

Calendar No. 760106TH CONGRESS
2^D SESSION**S. 1639****[Report No. 106-384]**

To authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1977, for the National Weather Service and Related Agencies, and for the United States Fire Administration for fiscal years 2000, 2001, and 2002.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 24, 1999

Mr. FRIST (for himself, Mr. BREAUX, Mr. McCAIN, Mr. HOLLINGS, and Mr. ROCKEFELLER) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

AUGUST 25, 2000

Reported under authority of the order of the Senate of July 26, 2000, by Mr. McCAIN, with an amendment in the nature of a substitute

[Strike out all after the enacting clause and insert the part printed in *italic*]

A BILL

To authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1977, for the National Weather Service and Related Agencies, and for the United States Fire Administration for fiscal years 2000, 2001, and 2002.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Earth, Wind, and Fire
 5 Authorization Act of 1999”.

6 **TITLE I—EARTHQUAKE HAZARDS REDUCTION**
 7 **ACT**

8 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

9 (a) ~~FEDERAL EMERGENCY MANAGEMENT AGENCY.~~

10 Section 12(a)(7) of the Earthquake Hazards Reduction
 11 Act of 1977 (42 U.S.C. 7706(a)) is amended—

12 (1) by striking “and” after “1998”, and

13 (2) by striking “1999.” and inserting “1999;

14 \$19,800,000 for the fiscal year ending September

15 30, 2000, of which \$450,000 shall be used to sup-

16 port the National Earthquake Hazard Reduction

17 Program eligible efforts of an established multi-state

18 consortium to reduce the unacceptable threat of

19 earthquake damages in the New Madrid seismic re-

20 gion through efforts to enhance preparedness, re-

21 sponse, recovery, and mitigation; \$20,890,000 for

22 the fiscal year ending September 30, 2001; and

23 \$22,040,000 for the fiscal year ending September

24 30, 2002.”.

25 (b) ~~UNITED STATES GEOLOGICAL SURVEY.—~~

1 (1) Section 12(b) of the Earthquake Hazards
2 Reduction Act of 1977 (42 U.S.C. 7706(b)) is
3 amended—

4 (A) by inserting after “operated by the
5 Agency.” the following: “There are authorized
6 to be appropriated to the Secretary of the Inte-
7 rior for purposes of carrying out, through the
8 Director of the United States Geological Sur-
9 vey, the responsibilities that may be assigned to
10 the Director under this Act \$46,100,000 for fis-
11 cal year 2000, of which 43,500,000 shall be
12 used for the Global Seismic Network;
13 \$48,635,000 for fiscal year 2001, of which
14 \$3,600,000 shall be used for the Global Seismic
15 Network; and \$51,310,000 for fiscal year
16 2002.”;

17 (B) by striking “and” at the end of para-
18 graph (1);

19 (C) by striking the comma at the end of
20 paragraph (2) and inserting a semicolon; and

21 (D) by striking after paragraph (2) the fol-
22 lowing new paragraphs:

23 “(3) \$9,000,000 of the amount authorized to be
24 appropriated for fiscal year 2000;

1 “(4) \$9,250,000 of the amount authorized to be
2 appropriated for fiscal year 2001; and

3 “(5) \$9,500,000 of the amount authorized to be
4 appropriated for fiscal year 2002.”.

5 (2) Section 2(a)(7) of the Act entitled “An Act
6 to authorize appropriations for carrying out the
7 Earthquake Hazards Reduction Act of 1977 for fis-
8 cal years 1998 and 1999, and for other purposes”
9 is amended by striking “1998 and 1999.” and in-
10 serting “1998 and 1999, \$1,600,000 for fiscal year
11 2000, \$1,690,000 for fiscal year 2001, and
12 \$1,783,000 for fiscal year 2002.”.

13 (e) NATIONAL SCIENCE FOUNDATION.—Section
14 12(e) of the Earthquake Hazards Reduction Act of 1977
15 (42 U.S.C. 7706(e)) is amended—

16 (1) by striking “1998, and” and inserting
17 “1998,”; and

18 (2) by striking “1999.” and inserting “1999,
19 and (5) \$19,000,000 for engineering research and
20 \$10,900,000 for geosciences research for the fiscal
21 year ending September 30, 2000. There are author-
22 ized to be appropriated to the National Science
23 Foundation \$20,045,000 for engineering research
24 and \$11,500,000 for geosciences research for fiscal
25 year 2001 and \$21,147,000 for engineering research

1 and \$12,133,000 for geosciences research for fiscal
 2 year 2002.”.

3 (d) NATIONAL INSTITUTE OF STANDARDS AND
 4 TECHNOLOGY.—Section 12(d) of the Earthquake Hazards
 5 Reduction Act of 1977 (42 U.S.C. 7706(d)) is amended—

6 (1) by striking “1998, and”; and inserting
 7 “1998,” and

8 (2) by striking “1999.” and inserting “1999,
 9 \$2,200,000 for fiscal year 2000, \$2,231,000 for fis-
 10 cal year 2001, and \$2,354,000 for fiscal year
 11 2002.”.

12 **SEC. 102. REPEALS.**

13 Section 10 and subsections (e) and (f) of section 12
 14 of the Earthquake Hazards Reduction Act of 1977 (42
 15 U.S.C. 7705d and 7706 (e) and (f)) are repealed.

16 **SEC. 103. ADVANCED NATIONAL SEISMIC RESEARCH AND**
 17 **MONITORING SYSTEM.**

18 The Earthquake Hazards Reduction Act of 1977 (42
 19 U.S.C. 7701 et seq.) is amended by adding at the end
 20 the following new section:

21 **“SEC. 13. ADVANCED NATIONAL SEISMIC RESEARCH AND**
 22 **MONITORING SYSTEM.**

23 “(a) ESTABLISHMENT.—The Director of the United
 24 States Geological Survey shall establish and operate an
 25 Advanced National Seismic Research and Monitoring Sys-

1 tem. The purpose of such system shall be to organize,
2 modernize, standardize, and stabilize the national, re-
3 gional, and urban seismic monitoring systems in the
4 United States, including sensors, recorders, and data anal-
5 ysis centers, into a coordinated system that will measure
6 and record the full range of frequencies and amplitudes
7 exhibited by seismic waves, in order to enhance earthquake
8 research and warning capabilities.

9 “(b) MANAGEMENT PLAN.—Not later than 90 days
10 after the date of the enactment of the Earthquake Haz-
11 ards Reduction Authorization Act 1999, the Director of
12 the United States Geological Survey shall transmit to the
13 Congress a 5 year management plan for establishing and
14 operating the Advanced National Seismic Research and
15 Monitoring System. The plan shall include annual cost es-
16 timates for both modernization and operation, milestones,
17 standards, and performance goals, as well as plans for se-
18 curing the participation of all existing networks in the Ad-
19 vanced National Seismic Research and Monitoring System
20 and for establishing new, or enhancing existing, partner-
21 ships to leverage resources.

22 “(c) AUTHORIZATION OF APPROPRIATIONS.—

23 “(1) EXPANSION AND MODERNIZATION.—In ad-
24 dition to amounts appropriated under section 12(b),
25 there are authorized to be appropriated to the Sec-

1 retary of the Interior, to be used by the Director of
 2 the United States Geological Survey to establish the
 3 Advanced National Seismic Research and Moni-
 4 toring System—

5 “(A) \$33,500,000 for fiscal year 2001;

6 “(B) \$33,700,000 for fiscal year 2002;

7 “(C) \$35,100,000 for fiscal year 2003;

8 “(D) \$35,000,000 for fiscal year 2004;

9 and

10 “(E) \$33,500,000 for fiscal year 2005.

11 “(2) OPERATION.—In addition to amounts ap-
 12 propriated under section 12(b), there are authorized
 13 to be appropriated to the Secretary of the Interior,
 14 to be used by the Director of the United States Geo-
 15 logical Survey to operate the Advanced National
 16 Seismic Research and Monitoring System—

17 “(A) \$4,500,000 for fiscal year 2001; and

18 “(B) \$10,300,000 for fiscal year 2002.”.

19 **SEC. 104. NETWORK FOR EARTHQUAKE ENGINEERING SIM-**
 20 **ULATION.**

21 The Earthquake Hazards Reduction Act of 1977 (42
 22 U.S.C. 7701 et seq.) is amended by adding at the end
 23 the following new section:

1 **“SEC. 14. NETWORK FOR EARTHQUAKE ENGINEERING SIM-**
 2 **ULATION.**

3 “(a) **ESTABLISHMENT.**—The Director of the Na-
 4 tional Science foundation shall establish a Network for
 5 Earthquake Engineering Simulation that will upgrade,
 6 link, and integrate a system of geographically distributed
 7 experimental facilities for earthquake engineering testing
 8 of full sized structures and their components and partial
 9 scale physical models. The system shall be integrated
 10 through networking software so that integrated models
 11 and databases can be used to create model-based simula-
 12 tion, and the components of the system shall be inter-
 13 connected with a computer network and allow for remote
 14 access, information sharing, and collaborative research.

15 “(b) **AUTHORIZATION OF APPROPRIATIONS.**—In ad-
 16 dition to amounts appropriated under section 12(e), there
 17 are authorized to be appropriated, out of funds otherwise
 18 authorized to be appropriated to the National Science
 19 Foundation, \$7,700,000 for fiscal year 2000 for the Net-
 20 work for Earthquake Engineering Simulation. In addition
 21 to amounts appropriated under section 12(e), there are
 22 authorized to be appropriated to the National Science
 23 Foundation for the Network for Earthquake Engineering
 24 Simulation—

25 “(1) \$28,200,000 for fiscal year 2001;

26 “(2) \$24,400,000 for fiscal year 2002;

1 “(3) \$4,500,000 for fiscal year 2003; and

2 “(4) \$17,000,000 for fiscal year 2004;”.

3 **SEC. 105. BUDGET COORDINATION.**

4 Section 5 of the Earthquake Hazards Reduction Act
5 of 1977 (42 U.S.C. 7704) is amended—

6 (1) in subsection (b)(1)—

7 (A) by striking subparagraph (A) and re-
8 designating subparagraphs (B) through (F) as
9 subparagraphs (A) through (E), respectively;
10 and

11 (B) by moving subparagraph (E), as so re-
12 designated by subparagraph (A) of this para-
13 graph, so as to appear immediately after sub-
14 paragraph (D), as so redesignated; and

15 (2) by adding at the end the following new sub-
16 section:

17 “(e) BUDGET COORDINATION.—

18 “(1) GUIDANCE.—The Agency shall each year
19 provide guidance to the other Program agencies con-
20 cerning the preparation of requests for appropria-
21 tions for activities related to the Program, and shall
22 prepare, in conjunction with the other Program
23 agencies, an annual Program budget to be submitted
24 to the Office of Management and Budget.

1 “(2) REPORTS.—Each Program agency shall
2 include with its annual request for appropriations
3 submitted to the Office of Management and Budget
4 a report that—

5 “(A) identifies each element of the pro-
6 posed Program activities of the agency;

7 “(B) specifies how each of these activities
8 contributes to the Program; and

9 “(C) states the portion of its request for
10 appropriations allocated to each element of the
11 Program.”.

12 **SEC. 106. REPORT ON AT-RISK POPULATIONS.**

13 Not later than one year after the date of the enact-
14 ment of this Act, and after a period for public comment,
15 the Director of the Federal Emergency Management
16 Agency shall transmit to the Congress a report describing
17 the elements of the Program that specifically address the
18 needs of at-risk populations, including the elderly, persons
19 with disabilities, non-English-speaking families, single-
20 parent households, and the poor. Such report shall also
21 identify additional actions that could be taken to address
22 those needs and make recommendations for any additional
23 legislative authority required to take such actions.

1 **SEC. 107. PUBLIC ACCESS TO EARTHQUAKE INFORMATION.**

2 Section 5(b)(2)(A)(ii) of the Earthquake Hazards Re-
 3 duction Act of 1977 (42 U.S.C. 7704(b)(2)(A)(ii)) is
 4 amended by inserting “, and development of means of in-
 5 creasing public access to available locality-specific infor-
 6 mation that may assist the public in preparing for or re-
 7 sponding to earthquakes” after “and the general public”.

8 **SEC. 108. LIFELINES.**

9 Section 4(6) of the Earthquake Hazards Reduction
 10 Act of 1977 (42 U.S.C. 7703(6)) is amended by inserting
 11 “and infrastructure” after “communication facilities”.

12 **TITLE II—NATIONAL WEATHER SERVICE AND**
 13 **RELATED AGENCIES AUTHORIZATION ACT**

14 **SEC. 201. DEFINITIONS.**

15 For purposes of this title, the term—

16 (1) “Administrator” means the Administrator
 17 of the National Oceanic and Atmospheric Adminis-
 18 tration; and

19 (2) “Secretary” means the Secretary of Com-
 20 merce.

21 **SEC. 202. NATIONAL WEATHER SERVICE.**

22 (a) **OPERATIONS, RESEARCH, AND FACILITIES.—**

23 There are authorized to be appropriated to the Secretary
 24 to enable the National Oceanic and Atmospheric Adminis-
 25 tration to carry out the Operations, Research, and Facili-
 26 ties activities of the National Weather Service

1 \$617,897,000 for fiscal year 2000, \$651,881,000 for fis-
2 cal year 2001, and \$687,734,000 for fiscal year 2002, to
3 remain available until expended. Of such amounts—

4 (1) \$450,411,000 for fiscal year 2000,
5 \$475,184,000 for fiscal year 2001, and
6 \$501,320,000 for fiscal year 2002 shall be for Local
7 Warnings and Forecasts;

8 (2) \$2,200,000 for fiscal year 2000, \$2,321,000
9 for fiscal year 2001, and \$2,449,000 for fiscal year
10 2002 shall be for Advanced Hydrological Prediction
11 System;

12 (3) \$619,000 for fiscal year 2000, \$653,000 for
13 fiscal year 2001, and \$689,000 for fiscal year 2002
14 shall be for Susquehanna River Basin Flood Sys-
15 tems;

16 (4) \$35,596,000 for fiscal year 2000,
17 \$37,554,000 for fiscal year 2001, and \$36,619,000
18 for fiscal year 2002 shall be for Aviation Forecasts;

19 (5) \$4,000,000 for fiscal year 2000, \$4,200,000
20 for fiscal year 2001, and \$4,452,000 for fiscal year
21 2002 shall be for Weather Forecast Offices (WFO)
22 Facilities Maintenance;

23 (6) \$37,081,000 for fiscal year 2000,
24 \$39,120,000 for fiscal year 2001, and \$41,272,000

1 for fiscal year 2002 shall be for Central Forecast
2 Guidance;

3 (7) \$3,090,000 for fiscal year 2000, \$3,260,000
4 for fiscal year 2001, and \$3,439,000 for fiscal year
5 2002 shall be for Atmospheric and Hydrological Re-
6 search;

7 (8) \$39,325,000 for fiscal year 2000;
8 \$41,488,000 for fiscal year 2001, and \$43,770,000
9 for fiscal year 2002 shall be for Next Generation
10 Weather Radar (NEXRAD);

11 (9) \$7,573,000 for fiscal year 2000; \$7,990,000
12 for fiscal year 2001; and \$8,429,000 for fiscal year
13 2002 shall be for Automated Surface Observing Sys-
14 tem (ASOS); and

15 (10) \$38,002,000 for fiscal year 2000;
16 \$40,092,000 for fiscal year 2001, and \$42,297,000
17 for fiscal year 2002 shall be for Advanced Weather
18 Interactive Processing System (AWIPS).

19 (b) PROCUREMENT, ACQUISITION, AND CONSTRU-
20 TION.—There are authorized to be appropriated to the
21 Secretary to enable the National Oceanic and Atmospheric
22 Administration to carry out the Procurement, Acquisition,
23 and Construction activities of the National Weather Serv-
24 ice \$69,632,000 for fiscal year 2000 and \$70,120,000 for

1 fiscal year 2001, to remain available until expended. Of
2 such amounts—

3 (1) \$9,560,000 for fiscal year 2000, \$9,060,000
4 for fiscal year 2001, and \$9,060,000 for fiscal year
5 2002 shall be for Next Generation Weather Radar
6 (NEXRAD);

7 (2) \$4,180,000 for fiscal year 2000, \$6,125,000
8 for fiscal year 2001, and \$7,565,000 for fiscal year
9 2002 shall be for Automated Surface Observing Sys-
10 tem (ASOS);

11 (3) \$22,575,000 for fiscal year 2000,
12 \$21,525,000 for fiscal year 2001, and \$7,900,000
13 for fiscal year 2002 shall be for Advanced Weather
14 Interactive Processing System (AWIPS);

15 (4) \$11,100,000 for fiscal year 2000,
16 \$12,835,000 for fiscal year 2001, and \$16,135,000
17 for fiscal year 2002 shall be for Computer Facilities
18 Upgrades;

19 (5) \$8,350,000 for fiscal year 2000, \$8,350,000
20 for fiscal year 2001, and \$8,350,000 for fiscal year
21 2002 shall be for Radiosonde Replacement;

22 (6) \$500,000 for fiscal year 2000 shall be for
23 National Oceanic and Atmospheric Administration
24 Operations Center Rehabilitation; and

1 (7) \$13,367,000 for fiscal year 2000,
2 \$12,225,000 for fiscal year 2001, and \$12,725,000
3 for fiscal year 2002 shall be for Weather Forecast
4 Office (WFO) Construction.

5 **SEC. 203. ATMOSPHERIC RESEARCH.**

6 (a) OPERATIONS, RESEARCH, AND FACILITIES.—

7 (1) IN GENERAL.—There are authorized to be
8 appropriated to the Secretary to enable the National
9 Oceanic and Atmospheric Administration to carry
10 out the Atmospheric Research Operations, Research,
11 and Facilities environmental research and develop-
12 ment activities of the Office of Oceanic and Atmos-
13 pheric Research \$173,250,000 for fiscal year 2000,
14 \$182,779,000 for fiscal year 2001, and
15 \$192,832,000 for fiscal year 2002, to remain avail-
16 able until expended.

17 (2) CLIMATE AND AIR QUALITY RESEARCH.—Of
18 the amounts authorized under paragraph (1),
19 \$126,200,000 for fiscal year 2000, \$133,141,000 for
20 fiscal year 2001, and \$140,464,000 for fiscal year
21 2002 shall be for Climate and Air Quality Research,
22 of which—

23 (A) \$16,900,000 for fiscal year 2000,
24 \$17,830,000 for fiscal year 2001, and

1 \$18,810,000 for fiscal year 2002 shall be for
2 Interannual and Seasonal Climate Research;

3 (B) ~~\$34,600,000~~ for fiscal year 2000,
4 ~~\$36,503,000~~ for fiscal year 2001, and
5 ~~\$38,511,000~~ for fiscal year 2002 shall be for
6 ~~Long-Term Climate and Air Quality Research;~~

7 (C) ~~\$74,600,000~~ for fiscal year 2000,
8 ~~\$78,703,000~~ for fiscal year 2001, and
9 ~~\$83,032,000~~ for fiscal year 2002 shall be for
10 ~~Climate and Global Change;~~

11 (D) ~~\$5,000,000~~ for fiscal year 2000,
12 ~~\$5,275,000~~ for fiscal year 2001, and
13 ~~\$5,565,000~~ for fiscal year 2002 shall be for
14 ~~Global Learning and Observations to Benefit~~
15 ~~the Environment (GLOBE); and~~

16 (E) ~~\$13,500,000~~ for fiscal year 2000 for
17 ~~High Performance Computing and Communica-~~
18 ~~tions.~~

19 (3) ~~ATMOSPHERIC PROGRAMS.~~ Of the amounts
20 authorized under paragraph (1), ~~\$47,050,000~~ for
21 fiscal year 2000, ~~\$49,638,000~~ for fiscal year 2001,
22 and ~~\$52,368,000~~ for fiscal year 2002 shall be for
23 ~~Atmospheric Programs, of which—~~

24 (A) ~~\$36,600,000~~ for fiscal year 2000,
25 ~~\$38,613,000~~ for fiscal year 2001, and

1 \$40,737,000 for fiscal year 2002 shall be for
2 Weather Research;

3 (B) \$4,350,000 for fiscal year 2000,
4 \$4,589,000 for fiscal year 2001, and
5 \$4,842,000 for fiscal year 2002 shall be for
6 Wind Profiler; and

7 (C) \$6,100,000 for fiscal year 2000,
8 \$6,436,000 for fiscal year 2001, and
9 \$6,789,000 for fiscal year 2002 shall be for
10 Solar-Terrestrial Services and Research.

11 (b) ~~PROCUREMENT, ACQUISITION, AND CONSTRUCTION.~~—There are authorized to be appropriated to the
12 Secretary to enable the National Oceanic and Atmospheric
13 Administration to carry out the Atmospheric Research
14 Procurement, Acquisition, and Construction environ-
15 mental research and development activities of the Office
16 of Oceanic and Atmospheric Research \$10,040,000 for fis-
17 cal year 2000, \$14,160,000 for fiscal year 2001, and
18 \$14,580,000 for fiscal year 2002, to remain available until
19 expended. Of such amounts—

21 (1) \$5,700,000 for fiscal year 2000, \$8,000,000
22 for fiscal year 2001, and \$8,000,000 for fiscal year
23 2002 shall be for the Geophysical Fluid Dynamics
24 Laboratory Supercomputer; and

1 (2) \$4,340,000 for fiscal year 2000, \$6,160,000
 2 for fiscal year 2001, and \$6,580,000 for fiscal year
 3 2002 shall be for the Advanced Composition Ex-
 4 plorer (ACE) Follow-On Satellite/GEOSTORM.

5 **SEC. 204. NATIONAL ENVIRONMENTAL SATELLITE, DATA**
 6 **AND INFORMATION SERVICE.**

7 (a) OPERATIONS, RESEARCH, AND FACILITIES.—

8 (1) IN GENERAL.—There are authorized to be
 9 appropriated to the Secretary to enable the National
 10 Oceanic and Atmospheric Administration to carry
 11 out the Operations, Research, and Facilities environ-
 12 mental research and development and related activi-
 13 ties of the National Environmental Satellite, Data
 14 and Information Service \$103,092,000 for fiscal
 15 year 2000, \$103,762,000 for fiscal year 2001, and
 16 \$114,744,000 for fiscal year 2002 to remain avail-
 17 able until expended.

18 (2) SATELLITE OBSERVING SYSTEMS.—Of the
 19 amounts authorized under paragraph (1),
 20 \$59,236,000 for fiscal year 2000, \$62,494,000 for
 21 fiscal year 2001, and \$65,931,000 for fiscal year
 22 2002 shall be for Satellite Observing Systems, of
 23 which—

24 (A) \$2,000,000 for fiscal year 2000,
 25 \$2,110,000 for fiscal year 2001, and

1 \$2,156,000 for fiscal year 2002 shall be for
2 Global Disaster Information Network (GDIN);

3 (B) \$4,000,000 for fiscal year 2000,
4 \$4,220,000 for fiscal year 2001, and
5 \$4,313,000 for fiscal year 2002 shall be for
6 Ocean Remote Sensing; and

7 (C) \$53,236,000 for fiscal year 2000,
8 \$56,164,000 for fiscal year 2001, and
9 \$59,253,000 for fiscal year 2002 shall be for
10 Environmental Observing Services.

11 (3) ENVIRONMENTAL DATA MANAGEMENT SYS-
12 TEMS.—Of the amounts authorized under paragraph
13 (1), \$43,856,000 for fiscal year 2000, \$46,268,000
14 for fiscal year 2001, and \$48,813,000 for fiscal year
15 2002 shall be for Environmental Data Management
16 Systems.

17 (b) PROCUREMENT, ACQUISITION, AND CONSTRU-
18 TION.—

19 (1) IN GENERAL.—There are authorized to be
20 appropriated to the Secretary to enable the National
21 Oceanic and Atmospheric Administration to carry
22 out the Procurement, Acquisition, and Construction
23 environmental research and development and related
24 activities of the National Environmental Satellite,
25 Data and Information Service \$414,157,000 for fis-

1 eal year 2000, \$476,183,000 for fiscal year 2001,
2 and \$505,094,000 for fiscal year 2002, to remain
3 available until expended.

4 (2) SYSTEMS ACQUISITION.—Of the amounts
5 authorized under paragraph (1), \$410,612,000 for
6 fiscal year 2000, \$473,803,000 for fiscal year 2001,
7 and \$505,094,000 shall be for Systems Acquisition,
8 of which—

9 (A) \$140,979,000 for fiscal year 2000,
10 \$114,594,000 for fiscal year 2001, and
11 \$98,253,000 for fiscal year 2002 shall be for
12 the procurement and launch of, and supporting
13 ground systems for, Polar Orbiting Environ-
14 mental Satellites (POES), K, L, M, N, and N’;

15 (B) \$80,100,000 for fiscal year 2000,
16 \$113,600,000 for fiscal year 2001, and
17 \$180,000,000 for fiscal year 2002 shall be for
18 the procurement and launch of, and supporting
19 ground systems for, the National Polar-Orbiting
20 Operational Environmental Satellite System
21 (NPOESS); and

22 (C) \$189,533,000 for fiscal year 2000,
23 \$245,609,000 for fiscal year 2001, and
24 \$226,841,000 for fiscal year 2002 shall be for
25 the procurement and launch of, and supporting

1 ground systems for, Geostationary Operational
 2 Environmental NEXT follow-on Satellites
 3 (~~GOES N-Q~~).

4 ~~(3) CONSTRUCTION.~~—Of the amounts author-
 5 ized under paragraph (1), ~~\$3,545,000~~ for fiscal year
 6 2000 and ~~\$2,380,000~~ for fiscal year 2001 shall be
 7 for National Oceanic and Atmospheric Administra-
 8 tion Operations Center Rehabilitation Construction.

9 **SEC. 205. INTERNET AVAILABILITY OF INFORMATION.**

10 The Administrator shall make available through the
 11 Internet home page of the National Oceanic and Atmos-
 12 pheric Administration the abstracts relating to all research
 13 grants and awards made with funds authorized by this
 14 Act. Nothing in this section shall be construed to require
 15 or permit the release of any information prohibited by law
 16 or regulation from being released to the public.

17 **TITLE III—FIRE ADMINISTRATION**
 18 **AUTHORIZATION ACT**

19 **SEC. 301. AUTHORIZATION OF APPROPRIATIONS.**

20 Section 17(g)(1) of the Federal Fire Prevention and
 21 Control Act of 1974 (15 U.S.C. 2216(g)(1)) is amended—

22 (1) by striking “and” at the end of subpara-
 23 graph (G);

24 (2) by striking the period at the end of sub-
 25 paragraph (H) and inserting a semicolon; and

1 (3) by adding at the end the following:

2 “(I) \$46,130,000 for fiscal year 2000;

3 “(J) \$47,570,000 for fiscal year 2001; and

4 “(K) \$49,054,000, for fiscal year 2002.”.

5 None of the funds authorized for fiscal years 2001 and
6 2002 may be obligated unless the Administrator has
7 verified to the Committee on Science of the House of Rep-
8 resentatives and the Committee on Commerce, Science,
9 and Transportation of the Senate that the obligation of
10 funds is consistent with the strategic plan transmitted
11 under section 302 of this Act.

12 **SEC. 302. STRATEGIC PLAN.**

13 (a) **REQUIREMENT.**—Not later than April 30, 2000,
14 the Administrator of the United States Fire Administra-
15 tion shall prepare and transmit to the Committee on
16 Science of the House of Representatives and the Com-
17 mittee on Commerce, Science, and Transportation of the
18 Senate a 5 year strategic plan of program activities for
19 the United States Fire Administration.

20 (b) **CONTENTS OF PLAN.**—The plan required by sub-
21 section (a) shall include—

22 (1) a comprehensive mission statement covering
23 the major functions and operations of the United
24 States Fire Administration in the areas of training,
25 research, development, test and evaluation, new

1 technology and non-developmental item implementa-
2 tion, safety, counterterrorism, data collection and
3 analysis; and public education;

4 (2) general goals and objectives, including those
5 related to outcomes, for the major functions and op-
6 erations of the United States Fire Administration;

7 (3) a description of how the goals and objec-
8 tives identified under paragraph (2) are to be
9 achieved, including operational processes, skills and
10 technology, and the human, capital, information, and
11 other resources required to meet those goals and ob-
12 jectives;

13 (4) an analysis of the strengths and weaknesses
14 of; opportunities for, and threats to the United
15 States Fire Administration;

16 (5) an identification of the fire related activities
17 of the National Institute of Standards and Tech-
18 nology, the Department of Defense; and other Fed-
19 eral agencies; and a discussion of how those activi-
20 ties can be coordinated with and contribute to the
21 achievement of the goals and objectives identified
22 under paragraph (2);

23 (6) a description of objective, quantifiable per-
24 formance goals needed to define the level of perform-
25 ance achieved by program activities in training; re-

1 search, data collection and analysis, and public edu-
2 cation, and how these performance goals relate to
3 the general goals and objectives in the strategic
4 plan;

5 (7) an identification of key factors external to
6 the United States Fire Administration and beyond
7 its control that could affect significantly the achieve-
8 ment of the general goals and objectives;

9 (8) a description of program evaluations used in
10 establishing or revising general goals and objectives,
11 with a schedule for future program evaluations;

12 (9) a plan for the timely distribution of infor-
13 mation and educational materials to State and local
14 firefighting services, including volunteer, career, and
15 combination services throughout the United States;

16 (10) a description of how the strategic plan pre-
17 pared under this section will be incorporated into the
18 strategic plan and the performance plans and re-
19 ports of the Federal Emergency Management Agen-
20 cy;

21 (11)(A) a description of the current and
22 planned use of the Internet for the delivery of train-
23 ing courses by the National Fire Academy, including
24 a listing of the types of courses and a description of
25 each course's provisions for real time interaction be-

1 tween instructor and students, the number of stu-
2 dents enrolled, and the geographic distribution of
3 students, for the most recent fiscal year;

4 (B) an assessment of the availability and actual
5 use by the National Fire Academy of Federal facili-
6 ties suitable for distance education applications, in-
7 cluding facilities with teleconferencing capabilities;
8 and

9 (C) an assessment of the benefits and problems
10 associated with delivery of instructional courses
11 using the Internet, including limitations due to net-
12 work bandwidth at training sites, the availability of
13 suitable course materials, and the effectiveness of
14 such courses in terms of student performance;

15 (12) timeline for implementing the plan; and

16 (13) the expected costs for implementing the
17 plan.

18 **SEC. 303. RESEARCH AGENDA.**

19 (a) **REQUIREMENT.**—Not later than 120 days after
20 the date of the enactment of this Act, the Administrator
21 of the United States Fire Administration, in consultation
22 with the Director of the Federal Emergency Management
23 Agency, the Director of the National Institute of Stand-
24 ards and Technology, representatives of trade, profes-
25 sional, and non-profit associations, State and local fire-

1 fighting services, and other appropriate entities, shall pre-
2 pare and transmit to the Committee on Science of the
3 House of Representatives and the Committee on Com-
4 merce, Science, and Transportation of the Senate a report
5 describing the United States Fire Administration's re-
6 search agenda and including a plan for implementing that
7 agenda.

8 (b) CONTENTS OF REPORT.—The report required by
9 subsection (a) shall—

10 (1) identify research priorities;

11 (2) describe how the proposed research agenda
12 will be coordinated and integrated with the programs
13 and capabilities of the National Institute of Stand-
14 ards and Technology, the Department of Defense,
15 and other Federal agencies;

16 (3) identify potential roles of academic, trade,
17 professional, and non-profit associations, and other
18 research institutions in achieving the research agen-
19 da;

20 (4) provide cost estimates, anticipated per-
21 sonnel needs, and a schedule for completing the var-
22 ious elements of the research agenda;

23 (5) describe ways to leverage resources through
24 partnerships, cooperative agreements, and other
25 means; and

1 (6) discuss how the proposed research agenda
 2 will enhance training, improve State and local fire-
 3 fighting services, impact standards and codes, in-
 4 crease firefighter and public safety, and advance
 5 firefighting techniques.

6 (c) ~~USE IN PREPARING STRATEGIC PLAN.~~—The re-
 7 search agenda prepared under this section shall be used
 8 in the preparation of the strategic plan required by section
 9 302.

10 **SEC. 304. SURPLUS AND EXCESS FEDERAL EQUIPMENT.**

11 The Federal Fire Prevention and Control Act of 1974
 12 is amended by adding at the end the following new section:

13 **“SEC. 33. SURPLUS AND EXCESS FEDERAL EQUIPMENT.**

14 “~~The Administrator shall make publicly available, in-~~
 15 cluding through the Internet, information on procedures
 16 for acquiring surplus and excess equipment or property
 17 that may be useful to State and local fire, emergency, and
 18 hazardous material handling service providers.”.

19 **SEC. 305. COOPERATIVE AGREEMENTS WITH FEDERAL FA-**
 20 **CILITIES.**

21 The Federal Fire Prevention and Control Act of
 22 1974, as amended by section 304, is amended by adding
 23 at the end the following new section:

1 **“SEC. 34. COOPERATIVE AGREEMENTS WITH FEDERAL FA-**
 2 **CILITIES.**

3 “The Administrator shall make publicly available, in-
 4 cluding through the Internet, information on procedures
 5 for establishing cooperative agreements between State and
 6 local fire and emergency services and Federal facilities in
 7 their region relating to the provision of fire and emergency
 8 services.”.

9 **SEC. 306. NEED FOR ADDITIONAL TRAINING IN**
 10 **COUNTERTERRORISM.**

11 (a) **IN GENERAL.**—The Administrator of the United
 12 States Fire Administration shall conduct an assessment
 13 of the need for additional capabilities for Federal
 14 counterterrorism training of emergency response per-
 15 sonnel.

16 (b) **CONTENTS OF ASSESSMENT.**—The assessment
 17 conducted under this section shall include—

18 (1) a review of the counterterrorism training
 19 programs offered by the United States Fire Admin-
 20 istration and other Federal agencies;

21 (2) an estimate of the number and types of
 22 emergency response personnel that have, during the
 23 period between January 1, 1994, and October 1,
 24 1999, sought training described in paragraph (1),
 25 but have been unable to receive that training as a

1 result of the oversubscription of the training capa-
2 bilities; and

3 ~~(3) a recommendation on the need to provide~~
4 additional Federal counterterrorism training centers;
5 including—

6 ~~(A) an analysis of existing Federal facili-~~
7 ties that could be used as counterterrorism
8 training facilities; and

9 ~~(B) a cost-benefit analysis of the establish-~~
10 ment of such counterterrorism training facili-
11 ties.

12 ~~(c) REPORT.~~—Not later than 180 days after the date
13 of the enactment of this Act, the Administrator shall pre-
14 pare and submit to the Congress a report on the results
15 of the assessment conducted under this section.

16 **SECTION 1. SHORT TITLE.**

17 *This Act may be cited as the “Earth, Wind, and Fire*
18 *Authorization Act of 2000”.*

19 **TITLE I—EARTHQUAKE HAZARDS REDUCTION**
20 **ACT**

21 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

22 *(a) FEDERAL EMERGENCY MANAGEMENT AGENCY.—*
23 *Section 12(a)(7) of the Earthquake Hazards Reduction Act*
24 *of 1977 (42 U.S.C. 7706(a)) is amended—*

25 *(1) by striking “and” after “1998”; and*

1 (2) by striking “1999.” and inserting “1999;
2 \$19,861,000 for the fiscal year ending September 30,
3 2001, of which \$450,000 shall be used to support the
4 National Earthquake Hazard Reduction Program-eli-
5 gible efforts of an established multi-state consortium
6 to reduce the unacceptable threat of earthquake dam-
7 ages in the New Madrid seismic region through efforts
8 to enhance preparedness, response, recovery, and miti-
9 gation; \$20,953,000 for the fiscal year ending Sep-
10 tember 30, 2002; and \$22,105,000 for the fiscal year
11 ending September 30, 2003.”.

12 (b) UNITED STATES GEOLOGICAL SURVEY.—Section
13 12(b) of the Earthquake Hazards Reduction Act of 1977 (42
14 U.S.C. 7706(b)) is amended—

15 (1) by inserting after “operated by the Agency.”
16 the following: “There are authorized to be appro-
17 priated to the Secretary of the Interior for purposes
18 of carrying out, through the Director of the United
19 States Geological Survey, the responsibilities that
20 may be assigned to the Director under this Act
21 \$47,360,000 for fiscal year 2001; \$49,965,000 for fis-
22 cal year 2002; and \$52,713,000 for fiscal year 2003.”;

23 (2) by striking “and” at the end of paragraph
24 (1);

1 (3) by striking “1999,” at the end of paragraph
2 (2) and inserting “1999;”; and

3 (4) by inserting after paragraph (2) the fol-
4 lowing:

5 “(3) \$9,000,000 of the amount authorized to be
6 appropriated for fiscal year 2001;

7 “(4) \$9,250,000 of the amount authorized to be
8 appropriated for fiscal year 2002; and

9 “(5) \$9,500,000 of the amount authorized to be
10 appropriated for fiscal year 2003.”.

11 (c) NATIONAL SCIENCE FOUNDATION.—Section 12(c)
12 of the *Earthquake Hazards Reduction Act of 1977* (42
13 U.S.C. 7706(c)) is amended—

14 (1) by striking “1998, and” and inserting
15 “1998;”; and

16 (2) by striking “1999.” and inserting “1999, and
17 (5) \$19,000,000 for engineering research and
18 \$11,900,000 for geosciences research for the fiscal year
19 ending September 30, 2001. There are authorized to
20 be appropriated to the National Science Foundation
21 \$20,045,000 for engineering research and \$12,555,000
22 for geosciences research for fiscal year 2002 and
23 \$21,147,000 for engineering research and \$13,246,000
24 for geosciences research for fiscal year 2003.”.

1 (d) *NATIONAL INSTITUTE OF STANDARDS AND TECH-*
 2 *NOLOGY.*—Section 12(d) of the *Earthquake Hazards Re-*
 3 *duction Act of 1977* (42 U.S.C. 7706(d)) is amended—

4 (1) by striking “1998, and”; and inserting
 5 “1998,”; and

6 (2) by striking “1999.” and inserting “1999,
 7 \$2,332,000 for fiscal year 2001, \$2,460,000 for fiscal
 8 year 2002, and \$2,595,300 for fiscal year 2003.”.

9 **SEC. 102. REPEALS.**

10 Section 10 and subsections (e) and (f) of section 12
 11 of the *Earthquake Hazards Reduction Act of 1977* (42
 12 U.S.C. 7705d and 7706 (e) and (f)) are repealed.

13 **SEC. 103. ADVANCED NATIONAL SEISMIC RESEARCH AND**
 14 **MONITORING SYSTEM.**

15 The *Earthquake Hazards Reduction Act of 1977* (42
 16 U.S.C. 7701 et seq.) is amended by adding at the end the
 17 following new section:

18 **“SEC. 13. ADVANCED NATIONAL SEISMIC RESEARCH AND**
 19 **MONITORING SYSTEM.**

20 “(a) *ESTABLISHMENT.*—The Director of the United
 21 States Geological Survey shall establish and operate an Ad-
 22 vanced National Seismic Research and Monitoring System.
 23 The purpose of such system shall be to organize, modernize,
 24 standardize, and stabilize the national, regional, and urban
 25 seismic monitoring systems in the United States, including

1 sensors, recorders, and data analysis centers, into a coordi-
2 nated system that will measure and record the full range
3 of frequencies and amplitudes exhibited by seismic waves,
4 in order to enhance earthquake research and warning capa-
5 bilities.

6 “(b) *MANAGEMENT PLAN.*—Not later than 90 days
7 after the date of the enactment of the *Earthquake Hazards*
8 *Reduction Authorization Act of 2000*, the Director of the
9 *United States Geological Survey* shall transmit to the Con-
10 gress a 5-year management plan for establishing and oper-
11 ating the *Advanced National Seismic Research and Moni-*
12 *toring System*. The plan shall include annual cost estimates
13 for both modernization and operation, milestones, stand-
14 ards, and performance goals, as well as plans for securing
15 the participation of all existing networks in the *Advanced*
16 *National Seismic Research and Monitoring System* and for
17 establishing new, or enhancing existing, partnerships to le-
18 verage resources.

19 “(c) *AUTHORIZATION OF APPROPRIATIONS.*—

20 “(1) *EXPANSION AND MODERNIZATION.*—In ad-
21 dition to amounts appropriated under section 12(b),
22 there are authorized to be appropriated to the Sec-
23 retary of the Interior, to be used by the Director of
24 the *United States Geological Survey* to establish the

1 *Advanced National Seismic Research and Monitoring*
 2 *System—*

3 “(A) \$33,500,000 for fiscal year 2001;

4 “(B) \$33,700,000 for fiscal year 2002;

5 “(C) \$35,100,000 for fiscal year 2003;

6 “(D) \$35,000,000 for fiscal year 2004; and

7 “(E) \$33,500,000 for fiscal year 2005.

8 “(2) *OPERATION.*—*In addition to amounts ap-*
 9 *propriated under section 12(b), there are authorized*
 10 *to be appropriated to the Secretary of the Interior, to*
 11 *be used by the Director of the United States Geologi-*
 12 *cal Survey to operate the Advanced National Seismic*
 13 *Research and Monitoring System—*

14 “(A) \$4,500,000 for fiscal year 2001; and

15 “(B) \$10,300,000 for fiscal year 2002.”.

16 **SEC. 104. NETWORK FOR EARTHQUAKE ENGINEERING SIM-**
 17 **ULATION.**

18 *The Earthquake Hazards Reduction Act of 1977 (42*
 19 *U.S.C. 7701 et seq.) is amended by adding at the end the*
 20 *following new section:*

21 **“SEC. 14. NETWORK FOR EARTHQUAKE ENGINEERING SIM-**
 22 **ULATION.**

23 “(a) *ESTABLISHMENT.*—*The Director of the National*
 24 *Science Foundation shall establish a Network for Earth-*
 25 *quake Engineering Simulation that will upgrade, link, and*

1 *integrate a system of geographically distributed experi-*
 2 *mental facilities for earthquake engineering testing of full-*
 3 *sized structures and their components and partial-scale*
 4 *physical models. The system shall be integrated through net-*
 5 *working software so that integrated models and databases*
 6 *can be used to create model-based simulation, and the com-*
 7 *ponents of the system shall be interconnected with a com-*
 8 *puter network and allow for remote access, information*
 9 *sharing, and collaborative research.*

10 “(b) *AUTHORIZATION OF APPROPRIATIONS.—In addi-*
 11 *tion to amounts appropriated under section 12(c), there are*
 12 *authorized to be appropriated, out of funds otherwise au-*
 13 *thorized to be appropriated to the National Science Foun-*
 14 *dation, \$28,200,000 for fiscal year 2001 for the Network*
 15 *for Earthquake Engineering Simulation. In addition to*
 16 *amounts appropriated under section 12(c), there are au-*
 17 *thorized to be appropriated to the National Science Foun-*
 18 *dation for the Network for Earthquake Engineering*
 19 *Simulation—*

20 “(1) \$24,400,000 for fiscal year 2002;

21 “(2) \$4,500,000 for fiscal year 2003; and

22 “(3) \$17,000,000 for fiscal year 2004.”.

23 **SEC. 105. BUDGET COORDINATION.**

24 *Section 5 of the Earthquake Hazards Reduction Act*
 25 *of 1977 (42 U.S.C. 7704) is amended—*

1 (1) *by striking subparagraph (A) of subsection*
2 *(b)(1) and redesignating subparagraphs (B) through*
3 *(F) of subsection (b)(1) as subparagraphs (A) through*
4 *(E), respectively;*

5 (2) *by striking “in this paragraph” in the last*
6 *sentence of paragraph (1) of subsection (b) and insert-*
7 *ing “in subparagraph (E)”;* and

8 (3) *by adding at the end the following new sub-*
9 *section;*

10 “(c) *BUDGET COORDINATION.—*

11 “(1) *GUIDANCE.—The Agency shall each year*
12 *provide guidance to the other Program agencies con-*
13 *cerning the preparation of requests for appropriations*
14 *for activities related to the Program, and shall pre-*
15 *pare, in conjunction with the other Program agencies,*
16 *an annual Program budget to be submitted to the Of-*
17 *fice of Management and Budget.*

18 “(2) *REPORTS.—Each Program agency shall in-*
19 *clude with its annual request for appropriations sub-*
20 *mitted to the Office of Management and Budget a re-*
21 *port that—*

22 “(A) *identifies each element of the proposed*
23 *Program activities of the agency;*

24 “(B) *specifies how each of these activities*
25 *contributes to the Program; and*

1 “(C) states the portion of its request for ap-
2 propriations allocated to each element of the Pro-
3 gram.”.

4 **SEC. 106. REPORT ON AT-RISK POPULATIONS.**

5 *Not later than one year after the date of the enactment*
6 *of this Act, and after a period for public comment, the Di-*
7 *rector of the Federal Emergency Management Agency shall*
8 *transmit to the Congress a report describing the elements*
9 *of the Program that specifically address the needs of at-risk*
10 *populations, including the elderly, persons with disabilities,*
11 *non-English-speaking families, single-parent households,*
12 *and the poor. Such report shall also identify additional ac-*
13 *tions that could be taken to address those needs and make*
14 *recommendations for any additional legislative authority*
15 *required to take such actions.*

16 **SEC. 107. PUBLIC ACCESS TO EARTHQUAKE INFORMATION.**

17 *Section 5(b)(2)(A)(ii) of the Earthquake Hazards Re-*
18 *duction Act of 1977 (42 U.S.C. 7704(b)(2)(A)(ii)) is amend-*
19 *ed by inserting “, and development of means of increasing*
20 *public access to available locality-specific information that*
21 *may assist the public in preparing for or responding to*
22 *earthquakes” after “and the general public”.*

1 **SEC. 108. LIFELINES.**

2 *Section 4(6) of the Earthquake Hazards Reduction Act*
 3 *of 1977 (42 U.S.C. 7703(6)) is amended by inserting “and*
 4 *infrastructure” after “communication facilities”.*

5 **TITLE II—NATIONAL WEATHER SERVICE AND**
 6 **RELATED AGENCIES AUTHORIZATION ACT**

7 **SEC. 201. DEFINITIONS.**

8 *For purposes of this title, the term—*

9 (1) *“Administrator” means the Administrator of*
 10 *the National Oceanic and Atmospheric Administra-*
 11 *tion; and*

12 (2) *“Secretary” means the Secretary of Com-*
 13 *merce.*

14 **SEC. 202. NATIONAL WEATHER SERVICE.**

15 (a) *OPERATIONS, RESEARCH, AND FACILITIES.—There*
 16 *are authorized to be appropriated to the Secretary to enable*
 17 *the National Oceanic and Atmospheric Administration to*
 18 *carry out the Operations, Research, and Facilities activities*
 19 *of the National Weather Service \$634,872,000 for fiscal year*
 20 *2001, \$669,790,000 for fiscal year 2002, and \$706,628,000*
 21 *for fiscal year 2003, to remain available until expended.*
 22 *Of such amounts—*

23 (1) *\$466,471,000 for fiscal year 2001,*
 24 *\$492,127,000 for fiscal year 2002, and \$519,194,000*
 25 *for fiscal year 2003 shall be for Local Warnings and*
 26 *Forecasts;*

1 (2) \$1,000,000 for fiscal year 2001, \$1,055,000
2 for fiscal year 2002, and \$1,113,000 for fiscal year
3 2003 shall be for *Advanced Hydrological Prediction*
4 *System*;

5 (3) \$619,000 for fiscal year 2001, \$653,000 for
6 fiscal year 2002, and \$689,000 for fiscal year 2003
7 shall be for *Susquehanna River Basin Flood Systems*;

8 (4) \$35,596,000 for fiscal year 2001, \$37,554,000
9 for fiscal year 2002, and \$39,619,000 for fiscal year
10 2003 shall be for *Aviation Forecasts*;

11 (5) \$5,250,000 for fiscal year 2001, \$5,539,000
12 for fiscal year 2002, and \$5,843,000 for fiscal year
13 2003 shall be for *Weather Forecast Offices (WFO) Fa-*
14 *cilities Maintenance*;

15 (6) \$38,001,000 for fiscal year 2001, \$40,091,000
16 for fiscal year 2002, and \$42,296,000 for fiscal year
17 2003 shall be for *Central Forecast Guidance*;

18 (7) \$3,068,000 for fiscal year 2001, \$3,237,000
19 for fiscal year 2002, and \$3,415,000 for fiscal year
20 2003 shall be for *Atmospheric and Hydrological Re-*
21 *search*;

22 (8) \$38,802,000 for fiscal year 2001, \$40,936,000
23 for fiscal year 2002, and \$43,188,000 for fiscal year
24 2003 shall be for *Next Generation Weather Radar*
25 *(NEXRAD)*;

1 (9) \$7,423,000 for fiscal year 2001, \$7,831,000
2 for fiscal year 2002, and \$8,262,000 for fiscal year
3 2003 shall be for Automated Surface Observing Sys-
4 tem (ASOS); and

5 (10) \$38,642,000 for fiscal year 2001,
6 \$40,767,000 for fiscal year 2002, and \$43,010,000 for
7 fiscal year 2003 shall be for Advanced Weather Inter-
8 active Processing System (AWIPS).

9 (b) *PROCUREMENT, ACQUISITION, AND CONSTRU-*
10 *CTION.—There are authorized to be appropriated to the Sec-*
11 *retary to enable the National Oceanic and Atmospheric Ad-*
12 *ministration to carry out the Procurement, Acquisition,*
13 *and Construction activities of the National Weather Service*
14 *\$75,360,000 for fiscal year 2001, \$77,754,000 for fiscal year*
15 *2002, and \$71,012,000 for fiscal year 2003 to remain avail-*
16 *able until expended. Of such amounts—*

17 (1) \$9,580,000 for fiscal year 2001, \$16,798,000
18 for fiscal year 2002, and \$15,931,000 for fiscal year
19 2003 shall be for Next Generation Weather Radar
20 (NEXRAD).

21 (2) \$5,125,000 for fiscal year 2001, \$5,125,000
22 for fiscal year 2002, and \$5,125,000 for fiscal year
23 2003 shall be for Automated Surface Observing Sys-
24 tem (ASOS).

1 (3) \$17,300,000 for fiscal year 2001, \$17,300,000
2 for fiscal year 2002, and \$9,645,000 for fiscal year
3 2003 shall be for Advanced Weather Interactive Proc-
4 essing System (AWIPS);

5 (4) \$13,085,000 for fiscal year 2001, \$17,505,000
6 for fiscal year 2002, and \$19,285,000 for fiscal year
7 2003 shall be for Center Computer Facilities Up-
8 grades;

9 (5) \$7,000,000 for fiscal year 2001, \$7,000,000
10 for fiscal year 2002, and \$7,000,000 for fiscal year
11 2003 shall be for Radiosonde Replacement;

12 (6) \$9,526,000 for fiscal year 2001, \$9,526,000
13 for fiscal year 2002, and \$9,526,000 for fiscal year
14 2003 shall be for Weather Forecast Office (WFO) Con-
15 struction;

16 (7) \$6,244,000 for fiscal year 2001, \$4,500,000
17 for fiscal year 2002, and \$4,500,000 for fiscal year
18 2003 shall be for NOAA Weather Radio Expansion;
19 and

20 (8) \$5,500,000 for fiscal year 2001 shall be for
21 the Evansville Infrastructure Protection.

22 **SEC. 203. ATMOSPHERIC RESEARCH.**

23 (a) OPERATIONS, RESEARCH, AND FACILITIES.—

24 (1) IN GENERAL.—There are authorized to be ap-
25 propriated to the Secretary to enable the National

1 *Oceanic and Atmospheric Administration to carry*
2 *out the Atmospheric Research Operations, Research,*
3 *and Facilities environmental research and develop-*
4 *ment activities of the Office of Oceanic and Atmos-*
5 *pheric Research \$201,963,000 for fiscal year 2001,*
6 *\$213,071,000 for fiscal year 2002, and \$224,790,000*
7 *for fiscal year 2003 to remain available until ex-*
8 *pended.*

9 (2) *CLIMATE AND AIR QUALITY RESEARCH.—Of*
10 *the amounts authorized under paragraph (1),*
11 *\$154,356,000 for fiscal year 2001, \$162,846,000 for*
12 *fiscal year 2002, and \$171,802,000 for fiscal year*
13 *2003 shall be for Climate and Air Quality Research,*
14 *of which—*

15 (A) *\$14,986,000 for fiscal year 2001,*
16 *\$15,813,000 for fiscal year 2002, and*
17 *\$16,683,000 for fiscal year 2003 shall be for*
18 *Interannual and Seasonal Climate Research;*

19 (B) *\$30,525,000 for fiscal year 2001,*
20 *\$32,204,000 for fiscal year 2002, and*
21 *\$33,975,000 for fiscal year 2003 shall be for*
22 *Long-Term Climate and Air Quality Research;*

23 (C) *\$67,095,000 for fiscal year 2001,*
24 *\$70,785,000 for fiscal year 2002, and*

1 \$74,678,000 for fiscal year 2003 shall be for Cli-
2 mate and Global Change;

3 (D) \$5,000,000 for fiscal year 2001,
4 \$5,275,000 for fiscal year 2002, and \$5,565,000
5 for fiscal year 2003 shall be for Global Learning
6 and Observations to Benefit the Environment
7 (GLOBE); and

8 (E) \$12,750,000 for fiscal year 2001,
9 \$13,451,000 for fiscal year 2002, and
10 \$14,191,000 for fiscal year 2003 for High Per-
11 formance Computing and Communications.

12 (3) *ATMOSPHERIC PROGRAMS.*—Of the amounts
13 authorized under paragraph (1), \$47,607,000 for fis-
14 cal year 2001, \$50,225,000 for fiscal year 2002, and
15 \$52,988,000 for fiscal year 2003 shall be for Atmos-
16 pheric Programs, of which—

17 (A) \$37,075,000 for fiscal year 2001,
18 \$39,114,000 for fiscal year 2002, and
19 \$41,265,000 for fiscal year 2003 shall be for
20 Weather Research;

21 (B) \$4,350,000 for fiscal year 2001,
22 \$4,589,000 for fiscal year 2002, and \$4,842,000
23 for fiscal year 2003 shall be for Wind Profiler;
24 and

1 (C) \$6,182,000 for fiscal year 2001,
2 \$6,522,000 for fiscal year 2002, and \$6,881,000
3 for fiscal year 2003 shall be for Solar-Terrestrial
4 Services and Research.

5 (b) *PROCUREMENT, ACQUISITION, AND CONSTRUCTION.*—There are authorized to be appropriated to the Secretary to enable the National Oceanic and Atmospheric Administration to carry out the Atmospheric Research Procurement, Acquisition, and Construction environmental research and development activities of the Office of Oceanic and Atmospheric Research \$7,000,000 for fiscal year 2001, \$7,000,000 for fiscal year 2002, and \$7,000,000 for fiscal year 2003, for the Geophysical Fluid Dynamics Laboratory Supercomputer.

15 **SEC. 204. NATIONAL ENVIRONMENTAL SATELLITE, DATA**
16 **AND INFORMATION SERVICE.**

17 (a) *OPERATIONS, RESEARCH, AND FACILITIES.*—

18 (1) *IN GENERAL.*—There are authorized to be appropriated to the Secretary to enable the National Oceanic and Atmospheric Administration to carry out the Operations, Research, and Facilities environmental research and development and related activities of the National Environmental Satellite, Data and Information Service \$108,201,000 for fiscal year 2001, \$114,152,000 for fiscal year 2002, and

1 \$120,430,000 for fiscal year 2003 to remain available
2 until expended.

3 (2) *SATELLITE OBSERVING SYSTEMS.*—Of the
4 amounts authorized under paragraph (1),
5 \$63,412,000 for fiscal year 2001, \$66,900,000 for fis-
6 cal year 2002, and \$70,579,000 for fiscal year 2003
7 shall be for Satellite Observing Systems, of which—

8 (A) \$5,500,000 for fiscal year 2001,
9 \$5,803,000 for fiscal year 2002, and \$6,122,000
10 for fiscal year 2003 shall be for Global Disaster
11 Information Network (GDIN);

12 (B) \$4,000,000 for fiscal year 2001,
13 \$4,220,000 for fiscal year 2002, and \$4,452,000
14 for fiscal year 2003 shall be for Ocean Remote
15 Sensing; and

16 (C) \$53,912,000 for fiscal year 2001,
17 \$56,877,000 for fiscal year 2002, and
18 \$60,005,000 for fiscal year 2003 shall be for En-
19 vironmental Observing Services.

20 (3) *ENVIRONMENTAL DATA MANAGEMENT SYS-*
21 *TEMS.*—Of the amounts authorized under paragraph
22 (1), \$44,879,000 for fiscal year 2001, \$47,252,000 for
23 fiscal year 2002, and \$49,851,000 for fiscal year 2003
24 shall be for Environmental Data Management Sys-
25 tems.

1 (b) *PROCUREMENT, ACQUISITION, AND CONSTRU-*
2 *CTION.—There are authorized to be appropriated to the Sec-*
3 *retary to enable the National Oceanic and Atmospheric Ad-*
4 *ministration to carry out the Procurement, Acquisition,*
5 *and Construction environmental research and development*
6 *and related activities of the National Environmental Sat-*
7 *ellite, Data and Information Service \$445,828,000 for fiscal*
8 *year 2001, \$515,271,000 for fiscal year 2002, and*
9 *\$554,945,000 for fiscal year 2003 to remain available until*
10 *expended of such amounts—*

11 (1) *\$136,965,000 for fiscal year 2001,*
12 *\$136,965,000 for fiscal year 2002, and \$103,010,000*
13 *for fiscal year 2003 shall be for the procurement and*
14 *launch of, and supporting ground systems for, Polar*
15 *Orbiting Environmental Satellites (POES), K, L, M,*
16 *N, and N'.*

17 (2) *\$76,654,000 for fiscal year 2001,*
18 *\$156,731,000 for fiscal year 2002, and \$236,471,000*
19 *for fiscal year 2003 shall be for the procurement and*
20 *launch of, and supporting ground systems for, the Na-*
21 *tional Polar-Orbiting Operational Environmental*
22 *Satellite System (NPOESS).*

23 (3) *\$323,209,000 for fiscal year 2001,*
24 *\$221,575,000 for fiscal year 2002, and \$215,464,000*
25 *for fiscal year 2003 shall be for the procurement and*

1 *launch of, and supporting ground systems for, Geo-*
 2 *stationary Operational Environment NEXT follow-on*
 3 *Satellites (GOES N–Q).*

4 **SEC. 205. MINORITY SERVING INSTITUTIONS.**

5 *There are authorized to be appropriated \$17,000,000*
 6 *for fiscal year 2001, \$17,935,000 for fiscal year 2002, and*
 7 *\$18,921,000 for fiscal year 2003 for Minority Serving Insti-*
 8 *tutions in the Atmospheric, Environmental, and Oceanic*
 9 *Sciences.*

10 **SEC. 206. INTERNET AVAILABILITY OF INFORMATION.**

11 *The Administrator shall make available through the*
 12 *Internet home page of the National Oceanic and Atmos-*
 13 *pheric Administration the abstracts relating to all research*
 14 *grants and awards made with funds authorized by this Act.*
 15 *Nothing in this section shall be construed to require or per-*
 16 *mit the release of any information prohibited by law or reg-*
 17 *ulation from being released to the public.*

18 **TITLE III—FIRE ADMINISTRATION**

19 **AUTHORIZATION ACT**

20 **SEC. 301. AUTHORIZATION OF APPROPRIATIONS.**

21 *Section 17(g)(1) of the Federal Fire Prevention and*
 22 *Control Act of 1974 (15 U.S.C. 2216(g)(1)) is amended—*
 23 *(1) by striking “and” at the end of subpara-*
 24 *graph (G);*

1 (2) *by striking the period at the end of subpara-*
2 *graph (H) and inserting a semicolon; and*

3 (3) *by adding at the end the following:*

4 “(I) \$69,753,000 for fiscal year 2001;

5 “(J) \$46,096,000 for fiscal year 2002; and

6 “(K) \$47,479,000, for fiscal year 2003.”.

7 *None of the funds authorized for fiscal years 2001 and 2002*
8 *may be obligated unless the Administrator has verified to*
9 *the Committee on Science of the House of Representatives*
10 *and the Committee on Commerce, Science, and Transpor-*
11 *tation of the Senate that the obligation of funds is consistent*
12 *with the strategic plan transmitted under section 302 of this*
13 *Act.*

14 **SEC. 302. STRATEGIC PLAN.**

15 (a) *REQUIREMENT.*—*Not later than April 30, 2000,*
16 *the Administrator of the United States Fire Administration*
17 *shall prepare and transmit to the Committee on Science*
18 *of the House of Representatives and the Committee on Com-*
19 *merce, Science, and Transportation of the Senate a 5-year*
20 *strategic plan of program activities for the United States*
21 *Fire Administration.*

22 (b) *CONTENTS OF PLAN.*—*The plan required by sub-*
23 *section (a) shall include—*

24 (1) *a comprehensive mission statement covering*
25 *the major functions and operations of the United*

1 *States Fire Administration in the areas of training;*
2 *research, development, test and evaluation; new tech-*
3 *nology and non-developmental item implementation;*
4 *safety; counterterrorism; data collection and analysis;*
5 *and public education;*

6 (2) *general goals and objectives, including those*
7 *related to outcomes, for the major functions and oper-*
8 *ations of the United States Fire Administration;*

9 (3) *a description of how the goals and objectives*
10 *identified under paragraph (2) are to be achieved, in-*
11 *cluding operational processes, skills and technology,*
12 *and the human, capital, information, and other re-*
13 *sources required to meet those goals and objectives;*

14 (4) *an analysis of the strengths and weaknesses*
15 *of, opportunities for, and threats to the United States*
16 *Fire Administration;*

17 (5) *an identification of the fire-related activities*
18 *of the National Institute of Standards and Tech-*
19 *nology, the Department of Defense, and other Federal*
20 *agencies, and a discussion of how those activities can*
21 *be coordinated with and contribute to the achievement*
22 *of the goals and objectives identified under paragraph*
23 *(2);*

24 (6) *a description of objective, quantifiable per-*
25 *formance goals needed to define the level of perform-*

1 *ance achieved by program activities in training, re-*
2 *search, data collection and analysis, and public edu-*
3 *cation, and how these performance goals relate to the*
4 *general goals and objectives in the strategic plan;*

5 *(7) an identification of key factors external to*
6 *the United States Fire Administration and beyond its*
7 *control that could affect significantly the achievement*
8 *of the general goals and objectives;*

9 *(8) a description of program evaluations used in*
10 *establishing or revising general goals and objectives,*
11 *with a schedule for future program evaluations;*

12 *(9) a plan for the timely distribution of informa-*
13 *tion and educational materials to State and local*
14 *firefighting services, including volunteer, career, and*
15 *combination services throughout the United States;*

16 *(10) a description of how the strategic plan pre-*
17 *pared under this section will be incorporated into the*
18 *strategic plan and the performance plans and reports*
19 *of the Federal Emergency Management Agency;*

20 *(11)(A) a description of the current and planned*
21 *use of the Internet for the delivery of training courses*
22 *by the National Fire Academy, including a listing of*
23 *the types of courses and a description of each course's*
24 *provisions for real time interaction between instructor*
25 *and students, the number of students enrolled, and the*

1 *geographic distribution of students, for the most re-*
2 *cent fiscal year;*

3 *(B) an assessment of the availability and actual*
4 *use by the National Fire Academy of Federal facili-*
5 *ties suitable for distance education applications, in-*
6 *cluding facilities with teleconferencing capabilities;*
7 *and*

8 *(C) an assessment of the benefits and problems*
9 *associated with delivery of instructional courses using*
10 *the Internet, including limitations due to network*
11 *bandwidth at training sites, the availability of suit-*
12 *able course materials, and the effectiveness of such*
13 *courses in terms of student performance;*

14 *(12) timeline for implementing the plan; and*

15 *(13) the expected costs for implementing the*
16 *plan.*

17 **SEC. 303. RESEARCH AGENDA.**

18 *(a) REQUIREMENT.—Not later than 120 days after the*
19 *date of the enactment of this Act, the Administrator of the*
20 *United States Fire Administration, in consultation with*
21 *the Director of the Federal Emergency Management Agency,*
22 *the Director of the National Institute of Standards and*
23 *Technology, representatives of trade, professional, and non-*
24 *profit associations, State and local firefighting services, and*
25 *other appropriate entities, shall prepare and transmit to*

1 *the Committee on Science of the House of Representatives*
2 *and the Committee on Commerce, Science, and Transpor-*
3 *tation of the Senate a report describing the United States*
4 *Fire Administration's research agenda and including a*
5 *plan for implementing that agenda.*

6 (b) *CONTENTS OF REPORT.—The report required by*
7 *subsection (a) shall—*

8 (1) *identify research priorities;*

9 (2) *describe how the proposed research agenda*
10 *will be coordinated and integrated with the programs*
11 *and capabilities of the National Institute of Stand-*
12 *ards and Technology, the Department of Defense, and*
13 *other Federal agencies;*

14 (3) *identify potential roles of academic, trade,*
15 *professional, and non-profit associations, and other*
16 *research institutions in achieving the research agenda;*

17 (4) *provide cost estimates, anticipated personnel*
18 *needs, and a schedule for completing the various ele-*
19 *ments of the research agenda;*

20 (5) *describe ways to leverage resources through*
21 *partnerships, cooperative agreements, and other*
22 *means; and*

23 (6) *discuss how the proposed research agenda*
24 *will enhance training, improve State and local fire-*
25 *fighting services, impact standards and codes, in-*

1 *fire and emergency services and Federal facilities in their*
2 *region relating to the provision of fire and emergency serv-*
3 *ices.”.*

4 **SEC. 306. NEED FOR ADDITIONAL TRAINING IN**
5 **COUNTERTERRORISM.**

6 (a) *IN GENERAL.*—*The administrator of the United*
7 *States Fire Administration shall conduct an assessment of*
8 *the need for additional capabilities for Federal*
9 *counterterrorism training of emergency response personnel.*

10 (b) *CONTENTS OF ASSESSMENT.*—*The assessment con-*
11 *ducted under this section shall include—*

12 (1) *a review of the counterterrorism training*
13 *programs offered by the United States Fire Adminis-*
14 *tration and other Federal agencies;*

15 (2) *an estimate of the number and types of emer-*
16 *gency response personnel that have, during the period*
17 *between January 1, 1994, and October 1, 1999,*
18 *sought training described in paragraph (1), but have*
19 *been unable to receive that training as a result of the*
20 *oversubscription of the training capabilities; and*

21 (3) *a recommendation on the need to provide ad-*
22 *ditional Federal counterterrorism training centers,*
23 *including—*

1 (A) an analysis of existing Federal facilities
2 that could be used as counterterrorism training
3 facilities; and

4 (B) a cost-benefit analysis of the establish-
5 ment of such counterterrorism training facilities.

6 (c) *REPORT.*—Not later than 180 days after the date
7 of the enactment of this Act, the Administrator shall pre-
8 pare and submit to the Congress a report on the results of
9 the assessment conducted under this section.

10 **SEC. 307. WORCESTER POLYTECHNIC INSTITUTE FIRE**
11 **SAFETY RESEARCH PROGRAM.**

12 From the funds authorized to be appropriated by sec-
13 tion 301, \$1,000,000 may be expended for the Worcester
14 Polytechnic Institute fire safety research program.

Calendar No. 760

106TH CONGRESS
2D SESSION

S. 1639

[Report No. 106-384]

A BILL

To authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1977, for the National Weather Service and Related Agencies, and for the United States Fire Administration for fiscal years 2000, 2001, and 2002.

AUGUST 25, 2000

Reported with an amendment in the nature of a
substitute