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SENATE

Report 105–198

# COMMERCIAL SPACE ACT OF 1997

REPORT

OF THE

# COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

on

H.R. 1702



June 2, 1998.—Ordered to be printed

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#### ONE HUNDRED FIFTH CONGRESS

#### SECOND SESSION

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**SENATE** 

REPORT 105–198

## COMMERCIAL SPACE ACT OF 1997

June 2, 1998.—Ordered to be printed

Mr. McCain, from the Committee on Commerce, Science, and Transportation, submitted the following

## REPORT

[To accompany H.R. 1702]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (H.R. 1702) 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 in the nature of a substitute and recommends that the bill as amended do pass.

## PURPOSE OF THE BILL

H.R. 1702, as reported, would encourage the development of a commercial space industry in the United States by streamlining government regulatory procedures, by updating existing legislation to reflect recent technological developments, and by authorizing appropriations to the Department of Transportation (DOT) for the activities of the Federal Aviation Administration's Office of the Associate Administrator for Commercial Space Transportation totaling \$6,182,000 for fiscal year (FY) 1998, \$6,275,000 for FY 1999, and \$6,600,000 for FY 2000.

## BACKGROUND AND NEEDS

The Department of Commerce has estimated that revenue from commercial space activity in the United States totaled approximately \$7.5 billion in 1995. For more than a decade, commercial space businesses have grown faster than the economy and proven relatively recession-proof. This success comes despite the fact that commercial space ventures are particularly capital-intensive and often involve more risk than more traditional terrestrial businesses.

Congress has passed three laws intended to assist the commercial space launch services industry: the 1984 Commercial Space Launch Act (CSLA), the 1988 Commercial Space Launch Act Amendments, and the 1990 Launch Services Purchase Act. Congress also passed the Land Remote Sensing Policy Act of 1992, a law which enables the private sector to design, build, launch, and operate commercial remote sensing satellites. Congress continues to be interested in these issues, although no new laws, or signifi-

cant amendments, have been passed since 1992.

During the course of its first term, the Clinton Administration published a range of policy statements that continued the work of Presidents Reagan and Bush in establishing a stable business environment from which the commercial sector could create new space businesses and jobs. Those policy statements addressed such issues as space transportation, commercial remote sensing, and the Global Positioning System. Additionally, the President issued a new National Space Policy Statement on September 19, 1996 which reinforced the government's support of commercial space developments, noting that, "expanding U.S. commercial space activities will generate economic benefits for the Nation and provide the U.S. Government with an increasing range of space goods and services." The new policy statement also declared that support of commercial space activity would be undertaken without federal subsidies. The policy supports the position that the government's role is to create a stable and predictable environment in which the entrepreneurial spirit of American enterprise can succeed. It also states, "Commercial space sector activities shall be supervised or regulated only to the extent required by law, national security, international obligation and public safety.

Since the passage of legislation in 1988, 1990 and 1992 and the announcement of policies intended to create a stable business environment for the commercial development of space, both the government and the commercial sector have identified areas for improve-

ment.

Based on those discussions, H.R. 1702, the Commercial Space Act of 1997, would improve the legal and regulatory framework for commercial space development. Specifically, H.R. 1702 would: (1) codify the best aspects of existing space policy so that the merits of the policy are established in a more stable framework; (2) incorporate lessons learned from past efforts to create a more effective policy for the promotion of commercial space activity; and (3) require a more streamlined and proactive legal and regulatory environment for commercial space ventures involved in the production and dissemination of information so that the United States will continue to lead the world into the information age.

The bill is necessary because commercial activity in space is still at a very early stage of development. Its progress is measured in the work of relatively small, entrepreneurial companies. Like any young industry, the commercial space industry is vulnerable to the sudden changes of government policy. H.R. 1702 is necessary to ensure consistency in government policy so that commercial space businesses can grow with the relatively reliable assurance that gov-

ernment policy will not change.

#### SUMMARY OF MAJOR PROVISIONS

The major provisions of the bill, as reported, would: (1) require a report by the National Aeronautics and Space Administration's (NASA) Administrator and an independent market study to be submitted to Congress identifying commercial opportunities and evaluating industry interest in playing a role in International Space Station (ISS) activities including operation, use, servicing, or augmentation; (2) establish authority for the Office of the Associate Administrator for Commercial Space Transportation, DOT, to license commercial reentry activities; (3) authorize appropriations for the Office of Associate Administrator for Commercial Space for FY 1998, FY 1999, and FY 2000; (4) reaffirm U.S. policy to make the U.S. Global Positioning System (GPS) the world standard and to continue its operation on a continuous worldwide basis without direct user fees; (5) authorize purchase of space science data when feasible by commercial providers instead of building complete systems to generate the data; (6) provide for the management of the Commercial Space Centers as a coordinated program out of NASA headquarters in Washington, DC; (7) require the Secretary of Commerce to publish a list of requirements for applicants seeking a license to own and operate a remote sensing satellite; (8) authorize the purchase of Earth remote sensing data from commercial providers by NASA, when feasible; (9) require the Federal government to procure space transportation services from U.S. commercial providers; (10) authorize a NASA plan for the potential privatization of the Space Shuttle program, including a requirement for the NASA Administrator to conduct a feasibility study; (11) codify Administration policy on the conversion of excess ballistic missiles; and (12) require the Secretary of Defense to prepare a national capability study of space infrastructure needs, both defense and civilian, through December 31, 2007.

## LEGISLATIVE HISTORY

H.R. 1702, the Commercial Space Act, was introduced in the House of Representatives on May 22, 1997, and passed the House November 4, 1997. A Statement of Administration Policy was sent to the House of Representatives on November 4, 1997, but many of the proposed Administration changes were not included.

H.R. 1702 was referred to the Commerce, Science, and Transportation Committee of the U.S. Senate on November 5, 1997. A bill, S. 1473, Commercial Space Act of 1997, was introduced by Senator Bob Graham on November 8, 1997. This bill, which is similar to H.R. 1702, would establish requirements for the use of excess intercontinental ballistic missiles as space launch vehicles. However, the bill does not amend the Land Remote Sensing Policy Act of 1992.

Two hearings have been held relating to commercial space activities. The first hearing was held on June 25, 1997 on the programs and budget of DOT's Office of Commercial Space Transportation. Ms. Patricia Grace Smith, Acting Administrator for the Office of Commercial Space Transportation, Federal Aviation Administration, DOT, and Mr. Keith Calhoun-Senghor, Director of the Office of Air and Space Commercialization, Department of Commerce, tes-

tified. On Thursday, March 5, 1998, the Subcommittee on Science, Technology and Space held a second hearing on the commercialization of Space. Three panels testified and those witnesses included: Panel I: Senator Wayne Allard, R-CO; and Senator Bob Graham, D-FL; Panel II: Mr. John Barker, Deputy Assistant Secretary, Bureau of Political-Military Affairs, Department of State; Mr. Keith Calhoun-Senghor, Director, Office of Air and Space Commercialization, Department of Commerce; Mr. Edward A. Frankle, General Counsel, NASA; Mr. Gil Klinger, Acting Deputy Under Secretary for Space, Department of Defense; and Panel III: Mr. John Copple, Chief Executive Officer, Space Imaging, Thornton, Colorado; Mr. Michael S. Kelly, President and Chief Executive Officer, Kelly Space and Technology, San Bernardino, California; Mr. Robert Meuser, Vice-President and General Counsel for Regulatory Affairs, Kistler Aerospace, Kirkland, Washington; and Mr. Michael Swiek, Executive Director, U.S. Global Positioning System Industry Council, Washington, DC. Ms. Patricia Grace Smith, Acting Associate Administrator for the Office of Commercial Space Transportation, Federal Aviation Administration, DOT submitted written testimony for the record. The hearing focused on existing policies and laws governing the commercialization of space, the importance to the Nation of the industries these policies support, and the impact on future jobs, new technologies, and economic growth for the Nation.

On March 12, 1998, the Committee met in open executive session and, on a voice vote, ordered the bill, as amended, reported.

#### ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. Congress, Congressional Budget Office, Washington, DC, April 1, 1998.

Hon. JOHN McCain,

Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 1702, the Commercial Space Act of 1997.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Kathleen Gramp (for federal costs), Pepper Santalucia (for the state and local impact), and Lesley Frymier (for the private-sector impact.)

Sincerely,

June E. O'Neill, Director.

Enclosure.

## H.R. 1702—The Commercial Space Act of 1997

Summary: H.R. 1702 would revise federal policies related to the procurement and licensing of services and products provided by the commercial space industry, and would authorize appropriations for

the Office of Commercial Space Transportation (OCST, within the Department of Transportation) for fiscal years 1998 through 2000. The act would define space transportation services, remote sensing data, and space science data as "commercial items" for the purposes of procurement policies, and would require federal agencies to acquire these services from the private sector, subject to certain conditions. OCST would be given the authority to license space transportation systems that involve reentry vehicles, sites, and operations, and the National Oceanic and Atmosphere Administration (NOAA, within the Department of Commerce) would be required to change the process and conditions used to award licenses for remote sensing systems. The act also would require the National Aeronautics and Space Administration (NASA) and the Department of Defense (DoD) to conduct studies and comply with various procedural requirements.

Assuming appropriation of the necessary amounts, CBO estimates that implementing H.R. 1702 would result in increased discretionary spending of about \$14 million over the 1998-2003 period. Because H.R. 1702 could affect direct spending and receipts, pay-as-you-go procedures would apply. CBO estimates, that any

such effects would be negligible.

The act contains no intergovernmental mandates as defined in the Unfunded Mandates Reform Act of 1995 (UMRA), and would impose no costs on state, local, or tribal governments. The act would impose new private-sector mandates, but CBO estimates that the cost of these mandates would not exceed the statutory threshold established by UMRA.

## Estimated cost to the Federal Government

CBO estimates that implementing H.R. 1702 would increase discretionary spending by about \$14 million over the 1999–2003 period, assuming appropriation of the necessary amounts. For the purposes of this estimate, we assume that the appropriations will be provided near the beginning of each fiscal year and that outlays will follow the historical pattern for such activities. Enacting H.R. 1702 could affect both direct spending and receipts (revenues), but CBO estimates that the effects would not be significant. The costs of this legislation fall primarily within budget function 400 (transportation).

[By fiscal year, in millions of dollars]

	1998	1999	2000	2001	2002	2003
SPENDING SUBJECT TO	APPROPRI	ATION				
Spending under current law:						
Budget authority 1	6	0	0	0	0	0
Estimated outlays	6	1	0	0	0	0
Proposed changes:						
Estimated authorization level	0	7	7	0	0	0
Estimated outlays	0	6	7	1	0	0
Spending under H.R. 1702:						
Estimated authorization level 1	6	7	7	0	0	0
Estimated outlays	6	7	7	1	0	0

<sup>&</sup>lt;sup>1</sup>The 1998 level is the amount appropriated for that year; it is equal to the amount that H.R. 1702 would authorize for 1998.

## Spending subject to appropriation

The estimated discretionary spending reflects both the amounts authorized for OCST (about \$6 million for 1999 and about \$7 million for 2000) and the cost of the studies and reports that NASA and DoD would have to prepare (estimated to total \$1 million in 1999). Defining space transportation services, remote sensing data, and space science data as "commercial items" could increase the time and effort involved in evaluating contracts because that designation would make it harder to obtain certain kinds of information from vendors on product specifications. CBO estimates, however, that this designation is unlikely to have a significant effect on costs in any year.

CBO estimates that directing NASA to purchase space science and Earth system data from commercial providers would not significantly affect federal spending in the near term. Assuming that NASA would purchase commercial data only if the terms of the acquisition would be cost-effective governmentwide, these provisions should not increase costs to the government. At the same time, very few commercial ventures now provide the kinds of data used by federal agencies, so there is little likelihood of significant near-term savings for the government from adopting the new policy.

Similarly, we estimate that little budgetary impact would result in the next five years from provisions requiring DoD and NASA to acquire space transportation systems from commercial providers. DoD's costs would change little in the near term, because the act exempts existing contracts and because DoD plans to increase its use of commercial services under current law. Likewise, most of NASA's missions already use commercial launch services, so the provisions are unlikely to affect the agency's spending. Provisions requiring DoD and NASA to justify their use of noncommercial services would not have a significant effect on their workload, assuming the agencies are able to prepare blanket determinations for classes of systems rather than for individual launches.

Finally, H.R. 1702 would strengthen the government's obligation to reimburse licensees of remote sensing systems for the cost of technical modifications needed to comply with conditions that DoD or the State Department impose on these licensees for purpose of national security. Because CBO expects these agencies to reimburse licensees for all appropriate costs under current law, we estimate that requiring such payments would not significantly change the amounts that would be paid. Other provisions would have little or no effect on discretionary spending.

## Direct spending

Increasing the government's use of commercial launch services would increase the use of federal launch property or services by the private sector. Under current law, nonfederal entities reimburse DoD and NASA for using such facilities, and agencies spend the proceeds to cover the costs incurred. Because any increase in collections resulting from additional commercial activity would be offset by new direct spending the net effect of the act on direct spending would be negligible.

#### Receipts (Revenues)

H.R. 1702 would allow OCST to impose civil penalties for violations of licensing agreements for reentry systems, which could affect revenues. CBO estimates that any additional receipts from civil penalties associated with the OCST licensing activities authorized by this bill would be insignificant. To date, OCST has never collected a penalty for a violation of the licensing and related requirements of the commercial space transportation program.

Pay-as-you-go considerations: Section 252 of the Balanced Budget and Emergency Deficit Control Act of 1985 sets up pay-as-you-go procedures for legislation affecting direct spending or receipts. Enacting H.R. 1702 could affect both direct spending and receipts because of provisions involving collections for the use of federal launch services and civil penalties for failure to comply with space transportation regulations. CBO estimates, however, that these

provisions would have little or no budgetary impact.

Estimated impact on State, local, and tribal governments: H.R. 1702 contains no intergovernmental mandates as defined in UMRA, and would impose no costs on state, local or tribal governments. The legislation would broaden the scope of the Department of Transportation's commercial space transportation program to include in space transportation and reentry activities, rather than just launch activities. One of the purposes of this program is to facilitate the participation of state governments in the provision of space transportation infrastructure, such as launch sites. The Secretary of Transportation is currently required to make excess launch property available to state governments. By broadening the scope of the program, H.R. 1702 would enable states to receive additional assistance if they choose to participate.

Estimated impact on the private sector: Section 102 would require operators to reentry sites to obtain a license from the OCST for reentry sites, vehicles, and services. CBO estimates that the direct costs of this private-sector mandate would not exceed, in any one year, the statutory threshold established in UMRA (\$100 mil-

lion in 1996, adjusted annually for inflation).

Previous CBO estimate: On June 24, 1997, CBO transmitted a cost estimate for H.R. 1702, as ordered reported by the House Committee on Science on June 18, 1997. Differences between the estimates are attributable to differences in the two versions of the legislation. CBO's estimate of total discretionary spending under H.R. 1702 as approved by the Senate Committee on Commerce, Science, and Transportation is higher than estimated for the House version largely because the Senate version includes authorizations of annual appropriations for OCST while the House version does not.

Estimate prepared by: Federal Costs: Kathleen Gramp; Impact on State, Local, and Tribal Governments: Pepper Santalucia; Im-

pact on the Private Sector: Lesley Frymier.

Estimate approved by: Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

#### REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of regulatory impact of the legislation, as reported.

## Number of persons covered

H.R. 1702, as reported, amends the CSLA (49 U.S.C. 70101 et seq.; P.L. 98–575), the Land Remote Sensing Policy Act of 1992 (15 U.S.C. 5601 et seq.; P.L. 102–555), and the Launch Services Purchase Act of 1990 (42 U.S.C. 2465b et seq.). The amendments to the CSLA require the Secretary of Transportation to issue regulations to carry out the requirements of the CSLA, including guidelines for industry and State governments to obtain sufficient insurance coverage for potential damages to third parties and procedures for requesting and obtaining: (1) licenses to launch a commercial launch vehicle; (2) operator licenses for launch; (3) launch site operator licenses; and (4) the application of government indemnification.

## Economic impact

This legislation will not have an adverse economic impact on the Nation. It provides sufficient authorization levels to sustain ongoing and new activities for the Office of the Associate Administrator for Commercial Space Transportation. It is expected that the new licensing authority given to the Office of the Associate Administrator for Commercial Space Transportation will generate new business opportunities for those in the commercial space industry.

## Privacy

This legislation will not have an adverse impact on the personal privacy of individuals.

#### Paperwork 1 4 1

This legislation requires the Administrator of NASA to provide the following: (1) a study, within 90 days of enactment, that identifies and examines the opportunities for commercial providers to play a role in ISS activities, including operation, use, servicing, and augmentation; (2) an independently-conducted market study, within 180 days of enactment, that examines and evaluates potential industry interest in providing commercial goods and services for the operation, servicing, and augmentation of the ISS; (3) a report detailing how many proposals NASA received during 1998 regarding commercial operation, servicing, utilization, or augmentation of the ISS which would be submitted with the FY 2000 budget request; and (4) a feasibility study, within 60 days of enactment, for the privatization of the Space Shuttle.

The Secretary of Transportation must submit an annual report to Congress, accompanying the annual budget request, that describes all activities undertaken under the amendments to CSLA, including a description of the process by which the industry may apply and DOT may approve licenses under CSLA and recommendations for legislation that may further commercial launches and reentries.

The Secretary of Commerce, within 180 days after enactment, shall publish in the Federal Register a complete and specific list of all information required to comprise applications for license under the Land Remote Sensing Policy Act.

The Secretary of Defense, within 180 days after enactment, shall submit a report to Congress on the national infrastructure capabilities and needs for both the defense and civilian launch sectors through December 31, 2007.

#### SECTION-BY-SECTION ANALYSIS

#### Section 1. Short title and table of contents

This section states the bill's short title as the "Commercial Space Act of 1997." A Table of Contents is provided.

## Section 2. Definitions

This section provides definitions for terms used in H.R. 1702, including those for "Administrator"; "commercial provider"; "payload"; "space-related activities"; "space transportation services"; "space transportation vehicle"; "State"; and "United States commercial provider".

## Title I—Promotion of Commercial Space Opportunities

#### Section 101. Commercialization of space station

This section would address issues relating to the commercialization of the ISS. Subsection (a) would state that it is Congressional policy that the economic development of Earth orbital space is a priority of the ISS, and that the fullest engagement of commercial providers and commercial users will reduce the operational costs of the ISS. Subsection (b) would require a report from NASA, within 90 days after enactment, that identifies and examines the opportunities for commercial providers to play a role in ISS activities; the potential cost savings from using commercial providers; which opportunities the NASA Administrator plans to make available to commercial providers; the policies that the NASA Administrator is advancing to encourage commercial opportunities; and the revenues and cost reimbursements to the Federal government from commercial users of the ISS. The section would further require the Administrator to submit an independent market study to Congress 180 days after enactment. This study would examine and evaluate potential industry interest in providing commercial goods and services for the operation, servicing, and augmentation of the ISS. Finally, subsection (b) would require the Administrator to report to Congress the number of proposals NASA received in 1998 regarding commercial operation, servicing, utilization, or augmentation of the ISS, and the number of proposals that resulted in agreements. The subsection further requires the Administrator to consider the role of State governments as brokers in promoting space station commercialization in all three reports.

## Section 102. Commercial space launch amendments

This section would amend chapter 701 of title 49, United States Code, entitled "Commercial Space Launch Activities," to: (1) establish a statutory framework for the licensing of commercial reentry

activities by the Secretary of Transportation; (2) clarify certain provisions in Chapter 701; (3) provide for criteria for accepting a license application; and (4) authorize appropriations for Federal Aviation Administration's Office of the Associate Administrator for

Commercial Space Transportation.

Specific changes are included in these amendments to address the industry's movement towards reentry vehicles. For example, paragraph (3) of subsection (a) would amend the CSLA to expand the definition of "launch services" to those activities directly related to the preparation of a launch site or payload facility. Paragraph (6) of subsection (a) would require the Secretary of Transportation to notify the Senate Committee on Commerce, Science, and Transportation and the House Science Committee within 30 days when a license has not been issued within the deadline. This paragraph would also authorize the Secretary to establish procedures for safety approvals of launch vehicles, reentry vehicles, safety systems, processes, services, or personnel that may be used in conducting licensed commercial space launch or reentry activities, as well as to develop regulations establishing criteria for accepting an application for a license within the 60 days after receipt of such application

Paragraph (16) of subsection (a) would add a new section to the CSLA to require the Secretary of Transportation within 9 months of enactment of this bill, to issue regulations that include: (1) guidelines for industry and State governments to obtain sufficient insurance coverage for potential damages to third parties; (2) procedures for requesting and obtaining licenses to launch a commercial launch vehicle; (3) procedures for requesting and obtaining operation licenses for launch; (4) procedures for requesting and obtaining launch site operator licenses; and (5) procedures for the application of government indemnification.

Paragraph (16) also would require the Secretary of Transportation within 6 months of enactment of the bill to issue a notice of proposed rulemaking that includes: (1) procedures for requesting and obtaining licenses to reenter a vehicle; (2) procedures for requesting and obtaining operator licenses for reentry; and (3) procedures for requesting and obtaining reentry site operator licenses.

Finally, paragraph (16) would require the Secretary of Transportation to submit an annual report to Congress, accompanying the annual budget request, describing all activities undertaken under the amendments to the CSLA, including a description of the process by which the industry may apply and DOT may approve licenses under CSLA and recommendations for legislation that may further commercial launches and reentries.

Subsection (b) of this section would authorize appropriations to the Office of the Associate Administrator for Commercial Space Transportation at DOT at a level of \$6,182,000 for FY 1998, \$6,275,000 for FY 1999, and \$6,600,000 for FY 2000.

Section 103. Promotion of United States global positioning system standards

Section 103 of this bill, as reported, would address issues relating to the U.S. GPS. Subsection (a) contains Congressional findings that the GPS has become an essential system for the civilian, scientific, and military community because of the role of the commercial industry in providing equipment and services. Subsection (b) states that the Congress encourages the President to: (1) ensure the operation of the GPS on a continuous worldwide basis without direct user fees; (2) enter into agreements that promote cooperation with foreign governments in order to establish GPS and its augmentations as the acceptable international standard; and (3) provide clear direction and adequate resources to U.S. representatives to ensure efficient management of the electromagnetic spectrum used by the GPS and to protect that spectrum from disruption and interference.

## Section 104. Acquisition of space science data

This section would require NASA to purchase space science data from commercial providers. Subsection (a) would require that purchase of such data to the maximum extent possible and cost effective, as long as the purchase would satisfy the scientific requirements of NASA and where practicable of other federal agencies and scientific researchers. Subsection (b) would require the acquisitions of space science data to be carried out in accordance with applicable acquisition laws and regulations. Further, space science data would be required to be treated as a commercial item under applicable acquisition laws. However, this subsection would not preclude the United States from acquiring sufficient rights in data to meet the needs of the scientific and educational community. Subsection (c) would define "space science data" for the purpose of this section. Subsection (d) would ensure that the federal government would require compliance with all applicable safety standards. Subsection (e) would specify that this section does not authorize NASA to provide financial assistance for the development of commercial systems for the collection of space science data.

## Section 105. Administration of commercial space centers

This section would require the Administrator to administer the Commercial Space Center (CSS) program in a unified coordinated manner from NASA headquarters in Washington, DC. Administering the Centers as a single entity will eliminate confusion and facilitate communication and synergism.

#### Title II—Remote Sensing

Section 201. Land Remote Sensing Policy Act of 1992 amendments

This section would update the provisions of the Land Remote Sensing Policy Act of 1992. Subsection (a) sets forth several Congressional findings stipulating that the national security concerns and international obligations of the United States must be protected as the commercial remote sensing industry emerges and that the U.S. government must support industrial growth and competitiveness. Subsection (b) would amend the Land Remote Sensing Policy Act with the following provisions: (1) The Secretary of Commerce would be required to publish a list of requirements for applicant's seeking a license to own and operate a remote sensing satellite; (2) the Secretary of Commerce would be prohibited from

seeking to enjoin a licensee from entering into a foreign agreement unless the Secretary first transmits a determination to the licensee that such participation is inconsistent with national security or international obligations; (3) the Secretary of Commerce would be authorized to modify a license and/or terminate operations of commercial remote sensing activities, thereby giving the Secretary the flexibility to pursue either option or both options at the same time; (4) the Secretary of Commerce would be required to notify Congress of any action to limit collection or distribution of data; (5) the Secretary would be required to notify Congress of any injunctions that the Department seeks against a commercial provider; (6) the Federal government would be prohibited from duplicating commercial provider activities unless significant savings could be realized or such duplication is necessary for reasons of national security or international obligations; (7) the Secretary of Commerce would be required to consult with the Secretaries of Defense and State on all matters affecting national security, and the Secretaries of Defense and State would be responsible for making determinations on whether such applications are consistent with U.S. national security interests and international obligations; (8) appropriate agencies would be encouraged to consider providing resources for use of commercial remote sensing services and products to developing nations as a component of U.S. international aid programs; and (9) NASA, the United States Geological Service, and the National Oceanic and Atmospheric Administration would be authorized to develop and implement a similar program to aid the transfer of remote sensing technology to states.

#### Section 202. Acquisition of earth science data

This section would require NASA to purchase Earth remote sensing data from commercial providers. Subsection (a) would require the Administrator of NASA to purchase for commercial providers to the maximum extent possible and where cost effective, as long as the purchase would satisfy scientific requirements of NASA and where appropriate of other federal agencies and scientific researchers. Subsection (b) would require the acquisitions to be carried out in accordance with applicable acquisition laws and regulations. Further, this subsection would require that such Earth remote sensing data be treated as a commercial item under applicable acquisition laws. However, this subsection would not preclude the federal government from acquiring sufficient rights in data to meet the needs of the scientific and educational community. Subsection (c) would ensure that the federal government would require compliance with all applicable safety standards. Subsection (d) would require the acquisition of Earth science data to be carried out through the Stennis Space Center.

Title III—Federal Acquisitions of Space Transportation Services

Section 301. Requirement to procure commercial space transportation services

This section would require the Federal government to procure space transportation services from U.S. commercial providers, and to the maximum practicable extent, plan missions to accommodate

the space transportation capabilities of U.S. commercial providers. Subsection (b) of this section would provide the following exceptions to the policy: (1) when a payload would require the unique capabilities of the Space Shuttle; (2) when U.S. commercial providers cannot provide cost-effective space transportation services when required; (3) when the use of space transportation services from U.S. commercial providers poses an unacceptable risk of loss of a unique scientific opportunity; (4) when the use of space transportation services from U.S. commercial providers is inconsistent with U.S. national security objectives; (5) when the use of space transportation services from U.S. commercial providers is inconsistent with foreign policy purposes, or launch of the payload by a foreign entity serves foreign policy purposes; (6) when 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 government; or (7) when a playload can make use of the available cargo space on a Space Shuttle mission as a secondary payload, and such payload is consistent with specific requirements authorized by the Administrator. This subsection would authorize only the Secretary of the Air Force (in the case of a national security issue) or the NASA Administrator to make a determination about when an exception would be granted. Subsection (c) would prohibit the requirements of subsection (a) from applying 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. Finally, subsection (d) would ensure that the provisions of this section would not prevent the Federal government from acquiring, owning, or maintaining space transportation vehicles that are for historical purposes.

Section 302. Acquisition of commercial space transportation services

The section would require space transportation services to be considered a "commercial item" for the purposes of acquisition laws and regulations. In addition, this section ensures that the Federal government would require compliance with applicable safety standards.

Section 303. Launch Services Purchase Act of 1990 amendments

Section 303 updates the Launch Service Purchase Act of 1990.

Section 304. Shuttle privatization

This section would require the NASA Administrator to plan for potential privatization of the Space Shuttle program while main-

taining safety and cost effectiveness as high priorities.

Subsection (a) would direct the Administrator to prepare for a transition from the Federal operation to the Federal purchase of commercial services for non-emergency launch requirements. In making those preparations, the Administrator would be required to plan for the potential privatization of the Space Shuttle program. Subsection (b) would require the NASA Administrator to conduct a feasibility study of Shuttle privatization addressing numerous

issues including: (1) who should own the Shuttle orbiters and ground facilities; (2) whether the Federal government should indemnify the contractor for any third party liability and if so, under what terms and conditions; (3) whether non-NASA payloads should be launched on the Shuttle and whether any classes of payload should be ineligible; (4) whether commercial payloads should be launched on the Shuttle; (5) whether federal government payloads should have priority over non-federal payloads in Shuttle launch assignments; (6) whether public interest requires certain Shuttle functions to continue to be performed by the federal government; and (7) how much cost savings, if any, will be generated by privatization. Subsection (c) would require NASA to submit a report to Congress, within 60 days after enactment, on the feasibility study.

Section 305. Use of excess intercontinental ballistic missiles

This section would codify Presidential Decision Directive/National Science and Technology Council #4 of August 5, 1994, Part VII, Use of U.S. Excess Ballistic Missile Assets.

The U.S. Government is currently storing almost 400 ballistic missiles which cannot be used for their intended purpose due to recent treaty agreements. Storage costs for these missiles are about \$10,000,000 a year, and the cost to destroy them far exceeds that amount.

The missiles, which have already been paid for with taxpayer funds, can be used for new, peaceful and practical purposes—the launching of small payloads. This use, however, would require the conversion of the missiles' hardware into launch vehicles.

This section would authorize the federal use of the converted space transportation vehicle if, within 30 days of the conversion the agency seeking the use of the missile notifies the U.S. Senate Committees on Commerce, Science, and Transportation and Armed Services and the U.S. House of Representatives Committees on National Security and Science that such use: (1) would result in cost savings to the Federal government compared to the cost of acquiring services from commercial providers; (2) would meet all mission requirements of the agency; (3) would be consistent with international obligations; and (4) is approved by the Secretary of Defense.

In the event that the Secretary of Defense determines that compliance with the 30 day requirement would be inconsistent with immediate national security requirements, the Secretary would not be required to meet that time frame.

## Section 306. National launch capability

This section would require the Secretary of Defense, within 180 days of enactment of this Act, to submit to the U.S. Senate Committee on Commerce, Science, and Transportation and the U.S. House of Representatives Committee on Science a report that assesses: (1) the total potential launch capability of the United States through December 31, 2007; (2) the combined needs of the defense and civil sectors; (3) the deficiency in resources; (4) the level of funding necessary to address identified deficiencies; (5) opportunities for investment by non-federal entities; (6) various methods by which the control of the launch property and launch services of the

Department of Defense may be transferred; and (7) the technical, structural, and legal impediments associated with making launch sites cost competitive on an international level.

## CHANGES IN EXISTING LAW

In the opinion of the Committee, it is necessary to dispense with the requirements of paragraph 12 of Rule XXVI of the Standing Rules of the Senate in order to expedite the business of the Senate.

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