

Calendar No. 208

106<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session  
**H. R. 1654**

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**AN ACT**

To authorize appropriations for the National Aeronautics and Space Administration for fiscal years 2000, 2001, and 2002, and for other purposes.

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JULY 14, 1999

Read twice and placed on the calendar

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IN THE SENATE OF THE UNITED STATES

MAY 20, 1999

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**AN ACT**

To authorize appropriations for the National Aeronautics and Space Administration for fiscal years 2000, 2001, and 2002, 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,*

1 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

2 (a) **SHORT TITLE.**—This Act may be cited as the  
 3 “National Aeronautics and Space Administration Author-  
 4 ization Act of 1999”.

5 (b) **TABLE OF CONTENTS.**—

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

**TITLE I—AUTHORIZATION OF APPROPRIATIONS**

Subtitle A—Authorizations

- Sec. 101. International Space Station.
- Sec. 102. Launch Vehicle and Payload Operations.
- Sec. 103. Science, Aeronautics, and Technology.
- Sec. 104. Mission Support.
- Sec. 105. Inspector General.
- Sec. 106. Total authorization.
- Sec. 107. Aviation systems capacity.

Subtitle B—Limitations and Special Authority

- Sec. 121. Use of funds for construction.
- Sec. 122. Availability of appropriated amounts.
- Sec. 123. Reprogramming for construction of facilities.
- Sec. 124. Limitation on obligation of unauthorized appropriations.
- Sec. 125. Use of funds for scientific consultations or extraordinary expenses.
- Sec. 126. Earth science limitation.
- Sec. 127. Competitiveness and international cooperation.
- Sec. 128. Trans-hab.
- Sec. 129. Consolidated Space Operations Contract.
- Sec. 130. Triana funding prohibition.

**TITLE II—MISCELLANEOUS PROVISIONS**

- Sec. 201. Requirement for independent cost analysis.
- Sec. 202. National Aeronautics and Space Act of 1958 amendments.
- Sec. 203. Commercial space goods and services.
- Sec. 204. Cost effectiveness calculations.
- Sec. 205. Foreign contract limitation.
- Sec. 206. Authority to reduce or suspend contract payments based on substantial evidence of fraud.
- Sec. 207. Space Shuttle upgrade study.
- Sec. 208. Aero-space transportation technology integration.
- Sec. 209. Definitions of commercial space policy terms.
- Sec. 210. External tank opportunities study.
- Sec. 211. Eligibility for awards.
- Sec. 212. Notice.
- Sec. 213. Unitary Wind Tunnel Plan Act of 1949 amendments.
- Sec. 214. Innovative technologies for human space flight.

- Sec. 215. Life in the universe.
- Sec. 216. Research on International Space Station.
- Sec. 217. Remote sensing for agricultural and resource management.
- Sec. 218. Integrated safety research plan.
- Sec. 219. 100th anniversary of flight educational initiative.
- Sec. 220. Internet availability of information.
- Sec. 221. Sense of the Congress; requirement regarding notice.
- Sec. 222. Use of abandoned and underutilized buildings, grounds, and facilities.
- Sec. 223. Space Station commercialization.
- Sec. 224. Anti-drug message on Internet sites.

1 **SEC. 2. FINDINGS.**

2 The Congress makes the following findings:

3 (1) The National Aeronautics and Space Ad-  
4 ministration should continue to pursue actions and  
5 reforms directed at reducing institutional costs, in-  
6 cluding management restructuring, facility consoli-  
7 dation, procurement reform, and convergence with  
8 defense and commercial sector systems.

9 (2) The National Aeronautics and Space Ad-  
10 ministration must continue on its current course of  
11 returning to its proud history as the Nation's leader  
12 in basic scientific, air, and space research.

13 (3) The overwhelming preponderance of the  
14 Federal Government's requirements for routine, un-  
15 manned space transportation can be met most effec-  
16 tively, efficiently, and economically by a free and  
17 competitive market in privately developed and oper-  
18 ated space transportation services.

19 (4) In formulating a national space transpor-  
20 tation service policy, the National Aeronautics and

1       Space Administration should aggressively promote  
2       the pursuit by commercial providers of development  
3       of advanced space transportation technologies in-  
4       cluding reusable space vehicles, and human space  
5       systems.

6               (5) The Federal Government should invest in  
7       the types of research and innovative technology in  
8       which United States commercial providers do not in-  
9       vest, while avoiding competition with the activities in  
10      which United States commercial providers do invest.

11             (6) International cooperation in space explo-  
12      ration and science activities serves the United States  
13      national interest—

14                     (A) when it—

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

18                             (ii) enables the United States to pur-  
19                             sue missions that it could not otherwise af-  
20                             ford to pursue unilaterally; or

21                             (iii) enhances United States capabili-  
22                             ties to use and develop space for the ben-  
23                             efit of United States citizens; and

24                     (B) when it—

1 (i) is undertaken in a manner that is  
2 sensitive to the desire of United States  
3 commercial providers to develop or explore  
4 space commercially;

5 (ii) is consistent with the need for  
6 Federal agencies to use space to complete  
7 their missions; and

8 (iii) is carried out in a manner con-  
9 sistent with United States export control  
10 laws.

11 (7) The National Aeronautics and Space Ad-  
12 ministration and the Department of Defense can co-  
13 operate more effectively in leveraging their mutual  
14 capabilities to conduct joint space missions that im-  
15 prove United States space capabilities and reduce  
16 the cost of conducting space missions.

17 (8) The Deep Space Network will continue to  
18 be a critically important part of the Nation's sci-  
19 entific and exploration infrastructure in the coming  
20 decades, and the National Aeronautics and Space  
21 Administration should ensure that the Network is  
22 adequately maintained and that upgrades required  
23 to support future missions are undertaken in a time-  
24 ly manner.

1           (9) The Hubble Space Telescope has proven to  
2           be an important national astronomical research facil-  
3           ity that is revolutionizing our understanding of the  
4           universe and should be kept productive, and its ca-  
5           pabilities should be maintained and enhanced as ap-  
6           propriate to serve as a scientific bridge to the next  
7           generation of space-based observatories.

8 **SEC. 3. DEFINITIONS.**

9           For purposes of this Act—

10           (1) the term “Administrator” means the Ad-  
11           ministrator of the National Aeronautics and Space  
12           Administration;

13           (2) the term “commercial provider” means any  
14           person providing space transportation services or  
15           other space-related activities, primary control of  
16           which is held by persons other than Federal, State,  
17           local, and foreign governments;

18           (3) the term “institution of higher education”  
19           has the meaning given such term in section 1201(a)  
20           of the Higher Education Act of 1965 (20 U.S.C.  
21           1141(a));

22           (4) the term “State” means each of the several  
23           States of the Union, the District of Columbia, the  
24           Commonwealth of Puerto Rico, the Virgin Islands,  
25           Guam, American Samoa, the Commonwealth of the

1 Northern Mariana Islands, and any other common-  
2 wealth, territory, or possession of the United States;  
3 and

4 (5) the term “United States commercial pro-  
5 vider” means a commercial provider, organized  
6 under the laws of the United States or of a State,  
7 which is—

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

10 (B) a subsidiary of a foreign company and  
11 the Secretary of Commerce finds that—

12 (i) such subsidiary has in the past evi-  
13 denced a substantial commitment to the  
14 United States market through—

15 (I) investments in the United  
16 States in long-term research, develop-  
17 ment, and manufacturing (including  
18 the manufacture of major components  
19 and subassemblies); and

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

22 (ii) the country or countries in which  
23 such foreign company is incorporated or  
24 organized, and, if appropriate, in which it  
25 principally conducts its business, affords



1 reciprocal treatment to companies de-  
2 scribed in subparagraph (A) comparable to  
3 that afforded to such foreign company's  
4 subsidiary in the United States, as evi-  
5 denced by—

6 (I) providing comparable oppor-  
7 tunities for companies described in  
8 subparagraph (A) to participate in  
9 Government sponsored research and  
10 development similar to that authorized  
11 under this Act;

12 (II) providing no barriers to com-  
13 panies described in subparagraph (A)  
14 with respect to local investment op-  
15 portunities that are not provided to  
16 foreign companies in the United  
17 States; and

18 (III) providing adequate and ef-  
19 fective protection for the intellectual  
20 property rights of companies de-  
21 scribed in subparagraph (A).

1       **TITLE I—AUTHORIZATION OF**  
2                   **APPROPRIATIONS**  
3                   **Subtitle A—Authorizations**

4       **SEC. 101. INTERNATIONAL SPACE STATION.**

5           There are authorized to be appropriated to the Na-  
6       tional Aeronautics and Space Administration for Inter-  
7       national Space Station—

8                   (1) for fiscal year 2000, \$2,482,700,000, of  
9       which \$394,400,000, notwithstanding section  
10       121(a)—

11                   (A) shall only be for Space Station re-  
12       search or for the purposes described in section  
13       103(2); and

14                   (B) shall be administered by the Office of  
15       Life and Microgravity Sciences and Applica-  
16       tions;

17                   (2) for fiscal year 2001, \$2,328,000,000, of  
18       which \$465,400,000, notwithstanding section  
19       121(a)—

20                   (A) shall only be for Space Station re-  
21       search or for the purposes described in section  
22       103(2); and

23                   (B) shall be administered by the Office of  
24       Life and Microgravity Sciences and Applica-  
25       tions; and

1           (3) for fiscal year 2002, \$2,091,000,000, of  
2       which \$469,200,000, notwithstanding section  
3       121(a)—

4           (A) shall only be for Space Station re-  
5       search or for the purposes described in section  
6       103(2); and

7           (B) shall be administered by the Office of  
8       Life and Microgravity Sciences and Applica-  
9       tions.

10 **SEC. 102. LAUNCH VEHICLE AND PAYLOAD OPERATIONS.**

11       There are authorized to be appropriated to the Na-  
12       tional Aeronautics and Space Administration for Launch  
13       Vehicle and Payload Operations the following amounts:

14           (1) For Space Shuttle Operations—

15               (A) for fiscal year 2000, \$2,547,400,000;

16               (B) for fiscal year 2001, \$2,649,900,000;

17           and

18               (C) for fiscal year 2002, \$2,629,000,000.

19           (2) For Space Shuttle Safety and Performance  
20       Upgrades—

21               (A) for fiscal year 2000, \$456,800,000, of  
22       which \$18,000,000 shall not be obligated until  
23       45 days after the report required by section 207  
24       has been submitted to the Congress;

1 (B) for fiscal year 2001, \$407,200,000;

2 and

3 (C) for fiscal year 2002, \$414,000,000.

4 (3) For Payload and Utilization Operations—

5 (A) for fiscal year 2000, \$169,100,000;

6 (B) for fiscal year 2001, \$182,900,000;

7 and

8 (C) for fiscal year 2002, \$184,500,000.

9 **SEC. 103. SCIENCE, AERONAUTICS, AND TECHNOLOGY.**

10 There are authorized to be appropriated to the Na-  
 11 tional Aeronautics and Space Administration for Science,  
 12 Aeronautics, and Technology the following amounts:

13 (1) For Space Science—

14 (A) for fiscal year 2000, \$2,202,400,000,

15 of which—

16 (i) \$10,500,000 shall be for the Near  
 17 Earth Object Survey;

18 (ii) \$472,000,000 shall be for the Re-  
 19 search Program;

20 (iii) \$12,000,000 shall be for Space  
 21 Solar Power technology; and

22 (iv) \$170,400,000 shall be for Hubble  
 23 Space Telescope (Development);

24 (B) for fiscal year 2001, \$2,315,200,000,

25 of which—

1 (i) \$10,500,000 shall be for the Near  
2 Earth Object Survey;

3 (ii) \$475,800,000 shall be for the Re-  
4 search Program; and

5 (iii) \$12,000,000 shall be for Space  
6 Solar Power technology; and

7 (C) for fiscal year 2002, \$2,411,800,000,  
8 of which—

9 (i) \$10,500,000 shall be for the Near  
10 Earth Object Survey;

11 (ii) \$511,100,000 shall be for the Re-  
12 search Program;

13 (iii) \$12,000,000 shall be for Space  
14 Solar Power technology; and

15 (iv) \$5,000,000 shall be for space  
16 science data buy.

17 (2) For Life and Microgravity Sciences and  
18 Applications—

19 (A) for fiscal year 2000, \$333,600,000, of  
20 which \$2,000,000 shall be for research and  
21 early detection systems for breast and ovarian  
22 cancer and other women's health issues, and  
23 \$5,000,000 shall be for sounding rocket vouch-  
24 ers, and of which \$77,400,000 may be used for

1 activities associated with International Space  
2 Station research;

3 (B) for fiscal year 2001, \$335,200,000, of  
4 which \$2,000,000 shall be for research and  
5 early detection systems for breast and ovarian  
6 cancer and other women's health issues, and of  
7 which \$70,000,000 may be used for activities  
8 associated with International Space Station re-  
9 search; and

10 (C) for fiscal year 2002, \$344,000,000, of  
11 which \$2,000,000 shall be for research and  
12 early detection systems for breast and ovarian  
13 cancer and other women's health issues, and of  
14 which \$80,800,000 may be used for activities  
15 associated with International Space Station re-  
16 search.

17 (3) For Earth Science, subject to the limita-  
18 tions set forth in sections 126 and 130—

19 (A) for fiscal year 2000, \$1,382,500,000;

20 (B) for fiscal year 2001, \$1,413,300,000;

21 and

22 (C) for fiscal year 2002, \$1,365,300,000.

23 (4) For Aero-Space Technology—

24 (A) for fiscal year 2000, \$1,010,300,000,

25 of which—

1 (i) \$543,800,000 shall be for Aero-  
2 nautical Research and Technology with  
3 \$423,800,000 to be for the Research and  
4 Technology Base, including \$36,000,000  
5 for aircraft noise reduction technology;

6 (ii) \$334,000,000 shall be for Ad-  
7 vanced Space Transportation Technology,  
8 including—

9 (I) \$61,300,000 for the Future-X  
10 Demonstration Program, including  
11 \$30,000,000 for Pathfinder Oper-  
12 ability Demonstrations; and

13 (II) \$105,600,000 for Advanced  
14 Space Transportation Program; and

15 (iii) \$132,500,000 shall be for Com-  
16 mercial Technology;

17 (B) for fiscal year 2001, \$918,400,000, of  
18 which—

19 (i) \$534,000,000 shall be for Aero-  
20 nautical Research and Technology with  
21 \$409,800,000 to be for the Research and  
22 Technology Base, including \$36,000,000  
23 for aircraft noise reduction technology, and  
24 with \$54,200,000 to be for Aviation Sys-  
25 tem Capacity;

1 (ii) \$249,400,000 shall be for Ad-  
2 vanced Space Transportation Technology,  
3 including—

4 (I) \$109,000,000 for the Future-  
5 X Demonstration Program; and

6 (II) \$134,400,000 for Advanced  
7 Space Transportation Program; and

8 (iii) \$135,000,000 shall be for Com-  
9 mercial Technology; and

10 (C) for fiscal year 2002, \$1,003,300,000,  
11 of which—

12 (i) \$527,200,000 shall be for Aero-  
13 nautical Research and Technology with  
14 \$390,100,000 to be for the Research and  
15 Technology Base, including \$27,500,000  
16 for aircraft noise reduction technology, and  
17 with \$67,600,000 to be for Aviation Sys-  
18 tem Capacity;

19 (ii) \$340,000,000 shall be for Ad-  
20 vanced Space Transportation Technology;  
21 and

22 (iii) \$135,600,000 shall be for Com-  
23 mercial Technology.

24 (5) For Mission Communication Services—

25 (A) for fiscal year 2000, \$406,300,000;



1 (B) for fiscal year 2001, \$382,100,000;  
2 and

3 (C) for fiscal year 2002, \$296,600,000.

4 (6) For Academic Programs—

5 (A) for fiscal year 2000, \$128,600,000, of  
6 which \$11,600,000 shall be for Higher Edu-  
7 cation within the Teacher/Faculty Preparation  
8 and Enhancement Programs, of which  
9 \$20,000,000 shall be for the National Space  
10 Grant College and Fellowship Program, and of  
11 which \$62,100,000 shall be for minority univer-  
12 sity research and education, including  
13 \$33,600,000 for Historically Black Colleges and  
14 Universities;

15 (B) for fiscal year 2001, \$128,600,000, of  
16 which \$62,100,000 shall be for minority univer-  
17 sity research and education, including  
18 \$33,600,000 for Historically Black Colleges and  
19 Universities; and

20 (C) for fiscal year 2002, \$130,600,000, of  
21 which \$62,800,000 shall be for minority univer-  
22 sity research and education, including  
23 \$34,000,000 for Historically Black Colleges and  
24 Universities.

25 (7) For Future Planning (Space Launch)—

1 (A) for fiscal year 2001, \$144,000,000;

2 and

3 (B) for fiscal year 2002, \$280,000,000.

4 **SEC. 104. MISSION SUPPORT.**

5 There are authorized to be appropriated to the Na-  
6 tional Aeronautics and Space Administration for Mission  
7 Support the following amounts:

8 (1) For Safety, Reliability, and Quality  
9 Assurance—

10 (A) for fiscal year 2000, \$43,000,000;

11 (B) for fiscal year 2001, \$45,000,000; and

12 (C) for fiscal year 2002, \$49,000,000.

13 (2) For Space Communication Services—

14 (A) for fiscal year 2000, \$89,700,000;

15 (B) for fiscal year 2001, \$109,300,000;

16 and

17 (C) for fiscal year 2002, \$174,200,000.

18 (3) For Construction of Facilities, including  
19 land acquisition—

20 (A) for fiscal year 2000, \$181,000,000,

21 including—

22 (i) Restore Electrical Distribution  
23 System (ARC), \$2,700,000;

- 1 (ii) Rehabilitate Main Hangar Build-  
2 ing 4802 (Dryden Flight Research Center  
3 (DFRC)), \$2,900,000;
- 4 (iii) Rehabilitate High Voltage System  
5 (Glenn Research Center), \$7,600,000;
- 6 (iv) Repair Site Steam Distribution  
7 System (GSFC), \$2,900,000;
- 8 (v) Restore Chilled Water Distribution  
9 System (GSFC), \$3,900,000;
- 10 (vi) Rehabilitate Hydrostatic Bearing  
11 Runner, 70 meter Antenna, Goldstone  
12 (JPL), \$1,700,000;
- 13 (vii) Upgrade 70 meter Antenna Servo  
14 Drive, 70 meter Antenna Subnet (JPL),  
15 \$3,400,000;
- 16 (viii) Rehabilitate Utility Tunnel  
17 Structure and Systems (Johnson Space  
18 Center (JSC)), \$5,600,000;
- 19 (ix) Connect KSC to CCAS Waste-  
20 water Treatment Plant (KSC),  
21 \$2,500,000;
- 22 (x) Repair and Modernize HVAC Sys-  
23 tem, Central Instrument Facility (KSC),  
24 \$3,000,000;

- 1 (xi) Replace High Voltage Load  
2 Break Switches (KSC), \$2,700,000;
- 3 (xii) Repair and Modernize HVAC  
4 and Electrical systems, Building 4201  
5 (Marshall Space Flight Center (MSFC)),  
6 \$2,300,000;
- 7 (xiii) Repair Roofs, Vehicle Compo-  
8 nent Supply buildings (MAF), \$2,000,000;
- 9 (xiv) Minor Revitalization of Facilities  
10 at Various Locations, not in excess of  
11 \$1,500,000 per project, \$65,500,000;
- 12 (xv) Minor Construction of New Fa-  
13 cilities and Additions to Existing Facilities  
14 at Various Locations, not in excess of  
15 \$1,500,000 per project, \$5,000,000;
- 16 (xvi) Facility Planning and Design,  
17 \$19,200,000;
- 18 (xvii) Deferred Major Maintenance,  
19 \$8,000,000;
- 20 (xviii) Environmental Compliance and  
21 Restoration, \$40,100,000;
- 22 (B) for fiscal year 2001, \$181,000,000;
- 23 and
- 24 (C) for fiscal year 2002, \$191,000,000.

1           (4) For Research and Program Management,  
2           including personnel and related costs, travel, and re-  
3           search operations support—

4                   (A) for fiscal year 2000, \$2,181,200,000;

5                   (B) for fiscal year 2001, \$2,195,000,000;

6           and

7                   (C) for fiscal year 2002, \$2,261,600,000.

8 **SEC. 105. INSPECTOR GENERAL.**

9           There are authorized to be appropriated to the Na-  
10          tional Aeronautics and Space Administration for Inspector  
11          General—

12                   (1) for fiscal year 2000, \$22,000,000;

13                   (2) for fiscal year 2001, \$22,000,000; and

14                   (3) for fiscal year 2002, \$22,000,000.

15 **SEC. 106. TOTAL AUTHORIZATION.**

16          Notwithstanding any other provision of this title, the  
17          total amount authorized to be appropriated to the Na-  
18          tional Aeronautics and Space Administration under this  
19          Act shall not exceed—

20                   (1) for fiscal year 2000, \$13,636,600,000;

21                   (2) for fiscal year 2001, \$13,757,100,000; and

22                   (3) for fiscal year 2002, \$13,847,900,000.

23 **SEC. 107. AVIATION SYSTEMS CAPACITY.**

24          In addition to amounts otherwise authorized, there  
25          are authorized to be appropriated to the Administrator of

1 the Federal Aviation Administration \$5,000,000 for fiscal  
2 year 2001 for aviation systems capacity.

3 **Subtitle B—Limitations and**  
4 **Special Authority**

5 **SEC. 121. USE OF FUNDS FOR CONSTRUCTION.**

6 (a) AUTHORIZED USES.—Funds appropriated under  
7 sections 101, 102, 103, and 104(1) and (2), and funds  
8 appropriated for research operations support under sec-  
9 tion 104(4), may be used for the construction of new fa-  
10 cilities and additions to, repair of, rehabilitation of, or  
11 modification of existing facilities at any location in support  
12 of the purposes for which such funds are authorized.

13 (b) LIMITATION.—No funds may be expended pursu-  
14 ant to subsection (a) for a project, the estimated cost of  
15 which to the National Aeronautics and Space Administra-  
16 tion, including collateral equipment, exceeds \$1,000,000,  
17 until 30 days have passed after the Administrator has no-  
18 tified the Committee on Science of the House of Rep-  
19 resentatives and the Committee on Commerce, Science,  
20 and Transportation of the Senate of the nature, location,  
21 and estimated cost to the National Aeronautics and Space  
22 Administration of such project.

23 (c) TITLE TO FACILITIES.—If funds are used pursu-  
24 ant to subsection (a) for grants to institutions of higher  
25 education, or to nonprofit organizations whose primary

1 purpose is the conduct of scientific research, for purchase  
2 or construction of additional research facilities, title to  
3 such facilities shall be vested in the United States unless  
4 the Administrator determines that the national program  
5 of aeronautical and space activities will best be served by  
6 vesting title in the grantee institution or organization.  
7 Each such grant shall be made under such conditions as  
8 the Administrator shall determine to be required to ensure  
9 that the United States will receive therefrom benefits ade-  
10 quate to justify the making of that grant.

11 **SEC. 122. AVAILABILITY OF APPROPRIATED AMOUNTS.**

12 To the extent provided in appropriations Acts, appro-  
13 priations authorized under subtitle A may remain avail-  
14 able without fiscal year limitation.

15 **SEC. 123. REPROGRAMMING FOR CONSTRUCTION OF FA-**  
16 **CILITIES.**

17 (a) IN GENERAL.—Appropriations authorized for  
18 construction of facilities under section 104(3)—

19 (1) may be varied upward by 10 percent in the  
20 discretion of the Administrator; or

21 (2) may be varied upward by 25 percent, to  
22 meet unusual cost variations, after the expiration of  
23 15 days following a report on the circumstances of  
24 such action by the Administrator to the Committee  
25 on Science of the House of Representatives and the

1       Committee on Commerce, Science, and Transpor-  
2       tation of the Senate.

3       The aggregate amount authorized to be appropriated for  
4       construction of facilities under section 104(3) shall not be  
5       increased as a result of actions authorized under para-  
6       graphs (1) and (2) of this subsection.

7       (b) SPECIAL RULE.—Where the Administrator deter-  
8       mines that new developments in the national program of  
9       aeronautical and space activities have occurred; and that  
10      such developments require the use of additional funds for  
11      the purposes of construction, expansion, or modification  
12      of facilities at any location; and that deferral of such ac-  
13      tion until the enactment of the next National Aeronautics  
14      and Space Administration authorization Act would be in-  
15      consistent with the interest of the Nation in aeronautical  
16      and space activities, the Administrator may use up to  
17      \$10,000,000 of the amounts authorized under section  
18      104(3) for each fiscal year for such purposes. No such  
19      funds may be obligated until a period of 30 days has  
20      passed after the Administrator has transmitted to the  
21      Committee on Commerce, Science, and Transportation of  
22      the Senate and the Committee on Science of the House  
23      of Representatives a written report describing the nature  
24      of the construction, its costs, and the reasons therefor.



1 **SEC. 124. LIMITATION ON OBLIGATION OF UNAUTHORIZED**  
2 **APPROPRIATIONS.**

3 (a) **REPORTS TO CONGRESS.—**

4 (1) **REQUIREMENT.—**Not later than—

5 (A) 30 days after the later of the date of  
6 the enactment of an Act making appropriations  
7 to the National Aeronautics and Space Admin-  
8 istration for fiscal year 2000 and the date of  
9 the enactment of this Act; and

10 (B) 30 days after the date of the enact-  
11 ment of an Act making appropriations to the  
12 National Aeronautics and Space Administration  
13 for fiscal year 2001 or 2002,

14 the Administrator shall submit a report to Congress  
15 and to the Comptroller General.

16 (2) **CONTENTS.—**The reports required by para-  
17 graph (1) shall specify—

18 (A) the portion of such appropriations  
19 which are for programs, projects, or activities  
20 not authorized under subtitle A of this title, or  
21 which are in excess of amounts authorized for  
22 the relevant program, project, or activity under  
23 this Act; and

24 (B) the portion of such appropriations  
25 which are authorized under this Act.

1 (b) FEDERAL REGISTER NOTICE.—The Adminis-  
2 trator shall, coincident with the submission of each report  
3 required by subsection (a), publish in the Federal Register  
4 a notice of all programs, projects, or activities for which  
5 funds are appropriated but which were not authorized  
6 under this Act, and solicit public comment thereon regard-  
7 ing the impact of such programs, projects, or activities on  
8 the conduct and effectiveness of the national aeronautics  
9 and space program.

10 (c) LIMITATION.—Notwithstanding any other provi-  
11 sion of law, no funds may be obligated for any programs,  
12 projects, or activities of the National Aeronautics and  
13 Space Administration for fiscal year 2000, 2001, or 2002  
14 not authorized under this Act until 30 days have passed  
15 after the close of the public comment period contained in  
16 a notice required by subsection (b).

17 **SEC. 125. USE OF FUNDS FOR SCIENTIFIC CONSULTATIONS**  
18 **OR EXTRAORDINARY EXPENSES.**

19 Not more than \$30,000 of the funds appropriated  
20 under section 103 may be used for scientific consultations  
21 or extraordinary expenses, upon the authority of the Ad-  
22 ministrator.

23 **SEC. 126. EARTH SCIENCE LIMITATION.**

24 Of the funds authorized to be appropriated for Earth  
25 Science under section 103(3) for each of fiscal years 2001

1 and 2002, \$50,000,000 shall be for the Commercial Re-  
2 mote Sensing Program at Stennis Space Center for com-  
3 mercial data purchases, unless the National Aeronautics  
4 and Space Administration has integrated data purchases  
5 into the procurement process for Earth science research  
6 by obligating at least 5 percent of the aggregate amount  
7 appropriated for that fiscal year for Earth Observing Sys-  
8 tem and Earth Probes for the purchase of Earth science  
9 data from the private sector.

10 **SEC. 127. COMPETITIVENESS AND INTERNATIONAL CO-**  
11 **OPERATION.**

12 (a) LIMITATION.—(1) As part of the evaluation of the  
13 costs and benefits of entering into an obligation to conduct  
14 a space mission in which a foreign entity will participate  
15 as a supplier of the spacecraft, spacecraft system, or  
16 launch system, the Administrator shall solicit comment on  
17 the potential impact of such participation through notice  
18 published in Commerce Business Daily at least 45 days  
19 before entering into such an obligation.

20 (2) The Administrator shall certify to the Congress  
21 at least 15 days in advance of any cooperative agreement  
22 with the People's Republic of China, or any company in-  
23 corporated under the laws of the People's Republic of  
24 China, involving spacecraft, spacecraft systems, launch  
25 systems, or scientific or technical information that—

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

3 (B) the agreement, including any indirect tech-  
4 nical benefit that could be derived from the agree-  
5 ment, will not measurably improve the missile or  
6 space launch capabilities of the People's Republic of  
7 China.

8 (3) The Inspector General of the National Aero-  
9 nautics and Space Administration, in consultation with  
10 the Director of Central Intelligence and the Director of  
11 the Federal Bureau of Investigation, shall conduct an an-  
12 nual audit of the policies and procedures of the National  
13 Aeronautics and Space Administration with respect to the  
14 export of technologies and the transfer of scientific and  
15 technical information, to assess the extent to which the  
16 National Aeronautics and Space Administration is car-  
17 rying out its activities in compliance with Federal export  
18 control laws and with paragraph (2).

19 (b) NATIONAL INTERESTS.—Before entering into an  
20 obligation described in subsection (a), the Administrator  
21 shall consider the national interests of the United States  
22 described in section 2(6).

23 **SEC. 128. TRANS-HAB.**

24 (a) REPLACEMENT STRUCTURE.—No funds author-  
25 ized by this Act shall be obligated for the definition, de-

1 sign, or development of an inflatable space structure to  
2 replace any International Space Station components  
3 scheduled for launch in the Assembly Sequence released  
4 by the National Aeronautics and Space Administration on  
5 February 22, 1999.

6 (b) GENERAL LIMITATION.—No funds authorized by  
7 this Act for fiscal year 2000 shall be obligated for the defi-  
8 nition, design, or development of an inflatable space struc-  
9 ture capable of accommodating humans in space.

10 **SEC. 129. CONSOLIDATED SPACE OPERATIONS CONTRACT.**

11 No funds authorized by this Act shall be used to cre-  
12 ate a Government-owned corporation to perform the func-  
13 tions that are the subject of the Consolidated Space Oper-  
14 ations Contract.

15 **SEC. 130. TRIANA FUNDING PROHIBITION.**

16 None of the funds authorized by this Act may be used  
17 for the Triana program, except that \$2,500,000 of the  
18 amount authorized under section 103(3)(A) for fiscal year  
19 2000 shall be available for termination costs.

20 **TITLE II—MISCELLANEOUS**  
21 **PROVISIONS**

22 **SEC. 201. REQUIREMENT FOR INDEPENDENT COST ANAL-**  
23 **YSIS.**

24 Before any funds may be obligated for Phase B of  
25 a project that is projected to cost more than \$100,000,000

1 in total project costs, the Chief Financial Officer for the  
2 National Aeronautics and Space Administration shall con-  
3 duct an independent cost analysis of such project and shall  
4 report the results to Congress. In developing cost account-  
5 ing and reporting standards for carrying out this section,  
6 the Chief Financial Officer shall, to the extent practicable  
7 and consistent with other laws, solicit the advice of exper-  
8 tise outside of the National Aeronautics and Space Admin-  
9 istration.

10 **SEC. 202. NATIONAL AERONAUTICS AND SPACE ACT OF 1958**

11 **AMENDMENTS.**

12 (a) DECLARATION OF POLICY AND PURPOSE.—Sec-  
13 tion 102 of the National Aeronautics and Space Act of  
14 1958 (42 U.S.C. 2451) is amended—

15 (1) by striking subsection (f) and redesignating  
16 subsections (g) and (h) as subsections (f) and (g),  
17 respectively; and

18 (2) in subsection (g), as so redesignated by  
19 paragraph (1) of this subsection, by striking “(f),  
20 and (g)” and inserting in lieu thereof “and (f)”.

21 (b) REPORTS TO THE CONGRESS.—Section 206(a) of  
22 the National Aeronautics and Space Act of 1958 (42  
23 U.S.C. 2476(a)) is amended—

24 (1) by striking “January” and inserting in lieu  
25 thereof “May”; and

1           (2) by striking “calendar” and inserting in lieu  
2           thereof “fiscal”.

3 **SEC. 203. COMMERCIAL SPACE GOODS AND SERVICES.**

4           The National Aeronautics and Space Administration  
5 shall purchase commercially available space goods and  
6 services to the fullest extent feasible, and shall not conduct  
7 activities that preclude or deter commercial space activi-  
8 ties except for reasons of national security or public safety.  
9 A space good or service shall be deemed commercially  
10 available if it is offered by a United States commercial  
11 provider, or if it could be supplied by a United States com-  
12 mercial provider in response to a Government procurement  
13 request. For purposes of this section, a purchase is fea-  
14 sible if it meets mission requirements in a cost-effective  
15 manner.

16 **SEC. 204. COST EFFECTIVENESS CALCULATIONS.**

17           In calculating the cost effectiveness of the cost of the  
18 National Aeronautics and Space Administration engaging  
19 in an activity as compared to a commercial provider, the  
20 Administrator shall compare the cost of the National Aer-  
21 onautics and Space Administration engaging in the activi-  
22 ty using full cost accounting principles with the price the  
23 commercial provider will charge for such activity.

1 **SEC. 205. FOREIGN CONTRACT LIMITATION.**

2 The National Aeronautics and Space Administration  
3 shall not enter into any agreement or contract with a for-  
4 eign government that grants the foreign government the  
5 right to recover profit in the event that the agreement or  
6 contract is terminated.

7 **SEC. 206. AUTHORITY TO REDUCE OR SUSPEND CONTRACT**  
8 **PAYMENTS BASED ON SUBSTANTIAL EVI-**  
9 **DENCE OF FRAUD.**

10 Section 2307(i)(8) of title 10, United States Code,  
11 is amended by striking “and (4)” and inserting in lieu  
12 thereof “(4), and (6)”.

13 **SEC. 207. SPACE SHUTTLE UPGRADE STUDY.**

14 (a) STUDY.—The Administrator shall enter into ap-  
15 propriate arrangements for the conduct of an independent  
16 study to reassess the priority of all Phase III and Phase  
17 IV Space Shuttle upgrades.

18 (b) PRIORITIES.—The study described in subsection  
19 (a) shall establish relative priorities of the upgrades within  
20 each of the following categories:

21 (1) Upgrades that are safety related.

22 (2) Upgrades that may have functional or tech-  
23 nological applicability to reusable launch vehicles.

24 (3) Upgrades that have a payback period within  
25 the next 12 years.



1           (c) COMPLETION DATE.—The results of the study de-  
2 scribed in subsection (a) shall be transmitted to the Con-  
3 gress not later than 180 days after the date of the enact-  
4 ment of this Act.

5 **SEC. 208. AERO-SPACE TRANSPORTATION TECHNOLOGY IN-**  
6 **TEGRATION.**

7           (a) INTEGRATION PLAN.—The Administrator shall  
8 develop a plan for the integration of research, develop-  
9 ment, and experimental demonstration activities in the  
10 aeronautics transportation technology and space transpor-  
11 tation technology areas. The plan shall ensure that inte-  
12 gration is accomplished without losing unique capabilities  
13 which support the National Aeronautics and Space Ad-  
14 ministration’s defined missions. The plan shall also in-  
15 clude appropriate strategies for using aeronautics centers  
16 in integration efforts.

17           (b) REPORTS TO CONGRESS.—Not later than 90 days  
18 after the date of the enactment of this Act, the Adminis-  
19 trator shall transmit to the Congress a report containing  
20 the plan developed under subsection (a). The Adminis-  
21 trator shall transmit to the Congress annually thereafter  
22 for 5 years a report on progress in achieving such plan,  
23 to be transmitted with the annual budget request.

1 **SEC. 209. DEFINITIONS OF COMMERCIAL SPACE POLICY**

2 **TERMS.**

3 The Administrator shall ensure that the usage of ter-  
4 minology in National Aeronautics and Space Administra-  
5 tion policies and programs is consistent with the following  
6 definitions:

7 (1) The term “commercialization” means the  
8 process of encouraging private entities conducting  
9 privatized space activities to expand their customer  
10 base beyond the Federal Government to address ex-  
11 isting or potential commercial markets, investing  
12 private resources to meet those commercial market  
13 requirements.

14 (2) The term “commercial purchase” means a  
15 purchase by the Federal Government of space goods  
16 and services at a market price from a private entity  
17 which has invested private resources to meet com-  
18 mercial requirements.

19 (3) The term “commercial use of Federal as-  
20 sets” means the use by a service contractor or other  
21 private entity of the capability of Federal assets to  
22 deliver services to commercial customers, with or  
23 without putting private capital at risk.

24 (4) The term “contract consolidation” means  
25 the combining of two or more Government service

1 contracts for related space activities into one larger  
2 Government service contract.

3 (5) The term “privatization” means the process  
4 of transferring—

5 (A) control and ownership of Federal  
6 space-related assets, along with the responsi-  
7 bility for operating, maintaining, and upgrading  
8 those assets; or

9 (B) control and responsibility for space-re-  
10 lated functions,  
11 from the Federal Government to the private sector.

12 **SEC. 210. EXTERNAL TANK OPPORTUNITIES STUDY.**

13 (a) APPLICATIONS.—the Administrator shall enter  
14 into appropriate arrangements for an independent study  
15 to identify, and evaluate the potential benefits and costs  
16 of, the broadest possible range of commercial and sci-  
17 entific applications which are enabled by the launch of  
18 Space Shuttle external tanks into Earth orbit and reten-  
19 tion in space, including—

20 (1) the use of privately owned external tanks as  
21 a venue for commercial advertising on the ground,  
22 during ascent, and in Earth orbit, except that such  
23 study shall not consider advertising that while in  
24 orbit is observable from the ground with the unaided  
25 human eye;

1           (2) the use of external tanks to achieve sci-  
2           entific or technology demonstration missions in  
3           Earth orbit, on the Moon, or elsewhere in space; and

4           (3) the use of external tanks as low-cost infra-  
5           structure in Earth orbit or on the Moon, including  
6           as an augmentation to the International Space Sta-  
7           tion.

8 A final report on the results of such study shall be deliv-  
9 ered to the Congress not later than 90 days after the date  
10 of the enactment of this Act. Such report shall include  
11 recommendations as to Government and industry-funded  
12 improvements to the external tank which would maximize  
13 its cost-effectiveness for the scientific and commercial ap-  
14 plications identified.

15           (b) REQUIRED IMPROVEMENTS.—The Administrator  
16 shall conduct an internal agency study, based on the con-  
17 clusions of the study required by subsection (a), of what—

18           (1) improvements to the current Space Shuttle  
19           external tank; and

20           (2) other in-space transportation or infrastruc-  
21           ture capability developments,

22 would be required for the safe and economical use of the  
23 Space Shuttle external tank for any or all of the applica-  
24 tions identified by the study required by subsection (a),  
25 a report on which shall be delivered to Congress not later

1 than 45 days after receipt of the final report required by  
2 subsection (a).

3 (c) CHANGES IN LAW OR POLICY.—Upon receipt of  
4 the final report required by subsection (a), the Adminis-  
5 trator shall solicit comment from industry on what, if any,  
6 changes in law or policy would be required to achieve the  
7 applications identified in that final report. Not later than  
8 90 days after receipt of such final report, the Adminis-  
9 trator shall transmit to the Congress the comments re-  
10 ceived along with the recommendations of the Adminis-  
11 trator as to changes in law or policy that may be required  
12 for those purposes.

13 **SEC. 211. ELIGIBILITY FOR AWARDS.**

14 (a) IN GENERAL.—The Administrator shall exclude  
15 from consideration for grant agreements made by the Na-  
16 tional Aeronautics and Space Administration after fiscal  
17 year 1999 any person who received funds, other than those  
18 described in subsection (b), appropriated for a fiscal year  
19 after fiscal year 1999, under a grant agreement from any  
20 Federal funding source for a project that was not sub-  
21 jected to a competitive, merit-based award process, except  
22 as specifically authorized by this Act. Any exclusion from  
23 consideration pursuant to this section shall be effective for  
24 a period of 5 years after the person receives such Federal  
25 funds.

1           (b) EXCEPTION.—Subsection (a) shall not apply to  
2 the receipt of Federal funds by a person due to the mem-  
3 bership of that person in a class specified by law for which  
4 assistance is awarded to members of the class according  
5 to a formula provided by law.

6           (c) DEFINITION.—For purposes of this section, the  
7 term “grant agreement” means a legal instrument whose  
8 principal purpose is to transfer a thing of value to the  
9 recipient to carry out a public purpose of support or stim-  
10 ulation authorized by a law of the United States, and does  
11 not include the acquisition (by purchase, lease, or barter)  
12 of property or services for the direct benefit or use of the  
13 United States Government. Such term does not include  
14 a cooperative agreement (as such term is used in section  
15 6305 of title 31, United States Code) or a cooperative re-  
16 search and development agreement (as such term is de-  
17 fined in section 12(d)(1) of the Stevenson-Wydler Tech-  
18 nology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1))).

19 **SEC. 212. NOTICE.**

20           (a) NOTICE OF REPROGRAMMING.—If any funds au-  
21 thorized by this Act are subject to a reprogramming action  
22 that requires notice to be provided to the Appropriations  
23 Committees of the House of Representatives and the Sen-  
24 ate, notice of such action shall concurrently be provided  
25 to the Committee on Science of the House of Representa-

1 tives and the Committee on Commerce, Science, and  
2 Transportation of the Senate.

3 (b) NOTICE OF REORGANIZATION.—The Adminis-  
4 trator shall provide notice to the Committees on Science  
5 and Appropriations of the House of Representatives, and  
6 the Committees on Commerce, Science, and Transpor-  
7 tation and Appropriations of the Senate, not later than  
8 15 days before any major reorganization of any program,  
9 project, or activity of the National Aeronautics and Space  
10 Administration.

11 **SEC. 213. UNITARY WIND TUNNEL PLAN ACT OF 1949**  
12 **AMENDMENTS.**

13 The Unitary Wind Tunnel Plan Act of 1949 is  
14 amended—

15 (1) in section 101 (50 U.S.C. 511) by striking  
16 “transsonic and supersonic” and inserting in lieu  
17 thereof “transsonic, supersonic, and hypersonic”;  
18 and

19 (2) in section 103 (50 U.S.C. 513)—

20 (A) by striking “laboratories” in sub-  
21 section (a) and inserting in lieu thereof “labora-  
22 tories and centers”;

23 (B) by striking “supersonic” in subsection  
24 (a) and inserting in lieu thereof “transsonic, su-  
25 personic, and hypersonic”; and

1 (C) by striking “laboratory” in subsection  
2 (c) and inserting in lieu thereof “facility”.

3 **SEC. 214. INNOVATIVE TECHNOLOGIES FOR HUMAN SPACE**  
4 **FLIGHT.**

5 (a) ESTABLISHMENT OF PROGRAM.—In order to pro-  
6 mote a “faster, cheaper, better” approach to the human  
7 exploration and development of space, the Administrator  
8 shall establish a Human Space Flight Commercialization/  
9 Technology program of ground-based and space-based re-  
10 search and development in innovative technologies.

11 (b) AWARDS.—At least 75 percent of the amount ap-  
12 propriated for the program established under subsection  
13 (a) for any fiscal year shall be awarded through broadly  
14 distributed announcements of opportunity that solicit pro-  
15 posals from educational institutions, industry, nonprofit  
16 institutions, National Aeronautics and Space Administra-  
17 tion Centers, the Jet Propulsion Laboratory, other Fed-  
18 eral agencies, and other interested organizations, and that  
19 allow partnerships among any combination of those enti-  
20 ties, with evaluation, prioritization, and recommendations  
21 made by external peer review panels.

22 (c) PLAN.—The Administrator shall include as part  
23 of the National Aeronautics and Space Administration’s  
24 budget request to the Congress for fiscal year 2001 a plan



1 for the implementation of the program established under  
2 subsection (a).

3 **SEC. 215. LIFE IN THE UNIVERSE.**

4 (a) REVIEW.—The Administrator shall enter into ap-  
5 propriate arrangements with the National Academy of  
6 Sciences for the conduct of a review of—

7 (1) international efforts to determine the extent  
8 of life in the universe; and

9 (2) enhancements that can be made to the Na-  
10 tional Aeronautics and Space Administration’s ef-  
11 forts to determine the extent of life in the universe.

12 (b) ELEMENTS.—The review required by subsection  
13 (a) shall include—

14 (1) an assessment of the direction of the Na-  
15 tional Aeronautics and Space Administration’s  
16 astrobiology initiatives within the Origins program;

17 (2) an assessment of the direction of other ini-  
18 tiatives carried out by entities other than the Na-  
19 tional Aeronautics and Space Administration to de-  
20 termine the extent of life in the universe, including  
21 other Federal agencies, foreign space agencies, and  
22 private groups such as the Search for Extra-  
23 terrestrial Intelligence Institute;

24 (3) recommendations about scientific and tech-  
25 nological enhancements that could be made to the

1 National Aeronautics and Space Administration's  
2 astrobiology initiatives to effectively utilize the initia-  
3 tives of the scientific and technical communities; and

4 (4) recommendations for possible coordination  
5 or integration of National Aeronautics and Space  
6 Administration initiatives with initiatives of other  
7 entities described in paragraph (2).

8 (c) REPORT TO CONGRESS.—Not later than 18  
9 months after the date of the enactment of this Act, the  
10 Administrator shall transmit to the Congress a report on  
11 the results of the review carried out under this section.

12 **SEC. 216. RESEARCH ON INTERNATIONAL SPACE STATION.**

13 (a) STUDY.—The Administrator shall enter into a  
14 contract with the National Research Council and the Na-  
15 tional Academy of Public Administration to jointly con-  
16 duct a study of the status of life and microgravity research  
17 as it relates to the International Space Station. The study  
18 shall include—

19 (1) an assessment of the United States sci-  
20 entific community's readiness to use the Inter-  
21 national Space Station for life and microgravity re-  
22 search;

23 (2) an assessment of the current and projected  
24 factors limiting the United States scientific commu-  
25 nity's ability to maximize the research potential of

1 the International Space Station, including, but not  
2 limited to, the past and present availability of re-  
3 sources in the life and microgravity research ac-  
4 counts within the Office of Human Spaceflight and  
5 the Office of Life and Microgravity Sciences and Ap-  
6 plications, and the past, present, and projected ac-  
7 cess to space of the scientific community; and

8 (3) recommendations for improving the United  
9 States scientific community's ability to maximize the  
10 research potential of the International Space Sta-  
11 tion, including an assessment of the relative costs  
12 and benefits of—

13 (A) dedicating an annual mission of the  
14 Space Shuttle to life and microgravity research  
15 during assembly of the International Space Sta-  
16 tion; and

17 (B) maintaining the schedule for assembly  
18 in place at the time of the enactment.

19 (b) REPORT.—Not later than 1 year after the date  
20 of the enactment of this Act, the Administrator shall  
21 transmit to the Committee on Science of the House of  
22 Representatives and the Committee on Commerce,  
23 Science, and Transportation of the Senate a report on the  
24 results of the study conducted under this section.

1 **SEC. 217. REMOTE SENSING FOR AGRICULTURAL AND RE-**  
2 **SOURCE MANAGEMENT.**

3 (a) INFORMATION DEVELOPMENT.—The Adminis-  
4 trator shall—

5 (1) consult with the Secretary of Agriculture to  
6 determine data product types that are of use to  
7 farmers which can be remotely sensed from air or  
8 space;

9 (2) consider useful commercial data products  
10 related to agriculture as identified by the focused re-  
11 search program between the National Aeronautics  
12 and Space Administration’s Stennis Space Center  
13 and the Department of Agriculture; and

14 (3) examine other data sources, including com-  
15 mercial sources, LightSAR, RADARSAT I, and  
16 RADARSAT II, which can provide domestic and  
17 international agricultural information relating to  
18 crop conditions, fertilization and irrigation needs,  
19 pest infiltration, soil conditions, projected food, feed,  
20 and fiber production, and other related subjects.

21 (b) PLAN.—After performing the activities described  
22 in subsection (a) the Administrator shall, in consultation  
23 with the Secretary of Agriculture, develop a plan to inform  
24 farmers and other prospective users about the use and  
25 availability of remote sensing products that may assist  
26 with agricultural and forestry applications identified in

1 subsection (a). The Administrator shall transmit such  
2 plan to the Congress not later than 180 days after the  
3 date of the enactment of this Act.

4 (c) IMPLEMENTATION.—Not later than 90 days after  
5 the plan has been transmitted under subsection (b), the  
6 Administrator shall implement the plan.

7 **SEC. 218. INTEGRATED SAFETY RESEARCH PLAN.**

8 (a) REQUIREMENT.—Not later than March 1, 2000,  
9 the Administrator and the Administrator of the Federal  
10 Aviation Administration shall jointly prepare and transmit  
11 to the Congress an integrated civil aviation safety research  
12 and development plan.

13 (b) CONTENTS.—The plan required by subsection (a)  
14 shall include—

15 (1) an identification of the respective research  
16 and development requirements, roles, and respon-  
17 sibilities of the National Aeronautics and Space Ad-  
18 ministration and the Federal Aviation Administra-  
19 tion;

20 (2) formal mechanisms for the timely sharing of  
21 information between the National Aeronautics and  
22 Space Administration and the Federal Aviation Ad-  
23 ministration, including a requirement that the FAA-  
24 NASA Coordinating Committee established in 1980  
25 meet at least twice a year; and

1           (3) procedures for increased communication and  
2           coordination between the Federal Aviation Adminis-  
3           tration research advisory committee established  
4           under section 44508 of title 49, United States Code,  
5           and the NASA Aeronautics and Space Transpor-  
6           tation Technology Advisory Committee, including a  
7           proposal for greater cross-membership between those  
8           two advisory committees.

9   **SEC. 219. 100TH ANNIVERSARY OF FLIGHT EDUCATIONAL**  
10                           **INITIATIVE.**

11           (a) EDUCATIONAL INITIATIVE.—In recognition of the  
12   100th anniversary of the first powered flight, the Adminis-  
13   trator, in coordination with the Secretary of Education,  
14   shall develop and provide for the distribution, for use in  
15   the 2000–2001 academic year and thereafter, of age-ap-  
16   propriate educational materials curriculum, for use at the  
17   kindergarten, elementary, and secondary levels, on the his-  
18   tory of flight, the contribution of flight to global develop-  
19   ment in the 20th century, the practical benefits of aero-  
20   nautics and space flight to society, the scientific and math-  
21   ematical principles used in flight, and any other related  
22   topics the Administrator considers appropriate. The Ad-  
23   ministrators shall integrate into the educational materials  
24   plans for the development and flight of the Mars plane.

1 (b) REPORT TO CONGRESS.—Not later than May 1,  
2 2000, the Administrator shall transmit a report to the  
3 Congress on activities undertaken pursuant to this section.

4 **SEC. 220. INTERNET AVAILABILITY OF INFORMATION.**

5 The Administrator shall make available through the  
6 Internet home page of the National Aeronautics and Space  
7 Administration the abstracts relating to all research  
8 grants and awards made with funds authorized by this  
9 Act. Nothing in this section shall be construed to require  
10 or permit the release of any information prohibited by law  
11 or regulation from being released to the public.

12 **SEC. 221. SENSE OF THE CONGRESS; REQUIREMENT RE-**  
13 **GARDING NOTICE.**

14 (a) PURCHASE OF AMERICAN-MADE EQUIPMENT  
15 AND PRODUCTS.—In the case of any equipment or prod-  
16 ucts that may be authorized to be purchased with financial  
17 assistance provided under this Act, it is the sense of the  
18 Congress that entities receiving such assistance should, in  
19 expending the assistance, purchase only American-made  
20 equipment and products.

21 (b) NOTICE TO RECIPIENTS OF ASSISTANCE.—In  
22 providing financial assistance under this Act, the Adminis-  
23 trator shall provide to each recipient of the assistance a  
24 notice describing the statement made in subsection (a) by  
25 the Congress.

1 **SEC. 222. USE OF ABANDONED AND UNDERUTILIZED**  
2 **BUILDINGS, GROUNDS, AND FACILITIES.**

3 (a) IN GENERAL.—In meeting the needs of the Na-  
4 tional Aeronautics and Space Administration for addi-  
5 tional facilities, the Administrator shall select abandoned  
6 and underutilized buildings, grounds, and facilities in de-  
7 pressed communities that can be converted to National  
8 Aeronautics and Space Administration facilities at a rea-  
9 sonable cost, as determined by the Administrator.

10 (b) DEFINITIONS.—For purposes of this section, the  
11 term “depressed communities” means rural and urban  
12 communities that are relatively depressed, in terms of age  
13 of housing, extent of poverty, growth of per capita income,  
14 extent of unemployment, job lag, or surplus labor.

15 **SEC. 223. SPACE STATION COMMERCIALIZATION.**

16 In order to promote commercialization of the Inter-  
17 national Space Station, the Administrator shall—

18 (1) allocate sufficient resources as appropriate  
19 to accelerate the National Aeronautics and Space  
20 Administration’s initiatives promoting commercial  
21 participation in the International Space Station;

22 (2) instruct all National Aeronautics and Space  
23 Administration staff that they should consider the  
24 potential impact on commercial participation in the  
25 International Space Station in developing policies or



1 program priorities not directly related to crew safe-  
2 ty; and

3 (3) publish a list, not later than 90 days after  
4 the date of the enactment of this Act, and annually  
5 thereafter with the annual budget request of the Na-  
6 tional Aeronautics and Space Administration, of the  
7 opportunities for commercial participation in the  
8 International Space Station consistent with safety  
9 and mission assurance.

10 **SEC. 224. ANTI-DRUG MESSAGE ON INTERNET SITES.**

11 Not later than 90 days after the date of the enact-  
12 ment of this Act, the Administrator, in consultation with  
13 the Director of the Office of National Drug Control Policy,  
14 shall place anti-drug messages on Internet sites controlled  
15 by the National Aeronautics and Space Administration.

Passed the House of Representatives May 19, 1999.

Attest:

JEFF TRANDAHL,

*Clerk.*