendment, offered by myself and by Mr. Brown.

[The text of the amendment follows:]

AMENDMENTS TO H.R. 3936

OFFERED BY MR. WALKER AND MR. BROWN

Page 2, in the table of contents, amend the item relating to section 104 to read as follows:

Sec. 104. Launch voucher demonstration program.

Page 3, line 24, insert "and" after "the United States;".

Page 4, lines 1 through 5, strike paragraph (8).

Page 4, line 6, strike "(9)" and insert in lieu thereof "(8)".

Page 6, lines 7 through 15, strike "The Congress further" and all that follows through "to fund operations." and insert in lieu thereof "The Congress further

declares that free and competitive markets create the most efficient conditions for promoting economic development, and should therefore govern the economic development of Earth orbital space. The Congress further declares that free market principles should be used in operating and adding capabilities to the Space Station whenever possible.".

Page 7, after line 15, strike the item relating to section 70122.

Page 20, line 19, strike "and".

Page 20, after line 19, insert the following new paragraph:

- 1 "(4) procedures for requesting and obtaining
- 2 launch site or reentry site operator licenses; and

Page 20, line 20, strike "(4)" and insert in lieu thereof "(5)".

Page 21, line 10, through page 22, line 16, strike section 70122.

Page 23, lines 3 through 6, strike "a single prime contract" and all that follows through "streamlining activities" and insert in lieu thereof "the Space Flight Operations Contract for the Space Shuttle".

Page 23, lines 9 through 11, strike "served in a position of authority with respect to the selection of the organization with which the employee seeks employment for an award" and insert in lieu thereof "was actively and significantly involved in the selection of the entity that is awarded the Space Flight Operations Contract for the Space Shuttle".

Page 23, line 12, through page 27, line 9, amend section 104 to read as follows:

1 SEC. 104. LAUNCH VOUCHER DEMONSTRATION PROGRAM.

- 2 Section 504 of the National Aeronautics and Space
- 3 Administration Authorization Act, Fiscal Year 1993 (15
- 4 U.S.C. 5803) is amended—
- 5 (1) in subsection (a)—
- 6 (A) by striking "the Office of Commercial
- 7 Programs within"; and

1	(B) by striking "Such program shall not				
2	be effective after September 30, 1995.";				
3	(2) by striking subsection (c); and				
4	(3) by redesignating subsections (d) and (e) as				
5	subsections (c) and (d), respectively.				

Page 28, line 8, strike "fully".

Page 28, line 23, insert ", except in cases where only one credible bid meeting the requirements of the solicitation is received" after "of the contract".

Page 29, after line 10, insert the following new subsection:

- 6 (c) Limitation.—This section does not authorize the
- 7 National Aeronautics and Space Administration to provide
- 8 financial assistance for the development of systems for the
- 9 collection of space science data.

Page 32, line 6, strike "indicates" and insert in lieu thereof "is in".

Page 33, line 4, strike "and at prevailing market prices".

Page 34, lines 7 through 9, amend paragraph (7) to read as follows:

- 1 (7) in section 205(c) (15 U.S.C. 5625(c)), by
 2 striking "if such remote sensing space system is li3 censed by the Secretary before commencing oper4 ation" and inserting in lieu thereof "if such private
 5 remote sensing space system will be licensed by the
 6 Secretary before commencing its commercial oper7 ation";
- Page 35, line 12, insert ", unless such activities would result in significant cost savings to the Federal Government" after "the commercial sector".

Page 37, lines 13 through 15, strike "In no event shall such a fee be required in an amount greater than \$5,000 per ground station.".

Page 38, lines 6 through 10, strike "The Secretary of Defense" and all that follows through "of the Senate.".

Page 39, lines 5 through 8, strike "The Secretary of State" and all that follows through "of the Senate.".

Page 39, line 25, strike "fully".

Page 42, lines 14 and 15, strike "poses an unacceptable risk to" and insert in lieu thereof "is inconsistent with".

Page 42, line 21, through page 43, line 4, strike "Defense, and shall not" and all that follows through "commercial providers." and insert in lieu thereof "the Air Force.".

Page 45, line 15, strike "(d)" and insert in lieu thereof "(c)".

Page 45, line 20, strike "or (c)".

Page 45, line 22, strike "(d)" and insert in lieu thereof "(c)".

Page 47, line 9, through page 48, line 6, strike subsection (c).

Page 48, line 7, redesignate subsection (d) as subsection (c).

The CHAIRMAN. These are several changes to the original text of the bill that were worked out jointly between my staff and Mr. Brown's staff. We deal with this bill as a way of updating the law as it was since 1988.

Several things have changed since then, including the need to license re-entry vehicles. We think that the corrections that are made here speak to a number of concerns that Mr. Brown and his staff raised in the course of our deliberations, and that it is an amendment that clarifies the bill and strengthens the bill, and I would urge its adoption.

Mr. Brown. Mr. Chairman? The CHAIRMAN. Mr. Brown?

Mr. Brown. May I just add that you've correctly reflected the circumstances. These amendments, which I'm not in a position to spell out in detail, were looked at very thoroughly by the staffs on both sides, in consultation with NASA. They feel, and we agree with them, that they constitute an improvement in the bill, and I recommend very strongly that we adopt them.

The CHAIRMAN. I thank you, Mr. Brown. Mr. Rohrabacher?

Mr. Rohrabacher. Mr. Chairman, I want to take this opportunity to thank you, and not just for sponsoring this legislation, but also for your tireless work over the years to advance space commercialization. This is another in a long line of omnibus space commercialization bills that you, Mr. Walker, have introduced over the years.

Many of the ideas in those prior bills, I might add, were passed into law under the leadership of Mr. Brown, showing that this truly is a bipartisan effort. While this Committee may have had its partisan differences, the Manager's Amendment makes this bill, again, a full bipartisan initiative which should easily pass the House, and hopefully can pass the Senate.

To that end, I would like to join you in asking my colleagues on both sides of the aisle to contact their friends in the other body to request their support for a prompt and unanimous consent passage of this bill. And basically, if we could follow that with the President's signature, I believe this would be basically a tribute to you, Mr. Walker, and the efforts that you've put out over the years.

One closing note is that you will be missed, and I appreciate the time and effort that you've put in. I appreciate the direction you've given to me as an individual member of this Committee. So, thank you very much. I would hope that all of us support this amendment, and help get the bill passed through the House and the Senate.

The CHAIRMAN. Thank you, Mr. Rohrabacher. I appreciate that. Anybody else with a—Mr. Volkmer?

Mr. VOLKMER. I thank the Chairman for recognizing me. It's good—I support the amendment. And it's apparent to me that the amendment is necessary in order to correct some deficiencies within the bill.

What I'm more concerned about is—and as we're getting to the last of the session, perhaps I could address myself to another person other than the Chairman. My concern is, I look at the sponsors of the bill, and I don't see any bipartisanship here at all.

This is basically a continuation of what I have lived and the rest of us have lived through for about 20 months now. I have inquired as to who on this side actually helped work on the bill, and I find very little participation.

I do find that within the bill there are ideas and concepts that originated not just within this bill, but years ago, several years

ago, and have been developed down through the times.

I would hope that whoever is in the Majority in the next Congress—and I'll address my remarks to the gentleman from Wisconsin, because I have worked with him in the past—hopefully in the future, we will continue to see what we saw before this Congress, and that is an attempt, at least, to develop legislation on a bipartisan fashion.

I think it's better for everybody to do so.

I vield back.

The CHAIRMAN. Thank you, Mr. Volkmer.

Mr. Volkmer, this bill was shopped to virtually every member of the Committee, Democrats and Republicans. We attempted to get Democratic cosponsors. We did work with Mr. Brown in developing the amendment that we're offering today as a way of making the bill into a bipartisan bill.

But this was not done as a partisan exercise. We attempted to get a bill written, but the fact is that every member of this Committee was contacted, was given a copy of the bill, was asked to cosponsor, was asked for suggestions about the bill.

And so there was an attempt, on a very broad basis, to try to

make this into a bipartisan effort.

And I'm happy that we were able to work it out in a way with Mr. Brown that we addressed those concerns through the Manager's Amendment. That's the reason why you have a bipartisan Manager's Amendment before you.

Are there other comments on the Manager's Amendment?

Mr. Baker?

Mr. Baker. I'd just like to add on to that.

As one of the cosponsors—and I know Mrs. Seastrand is—I'm very honored that this bill is going to go out today, because I can stop hearing from all the people at Vandenberg Air Force Base. It's now in space commercialization in the private sector who want to promote space commercialization.

This bill gives us the ground rules and the assistance we need to continue supporting this program. Mrs. Seastrand's district has a base that is into space commercialization.

They spend half their time in my office and half the time in her office, so I'm thrilled that it's going on the floor and out of here today.

The CHAIRMAN. Are there any other members who wish to be recognized?

[No response.]

The CHAIRMAN. If not, the Chair will put the question on the Manager's Amendment.

All those in favor will say aye.

[Chorus of ayes]

The CHAIRMAN. Those opposed will say no.

[No response.]

The CHAIRMAN. The ayes have it, and the amendment is agreed to.

Are there further amendments?

Mr. Brown. Mr. Chairman?

The CHAIRMAN. Mr. Brown?

Mr. Brown. Mr. Chairman, in an effort to achieve the goal which you have announced, and Mr. Rohrabacher has indicated is highly desirable, of moving this through the Senate by unanimous consent, I have an amendment which I would like to have distributed at this point.

The Chairman. The Clerk will report the Amendment.

The CLERK. Amendment offered by Mr. Brown to H.R. 3936. On page 41, line 8, delete, quote, 'as part of', quote, and insert in lieu thereof, 'in close coordination with.'

Mr. Brown. If I may explain the amendment, Mr. Chairman?

The CHAIRMAN. The gentleman is recognized.

Mr. Brown. I think most of us know that the bulk of the remote sensing activity at the present time, and a lot of the other material related to the GPS systems and so forth, is centered at Goddard Center in Maryland. Of course, some of it is and will continue to be reassigned to other centers. But the language here almost preempts for the Stennis Space Center, the activities contained in this particular section of the bill, which is basically a report with regard to the acquisition of remote sensing data.

The problem here is very simple. We have two very wonderful Senators from Mississippi, both of whom are good friends of mine, who are going to try to carry on the ancient tradition that the former Chairman of the Appropriations Committee was so excellent at, Jamie Whitten of Mississippi, in putting all the space programs

that they could into Mississippi.

Now, I don't particularly object to making full use of Mississippi and all of its great talents, including the talents of its two great Senators. But I think that there might be a problem with some other Senators who would not feel quite the same way about preempting all of this work for the Stennis Space Center.

So my amendment is quite simple. It says that this will be done in close cooperation with Stennis, but not necessarily as a part of

their program, taking it away from the Goddard Center.

The CHAIRMAN. I think the gentleman makes a very useful point. But one of dilemmas we have here is the fact that in the commercial bill, the commercial activities have largely been at Stennis; that's where they're headquartered, and that Goddard has tended to freeze out that when we have been dealing with them on other issues. And so this was an attempt to try to get it—

Let me ask the gentleman, could we perhaps substitute language that would say something to the effect of—that would say, instead of the language which is in the bill, and instead of what the gentleman is talking about, that would say something like, would be carried out with the commercial remote sensing program at the Stennis Space Center, as the lead, working in close cooperation with other centers of NASA?

Or even—I can even take out the words, as a the lead. What I'm trying to do is make certain that they have an obligation, if NASA decides it's going to go to Goddard, that they have an obligation to work with the people at Stennis, and not freeze them out of this opportunity.

Mr. Brown. I feel sure that a good-faith effort could come up with some language similar to what you're suggesting. The Administrator currently objects to this language, and he might very well communicate his objection to others, and make it more difficult to get this bill passed.

I would not like to see that, because I really think the bill does

make some important contribution.

The CHAIRMAN. Well, I mean, if this is a problem—I'm not aware that the Administrator has communicated to me at the present time. He obviously has to you.

If this is a concern, I would be happy to get it worked out between now and the time we go to the floor with it on suspension, and try to work some language that would meet our concerns, as well as concerns that you rightfully express. Would that be satisfactory to the gentleman?

Mr. Brown. Having the utmost regard for the gentleman's concern about this, and complete trust in his ability to draft good amendments and make useful compromises, I would be satisfied.

The Chairman. Well, we'll obviously do it in consultation with you.

Is the gentleman prepared to withdraw the amendment, then, at this time?

Mr. Brown. At this point, I'm prepared to withdraw the amendment.

The CHAIRMAN. And we understand it's being withdrawn on the assumption, and on my promise that this language will be changed, and that we will work with the gentleman to try to find appropriate language.

Mr. VOLKMER. Would the Chairman yield on that? Or, who has the time?

The CHAIRMAN. I'd be happy to yield to the gentleman from Missouri.

Mr. VOLKMER. Is it understood that the changes that will be agreeable to the gentleman from California and the gentleman from Pennsylvania will be made before the bill is taken up on the floor of the House?

The Chairman. We anticipate, Mr. Volkmer, because of the need to work out the procurement provisions with the Government Reform Committee, that there will be an amendment offered as a part of bringing the bill to the floor, even under the Suspension Calendar.

What I would intend to do is include this compromise language as a part of that amendment that will be brought.

Mr. Volkmer. That's what I'm asking, that it be done before it comes on the floor.

The CHAIRMAN. Oh, absolutely. This will be—particularly if it comes up under suspension, it will all have been worked out.

Mr. VOLKMER. Fine.

The Chairman. Are there further amendments?

[No response.]

The CHAIRMAN. Hearing none, the question is on the bill, H.R. 3936, the Space Commercialization Promotion Act of 1996.

All those in favor will say aye.

[Chorus of ayes.]

The CHAIRMAN. The amendment has been withdrawn. This is on

Again, all those in favor will say aye.

[Chorus of ayes.]

The CHAIRMAN. Those opposed will say no.

[No response.]

The CHAIRMAN. In the opinion of the Chair, the ayes have it. The bill is approved.

Mr. Brown. Mr. Chairman? The CHAIRMAN. Mr. Brown?

Mr. Brown. I will make the usual motion that the Committee report the bill, H.R. 3936, The Space Commercialization Promotion Act of 1996, as amended. Furthermore, I move to instruct the staff to prepare the legislative report to make technical and conforming amendments, and that the Chairman take all necessary steps to bring the bill before the House for consideration.

And I also request the usual three calendar days in which to sub-

mit supplementary, Minority, or additional views.

The CHAIRMAN. The Committee has heard the motion. Those in favor will say aye. [Chorus of ayes.]

The CHAIRMAN. Those opposed will say no.

[No response.]

The CHAIRMAN. The ayes have it, and the motion is agreed to without objection.

COMMITTEE ON SCIENCE

FULL COMMITTEE MARKUP

Wednesday, September 11, 1996

12:00 noon-2318 RHOB

AMENDMENT ROSTER

H.R. 3936, Space Commercialization Promotion Act of 1996

- -Motion to adopt the bill as amended; agreed to by voice vote.
- -Motion to order the bill reported, as amended; agreed to by voice vote.

No.	Sponsor	Description	Results
1.	Walker/Brown	Managers' Amendment	Adopted by a voice vote

The CHAIRMAN. The motion to reconsider is laid upon the table. The Chair will recognize Mr. Davis for a motion.

Mr. DAVIS. Mr. Chairman, I would move, pursuant to Clause 1 of Rule 20 of the Rules of the House of Representatives, that the Committee authorize the Chairman to offer such motions as may be necessary in the House to go to conference with the Senate on the bill H.R. 3936, The Space Commercialization Promotion Act of 1996, or a similar Senate bill.

The CHAIRMAN. You have heard the motion. All those in favor will say aye.

[Chorus of ayes]

The CHAIRMAN. Those opposed say no.

[No response.]

The CHAIRMAN. The ayes have it. So moved.

Mr. Brown?

Mr. Brown. Mr. Chairman, a parliamentary inquiry. Is this, as far as you know, the last markup session of the Committee?

The CHAIRMAN. This, I think, will be the last time that we will do any markups. We have a couple more hearing scheduled that will feature, for instance, some discussion of the potential life on Mars and some actions of that type. So, I expect the full Committee will meet on a couple more occasions for hearings, but I do not anticipate an additional markup.

Mr. Brown. May I request unanimous consent to proceed for one minute out of order?

The CHAIRMAN. The gentleman is recognized.

Mr. Brown. If this is the last markup, then it marks another point of attention that we need to give to the service of the distinguished Chairman. This will be his last markup.

I would like to make note of that, and to indicate to him that this—we're reaching the end of 20 years of joint service which, despite its occasional ups and downs, I want to pay tribute to him for the fine work that he's done. It will be a historic occasion when he leaves this Committee.

He's contributed a point of view which, as I say, I don't always agree with, but it's reflected in the bill that we have before us today, a point of view that says that we have to maximize the opportunities for all the people of this country to participate in the

space program, and that this will be the strength of the American space program, in contrast to the space programs of another countries.

That's a marvelous contribution to make. It is my hope, of course, that in the process of commercializing space, that we would get the government enterprise to understand the point of view of the private sector, and the private sector to understand the point of view of the public sector, so that they could work together in common harness for the benefit of all the people of this country. I'm sure the Chairman shares that point of view. I recognize your contribution and commend you for it.

The CHAIRMAN. Well, thank you very much. I might say to you that we have spent 20 years working together on this Committee, and many people might be surprised along the way to understand that you have been one of the people who has mentored me along

the way.

I remember very well, back when I first started off as a relatively young member of this Committee, thinking that it would be fairly easy to get some things done with regard to commercial space, and that what we ought to do, for instance, I thought, was change the NASA charter for this.

You were walking over with me to a Committee meeting. We were meeting over at the Cannon building for some reason that day. You said to me on the way over, this is going to be a lot more difficult than you think. I thought, gee, I have a fairly simple little

change here.

And everybody on earth came out of the woodwork. NASA was out of the woodwork, the aerospace contractors were out of the woodwork and protesting this and so on. I remember that we walked back, and I said, well, you were absolutely right. I have a few things to learn along the way about who reacts to these things.

So, you have been a great friend and mentor along the way, and

I've appreciated the opportunity to work with you.

Mr. GORDON. Mr. Chairman, I'd like to concur with Mr. Brown's words, and wish you well.

The CHAIRMAN. Thank you, Mr. Gordon. I appreciate it.

With that, the Committee stands adjourned.

[Whereupon, at 12:40 p.m., the hearing was adjourned, to reconvene pursuant to the call of the Chair.]

XVI. COMMITTEE CORRESPONDENCE

COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT, Washington, DC, September 16, 1996.

The Honorable Newt Gingrich, The Speaker, H-232, The Capitol, U.S. House of Representatives, Washington, DC 20515

DEAR MR. SPEAKER:

I write to you with respect to H.R. 3936, the "Space Commercialization Promotion Act of 1996." This bill was introduced on August 1, 1996, and was referred to the Committee on Science, and in addition, to the Committee on Government Reform and Oversight.

The purpose of this bill is to encourage the development of a commercial space industry in the United States and for other purposes. In fulfilling its goals, the bill requires the Federal government to use certain procurement procedures for the purchase of certain space-related activities. Government procurement policy falls within the Rule X jurisdiction of this Committee.

The Committee on Government Reform and Oversight has reviewed H.R 3936 and, in order to expedite consideration of this measure in the House, waives its right to take up this bill. I therefore ask that the Committee be discharged from further consideration.

The Committee on Government Reform and Oversight wishes to make clear that the foregoing waiver should not be construed as a waiver of the Committee's jurisdiction with respect to any of the legislative provisions in H.R. 3936 that fall within its jurisdiction. The Committee also wishes to preserve its prerogatives with respect to any House-Senate conference on this bill and any Senate amendments thereto, including the appointment of an equal number of conferees to those appointed for any other House committee with respect to the provisions of H.R. 3936 which fall within this committee's jurisdiction.

Thank you for your attention to this matter. Sincerely,

WILLIAM F. CLINGER, JR., Chairman.

cc:

The Honorable Gerald B.H. Solomon

The Honorable Robert S. Walker

The Honorable Cardiss Collins

The Honorable George E. Brown, Jr.

The Honorable John Joseph Moakley

COMMITTEE ON COMMERCE, Washington, DC, September 17, 1996.

The Honorable Robert S. Walker, Chairman, Committee on Science, 2320 Rayburn House Office Building, Washington, DC 20515

DEAR MR. CHAIRMAN:

On September 11, 1996, your Committee ordered reported H.R. 3936, the "Space Commercialization Promotion Act of 1996." This measure contains two provisions, section 105, "Promotion of United States Global Positioning System Standards," and section 201, "Land Remote Sensing Policy Act of 1992 Amendments," that place new obligations on the FCC and change application of the fee structure as established in the Communications Act of 1934. These provisions are within the Rule X jurisdiction of the Committee on Commerce in the area of communications.

While I am concerned that this measure interferes with the statutory application of fees set by the Commerce Committee, I recognize your Committee's desire to bring this legislation expeditiously before the House. Therefore, I will not seek a sequential referral of the bill. However, by agreeing not to seek a sequential referral, this Committee does not waive its jurisdictional interest in those matters within the jurisdiction of the Commerce Committee. I would appreciate your support of my effort to seek conferees on all provisions of the bill that are within the Commerce Committee's jurisdiction during any House-Senate conference that may be convened on this legislation.

I would appreciate your including this letter as a part of the Science Committee's report on H.R. 3936, and as part of the record during consideration of this bill by the House.

Sincerely,

THOMAS J. BLILEY, JR., Chairman.

cc:

The Honorable George E. Brown, Jr. Ranking Minority Member Committee on Science
The Honorable John D. Dingell Ranking Minority Member Committee on Commerce

COMMITTEE ON SCIENCE, Washington, DC, September 17, 1996.

THE HONORABLE THOMAS BLILEY, Chairman, Committee on Commerce, U.S. House of Representatives, Washington, DC 20515

DEAR MR. CHAIRMAN:

DEAR MR. CHAIRMAN:
Thank you for your letter of September 17, 1996, regarding H.R. 3936, the "Space Commercialization Promotion Act of 1996."
We appreciate your Committee's assistance in expediting this measure and recognize your jurisdiction concerning the FCC provisions. Accordingly, we will support your efforts to seek conferees on these and any other provisions within the Commerce Committee's jurisdiction if a conference is convened on this legislation.

Sincerely,

ROBERT S. WALKER, Chairman.

 \bigcirc