

pursuant to Public Law 94-304, as amended by Public Law 99-7, appoints the following Senators to the Commission on Security and Cooperation in Europe:

The Senator from Wisconsin [Mr. FEINGOLD], the Senator from Florida [Mr. GRAHAM], the Senator from New Jersey [Mr. LAUTENBERG], and the Senator from Nevada [Mr. REID].

AUTHORITY FOR COMMITTEES TO REPORT

Mr. WARNER. Mr. President, I ask unanimous consent that on Tuesday, August 19, committees have between the hours of 11 a.m. and 2 p.m. in order to file reported legislative and executive matters.

The PRESIDING OFFICER. Without objection, it is so ordered.

PROVIDING FOR A CONSULTANT FOR THE PRESIDENT PRO TEMPORE

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate now proceed to the consideration of S. 1120, which was introduced earlier today by Senators LOTT and DASCHLE.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A bill (S. 1120) providing for a consultant for the President pro tempore.

The PRESIDING OFFICER. Is there objection to the immediate consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. WARNER. Mr. President, I further ask unanimous consent that the bill be read a third time and passed, and the motion to reconsider be laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (S. 1120) was deemed read the third time and passed, as follows:

S. 1120

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Section 101(a) of the Supplemental Appropriations Act, 1977 (2 U.S.C. 61h-6(a)) is amended by inserting after the first sentence the following: "The President pro tempore of the Senate is authorized to appoint and fix the compensation of 1 consultant, on a temporary or intermittent basis, at a daily rate of compensation not in excess of that specified in the first sentence of this subsection."

EARTHQUAKE HAZARDS ACT AMENDMENTS

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate now proceed to consideration of Calendar No. 141, S. 910.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A bill (S. 910) to authorize appropriations for carrying out the Earthquake Hazards Reduction Act of 1997 for fiscal years 1998 and

1999, and for other purposes, which had been reported from the Committee on Commerce, Science, and Transportation, with an amendment to strike all after the enacting clause and inserting in lieu thereof the following:

SECTION 1. AUTHORIZATION OF APPROPRIATIONS.

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

(1) in subsection (a)(7)—

(A) by striking "and" after "1995,"; and

(B) by inserting before the period at the end the following: "; \$20,900,000 for the fiscal year ending September 30, 1998, and \$21,500,000 for the fiscal year ending September 30, 1999";

(2) in subsection (b)—

(A) by striking "and" after "September 30, 1995,"; and

(B) by inserting before the period at the end the following: "; \$51,142,000 for the fiscal year ending September 30, 1998 of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency; and \$52,676,000 for the fiscal year ending September 30, 1999, of which \$3,800,000 shall be used for the Global Seismic Network operated by the Agency"; and

(C) by adding at the end the following: "Of the amounts authorized to be appropriated under this subsection, at least—

"(1) \$8,000,000 of the amount authorized to be appropriated for the fiscal year ending September 30, 1998; and

"(2) \$8,250,000 of the amount authorized for the fiscal year ending September 30, 1999,

shall be used for carrying out a competitive, peer-reviewed program under which the Director, in close coordination with and as a complement to related activities of the United States Geological Survey, awards grants to, or enters into cooperative agreements with, State and local governments and persons or entities from the academic community and the private sector.";

(3) in subsection (c)—

(A) by striking "and" after "September 30, 1995,"; and

(B) by inserting before the period at the end the following: "; (3) \$18,450,000 for engineering research and \$11,920,000 for geosciences research for the fiscal year ending September 30, 1998, and (4) \$19,000,000 for engineering research and \$12,280,000 for geosciences research for the fiscal year ending September 30, 1999"; and

(4) in the last sentence of subsection (d)—

(A) by striking "and" after "September 30, 1995,"; and

(B) by inserting before the period at the end the following: "; \$2,000,000 for the fiscal year ending September 30, 1998, and \$2,060,000 for the fiscal year ending September 30, 1999".

SEC. 2. AUTHORIZATION OF REAL-TIME SEISMIC HAZARD WARNING SYSTEM DEVELOPMENT, AND OTHER ACTIVITIES.

(a) AUTOMATIC SEISMIC WARNING SYSTEM DEVELOPMENT.—

(1) DEFINITIONS.—In this section:

(A) DIRECTOR.—The term "Director" means the Director of the United States Geological Survey.

(B) HIGH-RISK ACTIVITY.—The term "high-risk activity" means an activity that may be adversely affected by a moderate to severe seismic event (as determined by the Director). The term includes high-speed rail transportation.

(C) REAL-TIME SEISMIC WARNING SYSTEM.—The term "real-time seismic warning system" means a system that issues warnings in real-time from a network of seismic sensors to a set of analysis processors, directly to receivers related to high-risk activities.

(2) IN GENERAL.—The Director shall conduct a program to develop a prototype real-time seismic warning system. The Director may enter into such agreements or contracts as may be necessary to carry out the program.

(3) UPGRADE OF SEISMIC SENSORS.—In carrying out a program under paragraph (2), in order to increase the accuracy and speed of seismic

event analysis to provide for timely warning signals, the Director shall provide for the upgrading of the network of seismic sensors participating in the prototype to increase the capability of the sensors—

(A) to measure accurately large magnitude seismic events (as determined by the Director); and

(B) to acquire additional parametric data.

(4) DEVELOPMENT OF COMMUNICATIONS AND COMPUTATION INFRASTRUCTURE.—In carrying out a program under paragraph (2), the Director shall develop a communications and computation infrastructure that is necessary—

(A) to process the data obtained from the upgraded seismic sensor network referred to in paragraph (3); and

(B) to provide for, and carry out, such communications engineering and development as is necessary to facilitate—

(i) the timely flow of data within a real-time seismic hazard warning system; and

(ii) the issuance of warnings to receivers related to high-risk activities.

(5) PROCUREMENT OF COMPUTER HARDWARE AND COMPUTER SOFTWARE.—In carrying out a program under paragraph (2), the Director shall procure such computer hardware and computer software as may be necessary to carry out the program.

(6) REPORTS ON PROGRESS.—

(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Director shall prepare and submit to Congress a report that contains a plan for implementing a real-time seismic hazard warning system.

(B) ADDITIONAL REPORTS.—Not later than 1 year after the date on which the Director submits the report under subparagraph (A), and annually thereafter, the Director shall prepare and submit to Congress a report that summarizes the progress of the Director in implementing the plan referred to in subparagraph (A).

(7) AUTHORIZATION OF APPROPRIATIONS.—In addition to the amounts made available to the Director under section 12(b) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7706(b)), there are authorized to be appropriated to the Department of the Interior, to be used by the Director to carry out paragraph (2), \$3,000,000 for each of fiscal years 1998 and 1999.

(b) SEISMIC MONITORING NETWORKS ASSESSMENT.—

(1) IN GENERAL.—The Director shall provide for an assessment of regional seismic monitoring networks in the United States. The assessment shall address—

(A) the need to update the infrastructure used for collecting seismological data for research and monitoring of seismic events in the United States;

(B) the need for expanding the capability to record strong ground motions, especially for urban area engineering purposes;

(C) the need to measure accurately large magnitude seismic events (as determined by the Director);

(D) the need to acquire additional parametric data; and

(E) projected costs for meeting the needs described in subparagraphs (A) through (D).

(2) RESULTS.—The Director shall transmit the results of the assessment conducted under this subsection to Congress not later than 1 year after the date of enactment of this Act.

(c) EARTH SCIENCE TEACHING MATERIALS.—

(1) DEFINITIONS.—In this subsection:

(A) LOCAL EDUCATIONAL AGENCY.—The term "local educational agency" has the meaning given that term in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801).

(B) SCHOOL.—The term "school" means a nonprofit institutional day or residential school that provides education for any of the grades kindergarten through grade 12.

(2) TEACHING MATERIALS.—In a manner consistent with the requirement under section

5(b)(4) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(4)) and subject to a merit based competitive process, the Director of the National Science Foundation may use funds made available to him or her under section 12(c) of such Act (42 U.S.C. 7706(c)) to develop, and make available to schools and local educational agencies for use by schools, at a minimal cost, earth science teaching materials that are designed to meet the needs of elementary and secondary school teachers and students.

(d) IMPROVED SEISMIC HAZARD ASSESSMENT.—

(1) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Director shall conduct a project to improve the seismic hazard assessment of seismic zones.

(2) REPORTS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and annually during the period of the project, the Director shall prepare, and submit to Congress, a report on the findings of the project.

(B) FINAL REPORT.—Not later than 60 days after the date of termination of the project conducted under this subsection, the Director shall prepare and submit to Congress a report concerning the findings of the project.

(e) STUDY OF NATIONAL EARTHQUAKE EMERGENCY TRAINING CAPABILITIES.—

(1) IN GENERAL.—The Director of the Federal Emergency Management Agency shall conduct an assessment of the need for additional Federal disaster-response training capabilities that are applicable to earthquake response.

(2) CONTENTS OF ASSESSMENT.—The assessment conducted under this subsection shall include—

(A) a review of the disaster training programs offered by the Federal Emergency Management Agency at the time of the assessment;

(B) an estimate of the number and types of emergency response personnel that have, during the period beginning on January 1, 1990 and ending on July 1, 1997, sought the training referred to in subparagraph (A), but have been unable to receive that training as a result of the oversubscription of the training capabilities of the Federal Emergency Management Agency; and

(C) a recommendation on the need to provide additional Federal disaster-response training centers.

(3) REPORT.—Not later than 180 days after the date of enactment of this Act, the Director shall prepare and submit to Congress a report that addresses the results of the assessment conducted under this subsection.

SEC. 3. COMPREHENSIVE ENGINEERING RESEARCH PLAN.

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

(1) by striking “and” at the end of subparagraph (D);

(2) by striking the period at the end of subparagraph (E) and inserting “; and”; and

(3) by adding at the end the following:

“(F) develop, in conjunction with the Federal Emergency Management Agency, the National Institute of Standards and Technology, and the United States Geological Survey, a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”.

(b) FEDERAL EMERGENCY MANAGEMENT AGENCY.—Section 5(b)(1) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(1)) is amended—

(1) by striking “and” at the end of subparagraph (D);

(2) by striking the period at the end of subparagraph (E) and inserting “; and”; and

(3) by adding at the end the following:

“(F) work with the National Science Foundation, the National Institute of Standards and Technology, and the United States Geological Survey, to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (existing at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”.

(c) UNITED STATES GEOLOGICAL SURVEY.—Section 5(b)(3) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(3)) is amended—

(1) by striking “and” at the end of subparagraph (E);

(2) by striking the period at the end of subparagraph (G) and inserting “; and”; and

(3) by adding at the end the following:

“(H) work with the National Science Foundation, the Federal Emergency Management Agency, and the National Institute of Standards and Technology to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”.

(d) NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—Section 5(b)(5) of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7704(b)(5)) is amended—

(1) by striking “and” at the end of subparagraph (B);

(2) by striking the period at the end of subparagraph (C) and inserting “; and”; and

(3) by adding at the end the following:

“(D) work with the National Science Foundation, the Federal Emergency Management Agency, and the United States Geological Survey to develop a comprehensive plan for earthquake engineering research to effectively use existing testing facilities and laboratories (in existence at the time of the development of the plan), upgrade facilities and equipment as needed, and integrate new, innovative testing approaches to the research infrastructure in a systematic manner.”.

SEC. 4. REPEALS.

Sections 6 and 7 of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7705 and 7705a) are repealed.

THE PRESIDING OFFICER. Is there objection to the immediate consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

MR. FRIST. Mr. President, I rise today to reaffirm my support for the 1998-1999 Reauthorization of the Earthquake Hazard Reduction Act of 1977.

I think we can all agree that the goal of the National Earthquake Hazard Reduction Program is a prime example of the proper role for government. In this bill we are calling for continued effort in the areas of public education, fundamental earth science research, development of better materials and building practices, and other activities that reduce the risk to life and property.

This bill contains a provision that builds upon the national seismic network, improving its capability and forming the basis for a real-time seismic hazard warning system. A real-time warning system has the potential to save lives by alerting people outside the immediate area of an impending seismic shock. Advance warning can be critical in preventing injury by giving

communities time to curtail high risk activities such as high-speed rail transportation, as well as shutoff of selected gas, electrical and water feeders to the effected area. This is pivotal in limiting the collateral damage caused after an earthquake by fire.

As we have all seen by the devastation in Northridge, CA, the consequences of an earthquake are simply too important for a region to be lulled into a false sense of safety. This point was brought home to me when I heard that an earthquake had struck Chattanooga. Certainly, not by any means, a large event, but a reminder, that the threat of earthquakes occur throughout the Nation.

We have also included an important provision which underscores our commitment to education. This bill would let NSF create and disseminate earth science educational materials in a way that permits easy access by educators and the general public. Acknowledging that FEMA and NSF have both done an outstanding job in creating educational material, we are looking for continued cooperation of all the agencies, one of the hallmarks of the National Earthquake Hazard Reduction Program [NEHRP].

To speed the process of moving this important legislation forward, I offer a technical amendment which brings the funding authority for USGS to the same level reflected in the House of Representatives version of this bill. The adoption of this amendment should reduce the time it will take for this important legislation to become law.

Mr. President, I believe that the passage of this legislation will continue of the good work that these four agencies have been undertaking—work that saves property, but most importantly, saves American lives.

MR. HOLLINGS. Mr. President, I rise today in support of passage of S. 910, a bill to reauthorize appropriations for the Earthquake Hazards Reduction Act. Catastrophic earthquakes are inevitable in the United States. Scientists consider California to be the most likely location for major earthquakes; however, all or parts of 39 states—populated by more than 70 million people—have been classified as having major or moderate seismic risk. Earthquakes are not uncommon in Alaska, Idaho, Utah, and Nevada. Major earthquakes east of the Rockies are infrequent but can prove devastating. In 1811-12, three huge earthquakes rocked the New Madrid area of Missouri, near St. Louis and Memphis. These earthquakes were so powerful that they changed the course of the Mississippi River and rang bells in Boston. In 1886, an earthquake leveled my hometown of Charleston. Estimates of the strength of the Charleston quake range from 7.0 to 7.6 on the Richter Scale. Of particular interest and concern about the east coast quakes is that there is no known geological origin for them. This fact underscores the

possibility of unpredictable seismic activity in the United States.

What we do know, though, is that the loss of life and property from earthquakes can be considerable. For example, the January 17, 1994, earthquake at Northridge, CA, was classified as only "moderate" in magnitude. Nonetheless, 57 people died, and injuries totaled over 6,500. In addition, insurance payments for this moderate event were over \$6 billion, and the Federal supplemental appropriation totaled another \$9 billion. The Northridge has become the second most expensive natural disaster in American history, exceeded only by Hurricane Andrew. Reducing damage from earthquakes would not only save lives but also save both private insurers and the Federal Government considerable amounts of money.

That is what NEHRP, National Earthquake Hazards Reduction Program, established by the Earthquake Hazards Reduction Act of 1977, is designed to do. It is a Federal inter-agency program designed to help minimize the loss of life and property caused by earthquakes. It supports scientific research on the origins of earthquakes, and funds engineering research to make buildings and other structures more seismically resistant. NEHRP also disseminates this technical information to the states, and helps states and localities prepare for earthquakes. NEHRP focuses on helping states prepare for earthquakes, in contrast to Federal disaster response programs that help states after a major event.

The Northridge earthquake illustrates both NEHRP's accomplishments and what some observers believe are continuing problems.

The most important accomplishment was the survival of most of the buildings and highway overpasses which were built to meet new seismic codes or retrofitted to meet those codes. For example, highway bridges designed using standards developed after the late 1970s performed very well. The most dramatic story concerns the retrofit of older highway overpasses. After the Loma Prieta earthquake in Northern California in 1989, university researchers and Federal engineers, using NEHRP funds, undertook a crash program to develop new ways to retrofit older highway bridges and began applying those retrofit techniques to overpasses in Southern California. At Northridge, six major highway bridges collapsed. While further study is needed, it appears that the older overpasses that were retrofitted survived, while those that did not often failed.

Northridge also illustrated some continuing problems such as the strength of "lifelines"—water line, natural gas pipelines, electrical lines, and so forth. Little research has been done to date on how to make these facilities more earthquake-resistant. Dramatic film from Northridge showed flooded streets with shooting jets of burning natural gas and illustrated how easily these lines are broken.

Mr. President, S. 910 will authorize the funding needed to continue the good work that has been done by the four participating agencies in NEHRP—the Federal Emergency Management Agency, the U.S. Geological Survey, the National Science Foundation, and the National Institute of Standards and Technology—and will allow them to address problems like ruptured lifelines that continue to plague disaster response teams.

This bill also will require new assessments of our seismic hazard warning systems, and our earthquake emergency training facilities to ensure that the warning systems and training facilities are up to date, properly operating, and responsive. In assessing the current conditions of the seismic monitoring networks, the agencies are expected to pay greater attention to understudied areas like the eastern seaboard where catastrophic seismic events have occurred in the past, and are predicted to occur in the future—yet are more difficult to understand.

This is a good bill. I commend the Senator from Tennessee for his diligence in this area, and I encourage my colleagues to support passage of this measure today.

AMENDMENT NO. 1054

(Purpose: To increase the authorization for the United States Geological Survey for 1998 and 1999.)

Mr. WARNER. Mr. President, Senator FRIST has an amendment at the desk, and I ask for its consideration.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

The Senator from Virginia [Mr. WARNER], for Mr. FRIST, proposes an amendment numbered 1054.

Mr. WARNER. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

On page 9, line 19, strike "\$51,142,000" and insert "\$52,565,000".

On page 9, line 22, strike "\$52,676,000" and insert "\$54,052,000".

Mr. WARNER. Mr. President, I ask unanimous consent that the amendment be agreed to.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 1054) was agreed to.

Mr. WARNER. Mr. President, I ask unanimous consent that the bill be considered read a third time and passed, as amended, the motion to reconsider be laid upon the table, and that any statements relating to the bill appear at the appropriate place in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (S. 910), as amended, was deemed read the third time and passed.

(The text of S. 910, as passed, will be printed in a future edition of the RECORD.)

CONVEYANCE OF BLM LAND TO GRANTS PASS, OR

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate now proceed to the consideration of Calendar No. 135, H.R. 1198.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A bill (H.R. 1198) to direct the Secretary of the Interior to convey certain land to the City of Grants Pass, Oregon.

The PRESIDING OFFICER. Is there objection to the immediate consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. WARNER. Mr. President, I ask unanimous consent that the bill be considered read a third time and passed, the motion to reconsider be laid upon the table, and that any statements relating to the bill appear at the appropriate place in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (H.R. 1198) was deemed read the third time and passed.

WARNER CANYON SKI HILL LAND EXCHANGE ACT OF 1997

Mr. WARNER. Mr. President, I ask unanimous consent that the Senate now proceed to the consideration of Calendar No. 136, H.R. 1944.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A bill (H.R. 1944) to provide for a land exchange involving the Warner Canyon Ski Area and other land in the State of Oregon.

The PRESIDING OFFICER. Is there objection to the immediate consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. WYDEN. Mr. President, I urge the Senate to pass the bill H.R. 1944, authorizing an exchange of lands between the U.S. Forest Service, the U.S. Fish and Wildlife Service, and Lake County, OR.

My colleague from Oregon, Senator SMITH, joined me in introducing S. 881 on June 11. The chairman of the Energy and Natural Resources Committee, Senator MURKOWSKI, was extremely helpful and the bill was included in a hearing on various land exchange bills on June 18th. The U.S. House passed the companion measure, sponsored by the chairman of the House Agriculture Committee, Congressman SMITH, on July 22. The Energy Committee reported the House bill yesterday, and I greatly appreciate the Chairman's excellent work to bring the bill to floor for final passage today.

This legislation will go far to keep the Warner Canyon Ski Area of Lakeview, OR, in business. If ever there was such a thing as a community ski area, this is it. It is low tech. It is run by a non-profit local organization. This legislation is clearly in the public interest of Lakeview, OR, and the Nation.