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### WILDFIRE MANAGEMENT TECHNOLOGY ADVANCEMENT ACT OF 2018

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DECEMBER 19, 2018.—Ordered to be printed

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Ms. MURKOWSKI, from the Committee on Energy and Natural Resources, submitted the following

#### R E P O R T

[To accompany S. 2290]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 2290) to improve wildfire management operations and the safety of firefighters and communities with the best available technology, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill, as amended, do pass.

The amendment is as follows:

1. Strike all after the enacting clause and insert the following:

#### SECTION 1. SHORT TITLE.

This Act may be cited as the “Wildfire Management Technology Advancement Act of 2018”.

#### SEC. 2. PURPOSE.

The purpose of this Act is to promote the use of the best available technology to enhance the effective and cost-efficient response to wildfires—

- (1) to meet applicable protection objectives; and
- (2) to increase the safety of—
  - (A) firefighters; and
  - (B) the public.

#### SEC. 3. DEFINITIONS.

In this Act:

- (1) SECRETARIES.—The term “Secretaries” means—
  - (A) the Secretary of Agriculture; and
  - (B) the Secretary of the Interior.
- (2) SECRETARY CONCERNED.—The term “Secretary concerned” means—
  - (A) the Secretary of Agriculture, with respect to activities under the Department of Agriculture; and

(B) the Secretary of the Interior, with respect to activities under the Department of the Interior.

**SEC. 4. UNMANNED AIRCRAFT SYSTEMS.**

(a) **DEFINITIONS.**—In this section, the terms “unmanned aircraft” and “unmanned aircraft system” have the meanings given those terms in section 331 of the FAA Modernization and Reform Act of 2012 (49 U.S.C. 40101 note; Public Law 112–95).

(b) **ESTABLISHMENT OF PROGRAM.**—Not later than 180 days after the date of enactment of this Act, the Secretary of the Interior, in consultation with the Secretary of Agriculture, shall establish a research, development, and testing program, or expand an applicable existing program, to assess unmanned aircraft system technologies, including optionally piloted aircraft, across the full range of wildland fire management operations in order to accelerate the deployment and integration of those technologies into the operations of the Secretaries.

(c) **EXPANDING USE OF UNMANNED AIRCRAFT SYSTEMS ON WILDFIRES.**—Not later than 1 year after the date of enactment of this Act, the Secretaries, in coordination with State wildland firefighting agencies and other relevant Federal agencies, shall enter into an agreement under which the Secretaries shall develop consistent protocols and plans for the use on wildland fires of unmanned aircraft system technologies, including for the development of real-time maps of the location of wildland fires.

**SEC. 5. LOCATION SYSTEMS FOR WILDLAND FIREFIGHTERS.**

(a) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, subject to the availability of appropriations, the Secretaries, in coordination with State wildland firefighting agencies, shall jointly develop and operate a tracking system (referred to in this section as the “system”) to remotely locate the positions of fire resources, including, at a minimum, any fire resources assigned to Federal type 1 wildland fire incident management teams.

(b) **REQUIREMENTS.**—The system shall—

- (1) use technology available to the Secretaries to remotely track the location of an active resource, such as a Global Positioning System;
- (2) depict the location of each fire resource on the applicable maps developed under section 4(c); and
- (3) operate continuously during the period for which any firefighting personnel are assigned to the applicable Federal wildland fire.

(c) **OPERATION.**—The Secretary concerned shall—

- (1) before commencing operation of the system—
  - (A) conduct not fewer than 2 pilot projects relating to the system; and
  - (B) review the results of those pilot projects; and
- (2) conduct training, and maintain a culture, such that an employee, officer, or contractor shall not rely on the system for safety.

**SEC. 6. WILDLAND FIRE DECISION SUPPORT.**

(a) **PROTOCOL.**—To the maximum extent practicable, the Secretaries shall ensure that wildland fire management activities conducted by the Secretaries, or conducted jointly by the Secretaries and State wildland firefighting agencies, achieve compliance with applicable incident management objectives in a manner that—

- (1) minimizes firefighter exposure to the lowest level necessary; and
- (2) reduces overall costs of wildfire incidents.

(b) **WILDFIRE DECISION SUPPORT SYSTEM.**—

(1) **IN GENERAL.**—The Secretaries, in coordination with State wildland firefighting agencies, shall establish a system to track and monitor decisions made by the Secretaries or State wildland firefighting agencies in managing wildfires.

(2) **COMPONENTS.**—The system established under paragraph (1) shall be able to alert the Secretaries if—

- (A) unusual costs are incurred;
- (B) an action to be carried out would likely—
  - (i) endanger the safety of a firefighter; or
  - (ii) be ineffective in meeting an applicable suppression or protection goal; or
- (C) a decision regarding the management of a wildfire deviates from—
  - (i) an applicable protocol established by the Secretaries, including the requirement under subsection (a); or
  - (ii) an applicable spatial fire management plan or fire management plan of the Secretary concerned.

**SEC. 7. SMOKE PROJECTIONS FROM ACTIVE WILDLAND FIRES.**

The Secretaries shall establish a program, to be known as the “Interagency Wildland Fire Air Quality Response Program”, under which the Secretary concerned—

- (1) to the maximum extent practicable, shall assign a team of air resource advisors to a type 1 incident management team managing a wildland fire; and
- (2) may assign a team of air resource advisors to a type 2 incident management team managing a wildland fire.

**SEC. 8. FIREFIGHTER INJURIES DATABASE.**

(a) IN GENERAL.—Section 9(a) of the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2208(a)) is amended—

- (1) in paragraph (2), by inserting “, categorized by the type of fire” after “such injuries and deaths”; and
  - (2) in paragraph (3), by striking “activities,” and inserting the following: “activities, including—
- “(A) all injuries sustained by a firefighter and treated by a doctor, categorized by the type of firefighter;
  - “(B) all deaths sustained while undergoing a pack test or preparing for a work capacity;
  - “(C) all injuries or deaths resulting from vehicle accidents; and
  - “(D) all injuries or deaths resulting from aircraft crashes.”

(b) USE OF EXISTING DATA GATHERING AND ANALYSIS ORGANIZATIONS.—Section 9(b)(3) of the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2208(b)(3)) is amended, by inserting “, including the Center for Firefighter Injury Research and Safety Trends” after “public and private”.

(c) MEDICAL PRIVACY OF FIREFIGHTERS.—Section 9 of the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2208) is amended by adding at the end the following:

“(e) MEDICAL PRIVACY OF FIREFIGHTERS.—The collection, storage, and transfer of any medical data collected under this section shall be conducted in accordance with—

- “(1) the privacy regulations promulgated under section 264(c) of the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. 1320d–2 note; Public Law 104–191); and
- “(2) other applicable regulations, including parts 160, 162, and 164 of title 45, Code of Federal Regulations (as in effect on the date of enactment of this subsection).”.

**SEC. 9. RAPID RESPONSE EROSION DATABASE.**

(a) IN GENERAL.—The Secretaries, in consultation with the Administrator of the National Aeronautics and Space Administration, shall establish and maintain a database, to be known as the “Rapid Response Erosion Database” (referred to in this section as the “Database”).

(b) OPEN-SOURCE DATABASE.—

(1) AVAILABILITY.—The Secretaries shall make the Database (including the original source code)—

- (A) web-based; and
- (B) available without charge.

(2) COMPONENTS.—The Database shall provide for—

- (A) the automatic incorporation of spatial data relating to vegetation, soils, and elevation into an applicable map created by the Secretary concerned that depicts the changes in land-cover and soil properties caused by a wildland fire; and

- (B) the generation of a composite map that can be used by the Secretary concerned to model the effectiveness of treatments in the burned area to prevent flooding, erosion, and landslides under a range of weather scenarios.

(c) USE.—The Secretary concerned shall use the Database, as applicable, in developing recommendations for emergency stabilization treatments or modifications to drainage structures to protect values-at-risk following a wildland fire.

(d) COORDINATION.—The Secretaries may share the Database, and any results generated in using the Database, with any State or unit of local government.

**SEC. 10. PREDICTING WHERE WILDFIRES WILL START.**

(a) IN GENERAL.—The Secretaries, in consultation with the Administrator of the National Aeronautics and Space Administration and the Secretary of Energy, through the capabilities and assets located at the National Laboratories, shall establish and maintain a system to predict the locations of future wildfires for fire-prone areas of the United States.

(b) COOPERATION; COMPONENTS.—The system established under subsection (a) shall—

- (1) be based on, and enhance, similar systems in existence on the date of enactment of this Act, including the Fire Danger Assessment System; and

(2) use a combination of soil moisture levels, precipitation patterns, topography, fuels growth and availability, ignition risks, and temperatures to calculate probabilities of wildfires igniting or burning in fire-prone areas of the United States.

(c) USE IN FORECASTS.—Not later than 1 year after the date of enactment of this Act, the Secretaries shall use the system established under subsection (a), to the maximum extent practicable, for purposes of developing any wildland fire potential forecasts.

(d) COORDINATION.—The Secretaries may share the system established under subsection (a), and any results generated in using the system, with any State or unit of local government.

#### **SEC. 11. STUDY ON AIRCRAFT OPERATING AT NIGHT.**

(a) STUDY.—Not later than 1 year after the date of enactment of this Act, subject to the availability of appropriations, the Secretaries shall conduct a study to determine the feasibility of operating aircraft at night when managing wildland fires.

(b) PARTNERSHIPS.—In conducting the study under subsection (a), the Secretaries may enter into a partnership with any State center of excellence with experience relating to aerial firefighting.

#### **SEC. 12. TERMINATION OF AUTHORITY.**

The authority provided by this Act terminates on the date that is 10 years after the date of enactment of this Act.

### **PURPOSE**

The purpose of S. 2290 is to promote the use of the best available technology to enhance the effective and cost-efficient response to wildfires to meet applicable protection objectives and to increase the safety of firefighters and the public.

### **BACKGROUND AND NEED**

Since 1910, there have been more than 1,000 firefighter deaths while working on wildland fires, 255 of which have occurred in the last 15 years.<sup>1</sup> From the 1950s to the late 1990s, wildfires consumed one to three million acres of land per year in the United States; in a bad fire year, five million acres of land burned. However, in two out of the past three years, wildfires consumed over 10 million acres of land.<sup>2</sup> Last year, over 12,000 structures were destroyed by wildfires—over 8,000 of those structures were people's homes.<sup>3</sup> And as a result of the growing wildland-urban interface, approximately 76,000 communities nationwide are now at-risk from wildfires.<sup>4</sup>

To keep up with the increasing severity and complexity of fires, fire managers are turning to new tools. Technological advances and innovation are transforming the way that wildland fires are being fought. As technology, like drones or fire mapping, becomes more readily available and sophisticated, fire managers are integrating those platforms into their responses, which improves the safety and welfare of firefighters and affected communities.

For example, unmanned aircraft systems (UASs), commonly known as drones, are increasingly being used by fire managers for

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<sup>1</sup> National Wildfire Coordinating Group Risk Management Committee, “Wildland Fire Fatalities by Year,” *Historical Wildland Firefighter Fatality Reports*, National Interagency Fire Center.

<sup>2</sup> National Interagency Coordination Center, “Total Wildland Fires and Acres (1926–2017),” National Interagency Fire Center: Fire Information Statistics.

<sup>3</sup> National Interagency Coordination Center, “Wildland Fire Summary and Statistics Annual Report, 2017,” National Interagency Fire Center: Fire and Aviation Management Web Applications.

<sup>4</sup> National Association of State Foresters, “Communities at Risk Report Fiscal Year 2015,” May 2016.

reconnaissance of wildfires and to assist individual firefighters. UASs are capable of mapping fire perimeters, assessing fire behavior, and detecting spot fires—all of which contribute to firefighter safety. UASs enable a complete aerial picture of a wildfire to be generated quickly, cost-effectively, and without endangering firefighters.

Knowing the locations of fire crews and resources is also important information. Firefighter fatality reports have suggested that if fire managers would have known the locations of firefighters in relationship to the wildfire, lives of firefighters could have been saved. In 2015, Barton Rye, a Department of the Interior employee, received the National Fire Safety Award for using GPS locators to map, track, and monitor the locations of multiple firefighters on a large wildland fire. Those locators saved the life of a disoriented firefighter.<sup>5</sup> Firefighter organizations have been calling for agencies to use this technology nationally to increase the safety of wildland firefighters. In 2017, the Center of Excellence for Advanced Technology Aerial Firefighting (Center) published an analysis that showed the cost of purchasing and operating a commercially available GPS locator ranged from \$200–\$800 per year. The analysis evaluated several platforms commercially available, confirming their ability to be used by wildland firefighters in a variety of situations.<sup>6</sup> The Forest Service recently purchased 6,000 units<sup>7</sup> and CAL FIRE has purchased 1,200 units; however, these units are not interoperable.<sup>8</sup>

On August 3, 2017, the Committee on Energy and Natural Resources held an oversight hearing on the use of technology to reduce the risks posed by wildfires to firefighters and communities. During that hearing, the Committee received testimony on the availability of technologies developed by Federal agencies without a firefighting mandate that can be of use to the firefighting agencies. One such technology, called the Rapid Response Erosion Database, shortens the time required to place emergency stabilization measures in order to prevent landslides that can occur with rain after wildfires. The Fire Danger Assessment System, another technology developed by the National Aeronautics and Space Administration (NASA), would enable seasonal wildfire forecasts to be produced at a finer resolution than at which they are currently produced.

Another emerging technology relates to air quality. Air quality in areas experiencing wildfires has become an increasing concern in the last several years, impacting public health and local economies. In the 1990s, Forest Service scientists developed the BlueSky Smoke Modeling Framework, which is used to understand and predict what is going to happen with smoke from particular wildfires. Over the last several years, the Forest Service has started to provide smoke forecasts for large wildfires and is seeking to expand this service.

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<sup>5</sup>U.S. Fish and Wildlife Service, “Fire Management Annual Report, Fiscal Year 2015,” National Interagency Fire Center.

<sup>6</sup>Center of Excellence for Advanced Technology Aerial Firefighting, “Satellite Messenger Evaluation for Wildland Fire Management”, Colorado Department of Public Safety: CoE-17-005.1, December 2017.

<sup>7</sup>Holdsambeck, Steve, “Schoolhouse Fire ATV Fatality: Learning Review Report,” Santa Fe National Forest, August 2013.

<sup>8</sup>Gabbert, Bill, “CAL FIRE to Procure Mobile Data Systems with Location Tracking Capability,” *Wildfire Today*, February 2018.

Decision-making in the course of managing wildland fires is a science unto itself. The Forest Service developed the Wildland Fire Decision Support System (WFDSS) in 2009 to guide decision-makers during complex wildland fires.<sup>9</sup> Over the last couple years, Forest Service researchers have called for an increase in the documentation of decisions made on wildland fires in order to bring fire-fighting costs down and make it safer for firefighters.<sup>10</sup> While WFDSS has been helpful, collecting and reviewing documented decisions will help fire managers make better decisions and determine if suppression resources will be effective.

While firefighter safety is the top priority for fire managers, injuries and fatalities among wildland firefighters appear to be increasing. While the Federal Fire Prevention and Control Act of 1974 (FFPCA, 15 U.S.C. 2201 et seq.) established a database for tracking injuries and deaths among structural firefighters, the database does not track incidents for wildland firefighters. Knowing the rates of occurrence and reasons for injuries among wildland firefighters will help managers identify reforms and training needs that will prevent future injuries.

In 2014, Federal, State, Tribal, and local governments issued the “National Cohesive Wildland Management Strategy,” which provided a management framework designed to more fully integrate fire management efforts across jurisdictions.<sup>11</sup> S. 2290 aims to build upon that national strategy, and the technologies and ideas that were shared during the August 2017 hearing. The bill codifies many programs that are in their initial stages of deployment and encourages firefighting agencies to continue to mature them.

#### LEGISLATIVE HISTORY

Senator Cantwell introduced S. 2290 on January 10, 2018.

The Senate Committee on Energy and Natural Resources met in open business session on October 2, 2018, and ordered S. 2290 favorably reported, as amended.

#### COMMITTEE RECOMMENDATION

The Senate Committee on Energy and Natural Resources, in open business session on October 2, 2018, by a majority voice vote of a quorum present, recommends that the Senate pass S. 2290, if amended as described herein.

#### COMMITTEE AMENDMENT

During its consideration of S. 2290, the Committee adopted an amendment in the nature of a substitute (ANS). The ANS clarifies that the purpose of the legislation is to use the best available technology when responding to wildland fires and to increase the safety of firefighters and the public. The substitute amendment also modifies the definitions to only define the terms “Secretary of the Interior” and “Secretary of Agriculture.”

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<sup>9</sup> Calkin, David E. and others, “A Real-time Risk Assessment Tool Supporting Wildland Fire Decisionmaking,” *Journal of Forestry*, July 2011.

<sup>10</sup> Banegas, Diane, “Why Big Blazes are Burning up Budgets and Landscapes,” *Research and Development*, Forest Service (July 21, 2017).

<sup>11</sup> U.S. Departments of the Interior and Agriculture, “The National Strategy: The Final Phase of the Development of the National Cohesive Wildland Fire Management Strategy,” April 2014.

The ANS modifies section 4 to only require the Secretaries to accelerate and promote the use of UASs and to direct the Secretaries to develop regulations and protocol, rather than requiring certain protocols. The substitute amendment further requires the UAS technologies to be used for fire risk mapping.

The ANS strikes the original section 6, relating to fire risk mapping. The substitute amendment also redesignates the original section 7 as section 6 and renames it to “Wildland Fire Decision Support.”

The ANS redesignates the original section 8 as section 7 and strikes subsections (b) and (c) relating to the duties of an air resource advisor and public dissemination of smoke projections. The substitute amendment also strikes the original section 9, relating to reverse 911 telecommunications systems.

The ANS redesignates the original section 10 as section 8. It further strikes the provisions requiring that data be collected on total costs incurred in response to a wildland fire by a type 1 or type 2 management incident team and the total number of structures lost during a fire.

The ANS redesignates the original section 11 as section 9. It further modifies the uses of the data collected in the Rapid Response Erosion Database.

The ANS strikes the original section 12, relating to research for effectiveness and standards. The substitute amendment redesignates the original section 13 as section 10. It further modifies the section to allow the Secretaries to share the data with State and local governments.

The ANS also redesignates the original sections 14 and 15 as sections 11 and 12, respectively.

#### SECTION-BY-SECTION ANALYSIS

*Sec. 1. Short title*

Section 1 provides a short title.

*Sec. 2. Purpose*

Section 2 provides the purpose of the bill.

*Sec. 3. Definitions*

Section 3 defines key terms.

*Sec. 4. Unmanned aircraft systems*

Subsection (a) defines the terms “unmanned aircraft” and “unmanned aircraft systems.”

Subsection (b) directs the Secretary of the Interior, in consultation with the Secretary of Agriculture, to establish a research, development, and testing program, or to expand an existing program, within 180 days of the Act’s enactment, to assess UAS technologies in wildland fire management operations, so that the deployment and integration of those technologies can be accelerated.

Subsection (c) directs the Secretaries in coordination with State wildland firefighting agencies and other relevant Federal agencies, within one year of the Act’s enactment, to enter in an agreement to develop consistent protocols for the use of UAS technologies in wildland fire response, including real-time fire mapping.

*Sec. 5. Location systems for wildland firefighters*

Subsection (a) directs the Secretaries, in coordination with State wildland firefighting agencies, to develop and operate jointly a tracking system, within one year of the Act's enactment, to track fire resources remotely. At a minimum, the system shall be able to track resources assigned to Federal type 1 wildland fire incident management teams. This subsection is subject to the availability of appropriations.

Subsection (b) requires the Secretaries to use available technology, such as a Global Positioning System, to locate each fire resource on a map, and to operate continuously while firefighters are assigned to Federal wildland fires.

Subsection (c) requires the Secretary concerned to conduct at least two pilot projects for the tracking system and to conduct trainings to ensure that personnel do not rely on the tracking system for safety purposes.

*Sec. 6. Wildland fire decision support*

Subsection (a) requires the Secretaries to ensure that any activities conducted for wildland fire management minimize firefighter exposure and reduce the overall cost of wildfire incidents.

Subsection (b) requires the Secretaries, in coordination with State wildland firefighting agencies, to establish a system to track and monitor decisions made in response to a wildland fire. Subsection (b) further requires that the system be able to alert the Secretaries if (1) unusual costs are incurred; (2) an action would likely endanger the safety of firefighters or result in an ineffective outcome; or (3) if a decision deviates from applicable protocols or spatial fire management plans.

*Sec. 7. Smoke projections from active wildland fires*

Section 7 directs the Secretaries to establish the "Interagency Wildland Fire Air Quality Response Program." That program shall, to the maximum extent practicable, assign a team of air resource advisors to a type 1 incident management team, and may assign a team to a type 2 incident management team.

*Sec. 8. Firefighter injuries database*

Subsection (a) amends the FFPCA to require the firefighter injuries database to evaluate (1) what type of fire led to an injury or death; (2) any deaths sustained while training or preparing for a wildland fire; and (3) injuries or deaths resulting from vehicle accidents or aircraft crashes.

Subsection (b) amends the FFPCA to authorize the National Fire Data Center to use data collected by the Center for Firefighter Injury Research and Safety Trends.

Subsection (c) amends the FFPCA to require any data collected under this section to comply with privacy regulations under the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. 1320d-2 note) and 45 C.F.R. 160, 162, and 164.

*Sec. 9. Rapid Response Erosion Database*

Subsection (a) requires the Secretaries, in consultation with the Administrator of NASA, to establish the "Rapid Response Erosion Database."

Subsection (b) requires the Database to be available on the internet at no charge. Subsection (b) further requires that the Database automatically incorporate spatial data showing changes in land-cover and soil properties and that the Database produce a map that assists with modeling the effectiveness of treatments to prevent flooding, erosion, and landslides.

*Sec. 10. Predicting where wildfires will start*

Subsection (a) directs the Secretaries, in consultation with the NASA Administrator and the Secretary of Energy, to establish a system to predict the location of future wildfires.

Subsection (b) requires that the system be based on similar existing systems, including the Fire Danger Assessment System, and use a combination of meteorological, topographical, environmental, and biological data to calculate the probability of a wildfire igniting in a given area.

Subsection (c) requires the Secretaries to use the system within one year of the Act's enactment to forecast wildland fire potential.

Subsection (d) authorizes the Secretaries to share the data and forecasts with State and local governments.

*Sec. 11. Study on aircraft operating at night*

Subsection (a) directs the Secretaries, subject to the availability of appropriations, to conduct a study of the feasibility of having aircraft operate at night during wildland fires.

Subsection (b) authorizes the Secretaries to enter into partnerships with State centers of excellence that have experience with aerial firefighting.

*Sec. 12. Termination of authority*

Section 12 terminates the authorities provided in this legislation 10 years after enactment.

#### COST AND BUDGETARY CONSIDERATIONS

The following estimate of the costs of this measure has been provided by the Congressional Budget Office:

S. 2290 would mostly codify programs managed by the Forest Service and the Bureau of Land Management that respond to wildfires and seek to prevent them. The bill also would direct the Federal Emergency Management Agency to collect data related to injuries and deaths of firefighters. Under the bill, the authority to operate those programs would expire after 10 years.

Using information from the Forest Service, CBO estimates that implementing S. 2290 would have no significant cost to the Federal government in any year.

Enacting S. 2290 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

CBO estimates that enacting S. 2290 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

S. 2290 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act.

The CBO staff contact for this estimate is Robert Reese. The estimate was reviewed by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

#### REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 2290. The bill is not a regulatory measure in the sense of imposing government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 2290, as ordered reported.

#### CONGRESSIONALLY DIRECTED SPENDING

S. 2290, as ordered reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

#### EXECUTIVE COMMUNICATIONS

The Committee did not request executive communications for S. 2290.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by S. 2290, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

### **THE FEDERAL FIRE PREVENTION AND CONTROL ACT OF 1974**

Public Law 93-498, as amended

An Act to reduce losses of life and property through better fire prevention and control, and for other purposes.

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#### NATIONAL FIRE DATA CENTER

**SEC. 9. (a) GENERAL.**—The Administrator shall operate, directly or through contracts or grants, an integrated, comprehensive National Fire Data Center for the selection, analysis, publication, and dissemination of information related to the prevention, occurrence, control, and results of fires of all types. The program of such Data Center shall be designed to (1) provide an accurate nationwide analysis of the fire problem, (2) identify major problem areas, (3) assist in setting priorities, (4) determine possible solutions to problems, and (5) monitor the progress of programs to reduce fire losses. To carry out these functions, the Data Center shall gather and analyze

(1) information on the frequency, causes, spread, and extinguishment of fires;

(2) information on the number of injuries and deaths resulting from fires, including the maximum available information on the specific causes and nature of such injuries and deaths, *categorized by the type of fire*, and information on property losses;

(3) information on the occupational hazards faced by firefighters, including the causes of deaths and injuries arising, directly and indirectly, from firefighting [activities;] *activities, including—*

*(A) all injuries sustained by a firefighter and treated by a doctor, categorized by the type of firefighter;*

*(B) all deaths sustained while undergoing a pack test or preparing for a work capacity;*

*(C) all injuries or deaths resulting from vehicle accidents; and*

*(D) all injuries or deaths resulting from aircraft crashes;*

(4) information on all types of firefighting activities, including inspection practices;

(5) technical information related to building construction, fire properties of materials, and similar information;

(6) information on fire prevention and control laws, systems, methods, techniques, and administrative structures used in foreign nations;

(7) information on the causes, behavior, and best method of control of other types of fire, including, but not limited to, forest fires, brush fires, fire underground, oil blow-out fires, and water-borne fires; and

(8) such other information and data as is deemed useful and applicable.

(b) METHODS.—In carrying out the program of the Data Center, the Administrator is authorized to—

(1) develop standardized data reporting methods;

(2) encourage and assist Federal, State, local, and other agencies, public and private, in developing and reporting information; and

(3) make full use of existing data gathering and analysis organizations, both public and private, *including the Center for Firefighter Injury Research and Safety Trends.*

(c) DISSEMINATION OF FIRE DATA.—The Administrator shall insure dissemination to the maximum extent possible of fire data collected and developed by the Data Center, and shall make such data, information, and analysis available in appropriate form to Federal agencies, State and local governments, private organizations, industry, business, and other interested persons.

(d) NATIONAL FIRE INCIDENT REPORTING SYSTEM UPDATE.—The Administrator shall update the National Fire Incident Reporting System to ensure that the information in the system is available, and can be updated, through the Internet and in real time.

(e) MEDICAL PRIVACY OF FIREFIGHTERS.—*The collection, storage, and transfer of any medical data collected under this section shall be conducted in accordance with—*

*(1) the privacy regulations promulgated under section 264(c) of the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. 1320d-2 note; Public Law 104-191); and*

(2) all other applicable regulations, including parts 160, 162, and 164 of title 45, Code of Federal Regulations (as in effect on the date of enactment of this subsection).

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