

SA 5172. Mr. BOOZMAN (for Mr. SULLIVAN) proposed an amendment to the bill S. 3086, to reauthorize and amend the Marine Debris Act to promote international action to reduce marine debris and for other purposes.

SA 5173. Mr. BOOZMAN (for Mr. MORAN) proposed an amendment to the bill S. 290, to amend title 38, United States Code, to improve the accountability of employees of the Department of Veterans Affairs, and for other purposes.

SA 5174. Mr. PORTMAN (for Mr. HATCH) proposed an amendment to the concurrent resolution S. Con. Res. 57, honoring in praise and remembrance the extraordinary life, steady leadership, and remarkable, 70-year reign of King Bhumibol Adulyadej of Thailand.

SA 5175. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to the bill H.R. 1150, to amend the International Religious Freedom Act of 1998 to improve the ability of the United States to advance religious freedom globally through enhanced diplomacy, training, counterterrorism, and foreign assistance efforts, and through stronger and more flexible political responses to religious freedom violations and violent extremism worldwide, and for other purposes.

SA 5176. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to amendment SA 5175 proposed by Mr. PORTMAN (for Mr. CORKER) to the bill H.R. 1150, *supra*.

SA 5177. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to the bill H.R. 4939, to increase engagement with the governments of the Caribbean region, the Caribbean diaspora community in the United States, and the private sector and civil society in both the United States and the Caribbean, and for other purposes.

SA 5178. Mr. PORTMAN (for Mr. JOHNSON) proposed an amendment to the bill H.R. 6302, to provide an increase in premium pay for United States Secret Service agents performing protective services during 2016, and for other purposes.

SA 5179. Mr. PORTMAN (for Mr. JOHNSON) proposed an amendment to the bill H.R. 6302, *supra*.

SA 5180. Mr. PORTMAN (for Mr. CRUZ (for himself and Mr. NELSON)) proposed an amendment to the bill S. 3346, to authorize the programs of the National Aeronautics and Space Administration, and for other purposes.

SA 5181. Mr. PORTMAN (for Mr. KIRK) proposed an amendment to the bill S. 1168, to amend title XVIII of the Social Security Act to preserve access to rehabilitation innovation centers under the Medicare program.

SA 5182. Mr. PORTMAN (for Mr. INHOFE (for himself and Mr. BLUMENTHAL)) proposed an amendment to the bill S. 3021, to amend title 38, United States Code, to authorize the use of Post-9/11 Educational Assistance to pursue independent study programs at certain educational institutions that are not institutions of higher learning.

SA 5183. Mr. PORTMAN (for Mr. THUNE) proposed an amendment to the bill H.R. 710, to require the Secretary of Homeland Security to prepare a comprehensive security assessment of the transportation security card program, and for other purposes.

SA 5184. Mr. PORTMAN (for Mr. BARRASSO) proposed an amendment to the bill S. 1776, to enhance tribal road safety, and for other purposes.

SA 5185. Mr. PORTMAN (for Mr. KING) proposed an amendment to the bill H.R. 4245, to exempt exportation of certain echinoderms and mollusks from licensing requirements under the Endangered Species Act of 1973.

SA 5186. Mr. PORTMAN (for Mr. GARDNER (for himself and Mr. PETERS)) proposed an amendment to the bill S. 3084, to invest in innovation through research and develop-

ment, and to improve the competitiveness of the United States.

TEXT OF AMENDMENTS

SA 5151. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the end add the following.
 “This Act shall take effect 2 days after the date of enactment.”

SA 5152. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

Strike “2” and insert “3”

SA 5153. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

Strike “3 days” and insert “4 days”

SA 5154. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the end add the following.
 “This act shall be effective 6 days after enactment.”

SA 5155. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

Strike “6” and insert “7”

SA 5156. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

At the end add the following.
 “This Act shall take effect 2 days after the date of enactment.”

SA 5157. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and

United States Courthouse”; which was ordered to lie on the table; as follows:
 Strike “2” and insert “3”

SA 5158. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

Strike “3 days” and insert “4 days”

SA 5159. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

At the end add the following.
 “This act shall be effective 6 days after enactment.”

SA 5160. Mr. McCONNELL submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

Strike “6” and insert “7”

SA 5161. Mrs. BOXER (for herself, Ms. CANTWELL, Mr. WYDEN, Mr. MERKLEY, Mrs. MURRAY, and Mr. HEINRICH) submitted an amendment intended to be proposed by her to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

Strike subtitle J of title III (relating to California water).

SA 5162. Mr. WYDEN (for himself, Mr. HATCH, Mr. CRAPO, Mr. RISCH, Mr. MERKLEY, Ms. BALDWIN, Mr. BENNET, Mr. HEINRICH, and Mr. UDALL) submitted an amendment intended to be proposed by him to the bill S. 612, to designate the Federal building and United States courthouse located at 1300 Victoria Street in Laredo, Texas, as the “George P. Kazen Federal Building and United States Courthouse”; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. _____ EXTENSION OF SECURE RURAL SCHOOLS AND COMMUNITY SELF-DETERMINATION ACT OF 2000.

(a) SECURE PAYMENTS FOR STATES CONTAINING FEDERAL LAND.—Section 101 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7111) is amended, in subsections (a) and (b), by striking “2015” each place it appears and inserting “2016”.

(b) PAYMENTS TO STATES AND COUNTIES.—Section 102 of the Secure Rural Schools and

Community Self-Determination Act of 2000 (16 U.S.C. 7112) is amended—

(1) in subsection (b)—

(A) in paragraph (1), by striking subparagraph (C) and inserting the following:

“(C) PAYMENTS FOR FISCAL YEAR 2014, 2015, OR 2016.—The election otherwise required by subparagraph (A) shall not apply for fiscal year 2014, 2015, or 2016.”; and

(B) in paragraph (2)—

(i) in subparagraph (A), by striking “fiscal years 2014 and 2015” and inserting “fiscal years 2014, 2015, and 2016”; and

(ii) in subparagraph (B), by striking “fiscal year 2015” and inserting “fiscal year 2016”; and

(2) in subsection (d)—

(A) in paragraph (1), by striking subparagraph (E) and inserting the following:

“(E) PAYMENTS FOR FISCAL YEARS 2014, 2015, AND 2016.—The election made by an eligible county under subparagraph (B), (C), or (D) for fiscal year 2013, or deemed to be made by the county under paragraph (3)(B) for that fiscal year, shall be effective for fiscal years 2014, 2015, and 2016.”; and

(B) in paragraph (3), by striking subparagraph (C) and inserting the following:

“(C) PAYMENTS FOR FISCAL YEARS 2014, 2015, AND 2016.—This paragraph does not apply for fiscal years 2014, 2015, and 2016.”.

(c) TRANSITION PAYMENTS TO STATES.—Section 103(d)(2) of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7113(d)(2)) is amended by striking “2015” and inserting “2016”.

(d) RESOURCE ADVISORY COMMITTEES.—Section 205(a)(4) of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7125(a)(4)) is amended by striking “2012” each place it appears and inserting “2016”.

(e) TERMINATION OF AUTHORITY.—Section 208 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7128) is amended—

(1) in subsection (a), by striking “2017” and inserting “2018”; and

(2) in subsection (b), by striking “2018” and inserting “2019”.

(f) COUNTY FUNDS TERMINATION OF AUTHORITY.—Section 304 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7144) is amended—

(1) in subsection (a), by striking “2017” and inserting “2018”; and

(2) in subsection (b), by striking “2018” and inserting “2019”.

(g) OFFSET.—It is the sense of the Senate the costs of carrying out this section and the amendments made by this section will be offset.

SA 5163. Mr. WYDEN (for himself, Mr. HATCH, Mr. CRAPO, Mr. RISCH, Mr. MERKLEY, Ms. BALDWIN, Mr. BENNET, Mr. HEINRICH, and Mr. UDALL) submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____ . EXTENSION OF SECURE RURAL SCHOOLS AND COMMUNITY SELF-DETERMINATION ACT OF 2000.

(a) SECURE PAYMENTS FOR STATES CONTAINING FEDERAL LAND.—Section 101 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7111) is amended, in subsections (a) and (b), by striking “2015” each place it appears and inserting “2016”.

(b) PAYMENTS TO STATES AND COUNTIES.—Section 102 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7112) is amended—

(1) in subsection (b)—

(A) in paragraph (1), by striking subparagraph (C) and inserting the following:

“(C) PAYMENTS FOR FISCAL YEAR 2014, 2015, OR 2016.—The election otherwise required by subparagraph (A) shall not apply for fiscal year 2014, 2015, or 2016.”; and

(B) in paragraph (2)—

(i) in subparagraph (A), by striking “fiscal years 2014 and 2015” and inserting “fiscal years 2014, 2015, and 2016”; and

(ii) in subparagraph (B), by striking “fiscal year 2015” and inserting “fiscal year 2016”; and

(2) in subsection (d)—

(A) in paragraph (1), by striking subparagraph (E) and inserting the following:

“(E) PAYMENTS FOR FISCAL YEARS 2014, 2015, AND 2016.—The election made by an eligible county under subparagraph (B), (C), or (D) for fiscal year 2013, or deemed to be made by the county under paragraph (3)(B) for that fiscal year, shall be effective for fiscal years 2014, 2015, and 2016.”; and

(B) in paragraph (3), by striking subparagraph (C) and inserting the following:

“(C) PAYMENTS FOR FISCAL YEARS 2014, 2015, AND 2016.—This paragraph does not apply for fiscal years 2014, 2015, and 2016.”.

(c) TRANSITION PAYMENTS TO STATES.—Section 103(d)(2) of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7113(d)(2)) is amended by striking “2015” and inserting “2016”.

(d) RESOURCE ADVISORY COMMITTEES.—Section 205(a)(4) of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7125(a)(4)) is amended by striking “2012” each place it appears and inserting “2016”.

(e) TERMINATION OF AUTHORITY.—Section 208 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7128) is amended—

(1) in subsection (a), by striking “2017” and inserting “2018”; and

(2) in subsection (b), by striking “2018” and inserting “2019”.

(f) COUNTY FUNDS TERMINATION OF AUTHORITY.—Section 304 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7144) is amended—

(1) in subsection (a), by striking “2017” and inserting “2018”; and

(2) in subsection (b), by striking “2018” and inserting “2019”.

(g) OFFSET.—It is the sense of the Senate the costs of carrying out this section and the amendments made by this section will be offset.

SA 5164. Mr. MANCHIN (for himself, Mr. SCHUMER, Mr. DONNELLY, Mrs. MCCASKILL, Mr. CASEY, Mr. BROWN, Mr. WARNER, Ms. HEITKAMP, Mr. LEAHY, Mr. KING, Ms. KLOBUCHAR, Mr. WYDEN, Mrs. FEINSTEIN, Mr. FRANKEN, Mr. WHITEHOUSE, Mrs. GILLIBRAND, Mr. MENENDEZ, Mr. BOOKER, Mr. SANDERS, Mr. DURBIN, Ms. WARREN, Ms. HIRONO, Mr. NELSON, Mrs. BOXER, Mr. BENNET, Mr. BLUMENTHAL, Ms. BALDWIN, Mr. CARPER, Ms. STABENOW, Mr. KAINE, Mr. MARKEY, Mr. MERKLEY, Mr. MURPHY, Mr. HEINRICH, Mr. PETERS, Mrs. SHAHEEN, Mr. TESTER, Mr. UDALL, Mr. REED, Ms. CANTWELL, Mrs. MURRAY, Mr. CARDIN, Mr. SCHATZ, Mr. COONS, Ms. MIKULSKI, Mr. REID, Mr. PORTMAN, Mrs. CAPITO, and Mr. KIRK) submitted an amendment intended to be proposed

by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 12, strike line 1 and all that follows through page 16, line 18, and insert the following:

“(a) SHORT TITLE.—This section may be cited as the ‘Miners Protection Act of 2016’.

“(b) INCLUSION OF CERTAIN RETIREES IN THE MULTIEMPLOYER HEALTH BENEFIT PLAN.—

“(1) IN GENERAL.—Section 402 of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1232) is amended—

“(A) in subsection (h)(2)(C)—

“(i) by striking ‘A transfer’ and inserting the following:

“(i) TRANSFER TO THE PLAN.—A transfer”;

“(ii) by redesignating clauses (i) and (ii) as subclauses (I) and (II), respectively, and moving such subclauses 2 ems to the right; and

“(iii) by striking the matter following such subclause (II) (as so redesignated) and inserting the following:

“(ii) CALCULATION OF EXCESS.—The excess determined under clause (i) shall be calculated by taking into account only—

“(I) those beneficiaries actually enrolled in the Plan as of the date of the enactment of the Miners Protection Act of 2016 who are eligible to receive health benefits under the Plan on the first day of the calendar year for which the transfer is made, other than those beneficiaries enrolled in the Plan under the terms of a participation agreement with the current or former employer of such beneficiaries; and

“(II) those beneficiaries whose health benefits, defined as those benefits payable directly following death or retirement or upon a finding of disability by an employer in the bituminous coal industry under a coal wage agreement (as defined in section 9701(b)(1) of the Internal Revenue Code of 1986), would be denied or reduced as a result of a bankruptcy proceeding commenced in 2012 or 2015.

“(iii) ELIGIBILITY OF CERTAIN RETIREES.—Individuals referred to in clause (ii)(II) shall be treated as eligible to receive health benefits under the Plan.

“(iv) REQUIREMENTS FOR TRANSFER.—The amount of the transfer otherwise determined under this subparagraph for a fiscal year shall be reduced by any amount transferred for the fiscal year to the Plan, to pay benefits required under the Plan, from a voluntary employees’ beneficiary association established as a result of a bankruptcy proceeding described in clause (ii).

“(v) VEBA TRANSFER.—The administrator of such voluntary employees’ beneficiary association shall transfer to the Plan any amounts received as a result of such bankruptcy proceeding, reduced by an amount for administrative costs of such association.”; and

“(B) in subsection (i)—

“(i) by redesignating paragraph (4) as paragraph (5); and

“(ii) by inserting after paragraph (3) the following:

“(4) ADDITIONAL AMOUNTS.—

“(A) CALCULATION.—If the dollar limitation specified in paragraph (3)(A) exceeds the aggregate amount required to be transferred under paragraphs (1) and (2) for a fiscal year, the Secretary of the Treasury shall transfer an additional amount equal to the difference between such dollar limitation and such aggregate amount to the trustees of the 1974 UMWA Pension Plan to pay benefits required under that plan.

“(B) CESSATION OF TRANSFERS.—The transfers described in subparagraph (A) shall

cease as of the first fiscal year beginning after the first plan year for which the funded percentage (as defined in section 432(i)(2) of the Internal Revenue Code of 1986) of the 1974 UMWA Pension Plan is at least 100 percent.

“(C) PROHIBITION ON BENEFIT INCREASES, ETC.—During a fiscal year in which the 1974 UMWA Pension Plan is receiving transfers under subparagraph (A), no amendment of such plan which increases the liabilities of the plan by reason of any increase in benefits, any change in the accrual of benefits, or any change in the rate at which benefits become nonforfeitable under the plan may be adopted unless the amendment is required as a condition of qualification under part I of subchapter D of chapter 1 of the Internal Revenue Code of 1986.

“(D) TREATMENT OF TRANSFERS FOR PURPOSES OF WITHDRAWAL LIABILITY UNDER ERISA.—The amount of any transfer made under subparagraph (A) (and any earnings attributable thereto) shall be disregarded in determining the unfunded vested benefits of the 1974 UMWA Pension Plan and the allocation of such unfunded vested benefits to an employer for purposes of determining the employer’s withdrawal liability under section 4201.

“(E) REQUIREMENT TO MAINTAIN CONTRIBUTION RATE.—A transfer under subparagraph (A) shall not be made for a fiscal year unless the persons that are obligated to contribute to the 1974 UMWA Pension Plan on the date of the transfer are obligated to make the contributions at rates that are no less than those in effect on the date which is 30 days before the date of enactment of the Miners Protection Act of 2016.

“(F) ENHANCED ANNUAL REPORTING.—

“(i) IN GENERAL.—Not later than the 90th day of each plan year beginning after the date of enactment of the Miners Protection Act of 2016, the trustees of the 1974 UMWA Pension Plan shall file with the Secretary of the Treasury or the Secretary’s delegate and the Pension Benefit Guaranty Corporation a report (including appropriate documentation and actuarial certifications from the plan actuary, as required by the Secretary of the Treasury or the Secretary’s delegate) that contains—

“(I) whether the plan is in endangered or critical status under section 305 of the Employee Retirement Income Security Act of 1974 and section 432 of the Internal Revenue Code of 1986 as of the first day of such plan year;

“(II) the funded percentage (as defined in section 432(i)(2) of such Code) as of the first day of such plan year, and the underlying actuarial value of assets and liabilities taken into account in determining such percentage;

“(III) the market value of the assets of the plan as of the last day of the plan year preceding such plan year;

“(IV) the total value of all contributions made during the plan year preceding such plan year;

“(V) the total value of all benefits paid during the plan year preceding such plan year;

“(VI) cash flow projections for such plan year and either the 6 or 10 succeeding plan years, at the election of the trustees, and the assumptions relied upon in making such projections;

“(VII) funding standard account projections for such plan year and the 9 succeeding plan years, and the assumptions relied upon in making such projections;

“(VIII) the total value of all investment gains or losses during the plan year preceding such plan year;

“(IX) any significant reduction in the number of active participants during the

plan year preceding such plan year, and the reason for such reduction;

“(X) a list of employers that withdrew from the plan in the plan year preceding such plan year, and the resulting reduction in contributions;

“(XI) a list of employers that paid withdrawal liability to the plan during the plan year preceding such plan year and, for each employer, a total assessment of the withdrawal liability paid, the annual payment amount, and the number of years remaining in the payment schedule with respect to such withdrawal liability;

“(XII) any material changes to benefits, accrual rates, or contribution rates during the plan year preceding such plan year;

“(XIII) any scheduled benefit increase or decrease in the plan year preceding such plan year having a material effect on liabilities of the plan;

“(XIV) details regarding any funding improvement plan or rehabilitation plan and updates to such plan;

“(XV) the number of participants and beneficiaries during the plan year preceding such plan year who are active participants, the number of participants and beneficiaries in pay status, and the number of terminated vested participants and beneficiaries;

“(XVI) the information contained on the most recent annual funding notice submitted by the plan under section 101(f) of the Employee Retirement Income Security Act of 1974;

“(XVII) the information contained on the most recent Department of Labor Form 5500 of the plan; and

“(XVIII) copies of the plan document and amendments, other retirement benefit or ancillary benefit plans relating to the plan and contribution obligations under such plans, a breakdown of administrative expenses of the plan, participant census data and distribution of benefits, the most recent actuarial valuation report as of the plan year, copies of collective bargaining agreements, and financial reports, and such other information as the Secretary of the Treasury or the Secretary’s delegate, in consultation with the Secretary of Labor and the Director of the Pension Benefit Guaranty Corporation, may require.

“(ii) ELECTRONIC SUBMISSION.—The report required under clause (i) shall be submitted electronically.

“(iii) INFORMATION SHARING.—The Secretary of the Treasury or the Secretary’s delegate shall share the information in the report under clause (i) with the Secretary of Labor.

“(iv) PENALTY.—Any failure to file the report required under clause (i) on or before the date described in such clause shall be treated as a failure to file a report required to be filed under section 6058(a) of the Internal Revenue Code of 1986, except that section 6652(e) of such Code shall be applied with respect to any such failure by substituting ‘\$100’ for ‘\$25’. The preceding sentence shall not apply if the Secretary of the Treasury or the Secretary’s delegate determines that reasonable diligence has been exercised by the trustees of such plan in attempting to timely file such report.

“(G) 1974 UMWA PENSION PLAN DEFINED.—For purposes of this paragraph, the term ‘1974 UMWA Pension Plan’ has the meaning given the term in section 9701(a)(3) of the Internal Revenue Code of 1986, but without regard to the limitation on participation to individuals who retired in 1976 and thereafter.’

“(2) EFFECTIVE DATES.—

“(A) IN GENERAL.—The amendments made by this subsection shall apply to fiscal years beginning after September 30, 2016.

“(B) REPORTING REQUIREMENTS.—Section 402(i)(4)(F) of the Surface Mining Control and

Reclamation Act of 1977 (30 U.S.C. 1232(i)(4)(F)), as added by this subsection, shall apply to plan years beginning after the date of the enactment of this Act.

“(c) CLARIFICATION OF FINANCING OBLIGATIONS.—

“(1) IN GENERAL.—Subsection (a) of section 9704 of the Internal Revenue Code of 1986 is amended—

“(A) by striking paragraph (3),

“(B) by striking ‘three premiums’ and inserting ‘two premiums’, and

“(C) by striking ‘, plus’ at the end of paragraph (2) and inserting a period.

“(2) CONFORMING AMENDMENTS.—

“(A) Section 9704 of the Internal Revenue Code of 1986 is amended—

“(i) by striking subsection (d), and

“(ii) by redesignating subsections (e) through (j) as subsections (d) through (i), respectively.

“(B) Subsection (d) of section 9704 of such Code, as so redesignated, is amended—

“(i) by striking ‘3 separate accounts for each of the premiums described in subsections (b), (c), and (d)’ in paragraph (1) and inserting ‘2 separate accounts for each of the premiums described in subsections (b) and (c)’, and

“(ii) by striking ‘or the unassigned beneficiaries premium account’ in paragraph (3)(B).

“(C) Subclause (I) of section 9703(b)(2)(C)(ii) of such Code is amended by striking ‘9704(e)(3)(B)(i)’ and inserting ‘9704(d)(3)(B)(i)’.

“(D) Paragraph (3) of section 9705(a) of such Code is amended—

“(i) by striking ‘the unassigned beneficiary premium under section 9704(a)(3) and’ in subparagraph (B), and

“(ii) by striking ‘9704(i)(1)(B)’ and inserting ‘9704(h)(1)(B)’.

“(E) Paragraph (2) of section 9711(c) of such Code is amended—

“(i) by striking ‘9704(j)(2)’ in subparagraph (A)(i) and inserting ‘9704(i)(2)’,

“(ii) by striking ‘9704(j)(2)(B)’ in subparagraph (B) and inserting ‘9704(i)(2)(B)’, and

“(iii) by striking ‘9704(j)’ and inserting ‘9704(i)’.

“(F) Paragraph (4) of section 9712(d) of such Code is amended by striking ‘9704(j)’ and inserting ‘9704(i)’.

“(3) ELIMINATION OF ADDITIONAL BACKSTOP PREMIUM.—

“(A) IN GENERAL.—Paragraph (1) of section 9712(d) of the Internal Revenue Code of 1986 is amended by striking subparagraph (C).

“(B) CONFORMING AMENDMENT.—Paragraph (2) of section 9712(d) of such Code is amended—

“(i) by striking subparagraph (B),

“(ii) by striking ‘, and’ at the end of subparagraph (A) and inserting a period, and

“(iii) by striking ‘shall provide for—’ and all that follows through ‘annual adjustments’ and inserting ‘shall provide for annual adjustments’.

“(4) EFFECTIVE DATE.—The amendments made by this subsection shall apply to plan years beginning after September 30, 2016.

“(d) CUSTOMS USER FEES.—

“(1) IN GENERAL.—Section 13031(j)(3)(A) of the Consolidated Omnibus Budget Reconciliation Act of 1985 (19 U.S.C. 58c(j)(3)(A)) is amended by striking ‘September 30, 2025’ and inserting ‘May 6, 2026’.

“(2) RATE FOR MERCHANDISE PROCESSING FEES.—Section 503 of the United States–Korea Free Trade Agreement Implementation Act (Public Law 112–41; 19 U.S.C. 3805 note) is amended by striking ‘September 30, 2025’ and inserting ‘May 6, 2026’.

SA 5165. Mr. WYDEN submitted an amendment intended to be proposed by

him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

DIVISION —CHILD AND FAMILY SERVICES AND SUPPORT

SECTION 1. SHORT TITLE.

This division may be cited as the “Family First Prevention Services Act of 2016”.

SEC. 2. TABLE OF CONTENTS.

The table of contents for this division is as follows:

- Sec. 1. Short title.
Sec. 2. Table of contents.

TITLE I—INVESTING IN PREVENTION AND FAMILY SERVICES

Sec. 101. Purpose.

Subtitle A—Prevention Activities Under Title IV–E

- Sec. 111. Foster care prevention services and programs.
Sec. 112. Foster care maintenance payments for children with parents in a licensed residential family-based treatment facility for substance abuse.
Sec. 113. Title IV–E payments for evidence-based kinship navigator programs.

Subtitle B—Enhanced Support Under Title IV–B

- Sec. 121. Elimination of time limit for family reunification services while in foster care and permitting time-limited family reunification services when a child returns home from foster care.
Sec. 122. Reducing bureaucracy and unnecessary delays when placing children in homes across State lines.
Sec. 123. Enhancements to grants to improve well-being of families affected by substance abuse.

Subtitle C—Miscellaneous

- Sec. 131. Reviewing and improving licensing standards for placement in a relative foster family home.
Sec. 132. Development of a statewide plan to prevent child abuse and neglect fatalities.
Sec. 133. Modernizing the title and purpose of title IV–E.
Sec. 134. Effective dates.

TITLE II—ENSURING THE NECESSITY OF A PLACEMENT THAT IS NOT IN A FOSTER FAMILY HOME

- Sec. 201. Limitation on Federal financial participation for placements that are not in foster family homes.
Sec. 202. Assessment and documentation of the need for placement in a qualified residential treatment program.
Sec. 203. Protocols to prevent inappropriate diagnoses.
Sec. 204. Additional data and reports regarding children placed in a setting that is not a foster family home.
Sec. 205. Effective dates; application to waivers.

TITLE III—CONTINUING SUPPORT FOR CHILD AND FAMILY SERVICES

- Sec. 301. Supporting and retaining foster families for children.
Sec. 302. Extension of child and family services programs.

Sec. 303. Improvements to the John H. Chafee Foster Care Independence Program and related provisions.

TITLE IV—CONTINUING INCENTIVES TO STATES TO PROMOTE ADOPTION AND LEGAL GUARDIANSHIP

Sec. 401. Reauthorizing adoption and legal guardianship incentive programs.

TITLE V—TECHNICAL CORRECTIONS

- Sec. 501. Technical corrections to data exchange standards to improve program coordination.
Sec. 502. Technical corrections to State requirement to address the developmental needs of young children.

TITLE VI—ENSURING STATES REINVEST SAVINGS RESULTING FROM INCREASE IN ADOPTION ASSISTANCE

- Sec. 601. Delay of adoption assistance phase-in.
Sec. 602. GAO study and report on State reinvestment of savings resulting from increase in adoption assistance.

TITLE I—INVESTING IN PREVENTION AND FAMILY SERVICES

SEC. 101. PURPOSE.

The purpose of this title is to enable States to use Federal funds available under parts B and E of title IV of the Social Security Act to provide enhanced support to children and families and prevent foster care placements through the provision of mental health and substance abuse prevention and treatment services, in-home parent skill-based programs, and kinship navigator services.

Subtitle A—Prevention Activities Under Title IV–E

SEC. 111. FOSTER CARE PREVENTION SERVICES AND PROGRAMS.

(a) STATE OPTION.—Section 471 of the Social Security Act (42 U.S.C. 671) is amended—

(1) in subsection (a)(1), by striking “and” and all that follows through the semicolon and inserting “, adoption assistance in accordance with section 473, and, at the option of the State, services or programs specified in subsection (e)(1) of this section for children who are candidates for foster care or who are pregnant or parenting foster youth and the parents or kin caregivers of the children, in accordance with the requirements of that subsection;”; and

(2) by adding at the end the following:

“(e) PREVENTION AND FAMILY SERVICES AND PROGRAMS.—

“(1) IN GENERAL.—Subject to the succeeding provisions of this subsection, the Secretary may make a payment to a State for providing the following services or programs for a child described in paragraph (2) and the parents or kin caregivers of the child when the need of the child, such a parent, or such a caregiver for the services or programs are directly related to the safety, permanence, or well-being of the child or to preventing the child from entering foster care:

“(A) MENTAL HEALTH AND SUBSTANCE ABUSE PREVENTION AND TREATMENT SERVICES.—Mental health and substance abuse prevention and treatment services provided by a qualified clinician for not more than a 12-month period that begins on any date described in paragraph (3) with respect to the child.

“(B) IN-HOME PARENT SKILL-BASED PROGRAMS.—In-home parent skill-based programs for not more than a 12-month period that begins on any date described in paragraph (3) with respect to the child and that include parenting skills training, parent education, and individual and family counseling.

“(2) CHILD DESCRIBED.—For purposes of paragraph (1), a child described in this paragraph is the following:

“(A) A child who is a candidate for foster care (as defined in section 475(13)) but can remain safely at home or in a kinship placement with receipt of services or programs specified in paragraph (1).

“(B) A child in foster care who is a pregnant or parenting foster youth.

“(3) DATE DESCRIBED.—For purposes of paragraph (1), the dates described in this paragraph are the following:

“(A) The date on which a child is identified in a prevention plan maintained under paragraph (4) as a child who is a candidate for foster care (as defined in section 475(13)).

“(B) The date on which a child is identified in a prevention plan maintained under paragraph (4) as a pregnant or parenting foster youth in need of services or programs specified in paragraph (1).

“(4) REQUIREMENTS RELATED TO PROVIDING SERVICES AND PROGRAMS.—Services and programs specified in paragraph (1) may be provided under this subsection only if specified in advance in the child’s prevention plan described in subparagraph (A) and the requirements in subparagraphs (B) through (E) are met:

“(A) PREVENTION PLAN.—The State maintains a written prevention plan for the child that meets the following requirements (as applicable):

“(i) CANDIDATES.—In the case of a child who is a candidate for foster care described in paragraph (2)(A), the prevention plan shall—

“(I) identify the foster care prevention strategy for the child so that the child may remain safely at home, live temporarily with a kin caregiver until reunification can be safely achieved, or live permanently with a kin caregiver;

“(II) list the services or programs to be provided to or on behalf of the child to ensure the success of that prevention strategy; and

“(III) comply with such other requirements as the Secretary shall establish.

“(ii) PREGNANT OR PARENTING FOSTER YOUTH.—In the case of a child who is a pregnant or parenting foster youth described in paragraph (2)(B), the prevention plan shall—

“(I) be included in the child’s case plan required under section 475(1);

“(II) list the services or programs to be provided to or on behalf of the youth to ensure that the youth is prepared (in the case of a pregnant foster youth) or able (in the case of a parenting foster youth) to be a parent;

“(III) describe the foster care prevention strategy for any child born to the youth; and

“(IV) comply with such other requirements as the Secretary shall establish.

“(B) TRAUMA-INFORMED.—The services or programs to be provided to or on behalf of a child are provided under an organizational structure and treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma and in accordance with recognized principles of a trauma-informed approach and trauma-specific interventions to address trauma’s consequences and facilitate healing.

“(C) ONLY SERVICES AND PROGRAMS PROVIDED IN ACCORDANCE WITH PROMISING, SUPPORTED, OR WELL-SUPPORTED PRACTICES PERMITTED.—

“(i) IN GENERAL.—Only State expenditures for services or programs specified in subparagraph (A) or (B) of paragraph (1) that are provided in accordance with practices that meet the requirements specified in clause (ii) of this subparagraph and that meet the requirements specified in clause (iii), (iv), or

(v), respectively, for being a promising, supported, or well-supported practice, shall be eligible for a Federal matching payment under section 474(a)(6)(A).

“(ii) GENERAL PRACTICE REQUIREMENTS.—The general practice requirements specified in this clause are the following:

“(I) The practice has a book, manual, or other available writings that specify the components of the practice protocol and describe how to administer the practice.

“(II) There is no empirical basis suggesting that, compared to its likely benefits, the practice constitutes a risk of harm to those receiving it.

“(III) If multiple outcome studies have been conducted, the overall weight of evidence supports the benefits of the practice.

“(IV) Outcome measures are reliable and valid, and are administrated consistently and accurately across all those receiving the practice.

“(V) There is no case data suggesting a risk of harm that was probably caused by the treatment and that was severe or frequent.

“(iii) PROMISING PRACTICE.—A practice shall be considered to be a ‘promising practice’ if the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study that—

“(I) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed; and

“(II) utilized some form of control (such as an untreated group, a placebo group, or a wait list study).

“(iv) SUPPORTED PRACTICE.—A practice shall be considered to be a ‘supported practice’ if—

“(I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study that—

“(aa) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed;

“(bb) was a rigorous random-controlled trial (or, if not available, a study using a rigorous quasi-experimental research design); and

“(cc) was carried out in a usual care or practice setting; and

“(II) the study described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 6 months beyond the end of the treatment.

“(v) WELL-SUPPORTED PRACTICE.—A practice shall be considered to be a ‘well-supported practice’ if—

“(I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least two studies that—

“(aa) were rated by an independent systematic review for the quality of the study

design and execution and determined to be well-designed and well-executed;

“(bb) were rigorous random-controlled trials (or, if not available, studies using a rigorous quasi-experimental research design); and

“(cc) were carried out in a usual care or practice setting; and

“(II) at least one of the studies described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 1 year beyond the end of treatment.

“(D) GUIDANCE ON PRACTICES CRITERIA AND PRE-APPROVED SERVICES AND PROGRAMS.—

“(i) IN GENERAL.—Not later than October 1, 2018, the Secretary shall issue guidance to States regarding the practices criteria required for services or programs to satisfy the requirements of subparagraph (C). The guidance shall include a pre-approved list of services and programs that satisfy the requirements.

“(ii) UPDATES.—The Secretary shall issue updates to the guidance required by clause (i) as often as the Secretary determines necessary.

“(E) OUTCOME ASSESSMENT AND REPORTING.—The State shall collect and report to the Secretary the following information with respect to each child for whom, or on whose behalf mental health and substance abuse prevention and treatment services or in-home parent skill-based programs are provided during a 12-month period beginning on the date the child is determined by the State to be a child described in paragraph (2):

“(i) The specific services or programs provided and the total expenditures for each of the services or programs.

“(ii) The duration of the services or programs provided.

“(iii) In the case of a child described in paragraph (2)(A), the child’s placement status at the beginning, and at the end, of the 1-year period, respectively, and whether the child entered foster care within 2 years after being determined a candidate for foster care.

“(5) STATE PLAN COMPONENT.—

“(A) IN GENERAL.—A State electing to provide services or programs specified in paragraph (1) shall submit as part of the State plan required by subsection (a) a prevention services and programs plan component that meets the requirements of subparagraph (B).

“(B) PREVENTION SERVICES AND PROGRAMS PLAN COMPONENT.—In order to meet the requirements of this subparagraph, a prevention services and programs plan component, with respect to each 5-year period for which the plan component is in operation in the State, shall include the following:

“(i) How providing services and programs specified in paragraph (1) is expected to improve specific outcomes for children and families.

“(ii) How the State will monitor and oversee the safety of children who receive services and programs specified in paragraph (1), including through periodic risk assessments throughout the period in which the services and programs are provided on behalf of a child and reexamination of the prevention plan maintained for the child under paragraph (4) for the provision of the services or programs if the State determines the risk of the child entering foster care remains high despite the provision of the services or programs.

“(iii) With respect to the services and programs specified in subparagraphs (A) and (B) of paragraph (1), information on the specific promising, supported, or well-supported practices the State plans to use to provide the services or programs, including a description of—

“(I) the services or programs and whether the practices used are promising, supported, or well-supported;

“(II) how the State plans to implement the services or programs, including how implementation of the services or programs will be continuously monitored to ensure fidelity to the practice model and to determine outcomes achieved and how information learned from the monitoring will be used to refine and improve practices;

“(III) how the State selected the services or programs;

“(IV) the target population for the services or programs; and

“(V) how each service or program provided will be evaluated through a well-designed and rigorous process, which may consist of an ongoing, cross-site evaluation approved by the Secretary.

“(iv) A description of the consultation that the State agencies responsible for administering the State plans under this part and part B engage in with other State agencies responsible for administering health programs, including mental health and substance abuse prevention and treatment services, and with other public and private agencies with experience in administering child and family services, including community-based organizations, in order to foster a continuum of care for children described in paragraph (2) and their parents or kin caregivers.

“(v) A description of how the State shall assess children and their parents or kin caregivers to determine eligibility for services or programs specified in paragraph (1).

“(vi) A description of how the services or programs specified in paragraph (1) that are provided for or on behalf of a child and the parents or kin caregivers of the child will be coordinated with other child and family services provided to the child and the parents or kin caregivers of the child under the State plan under part B.

“(vii) Descriptions of steps the State is taking to support and enhance a competent, skilled, and professional child welfare workforce to deliver trauma-informed and evidence-based services, including—

“(I) ensuring that staff is qualified to provide services or programs that are consistent with the promising, supported, or well-supported practice models selected; and

“(II) developing appropriate prevention plans, and conducting the risk assessments required under clause (iii).

“(viii) A description of how the State will provide training and support for caseworkers in assessing what children and their families need, connecting to the families served, knowing how to access and deliver the needed trauma-informed and evidence-based services, and overseeing and evaluating the continuing appropriateness of the services.

“(ix) A description of how caseload size and type for prevention caseworkers will be determined, managed, and overseen.

“(x) An assurance that the State will report to the Secretary such information and data as the Secretary may require with respect to the provision of services and programs specified in paragraph (1), including information and data necessary to determine the performance measures for the State under paragraph (6) and compliance with paragraph (7).

“(C) REIMBURSEMENT FOR SERVICES UNDER THE PREVENTION PLAN COMPONENT.—

“(i) LIMITATION.—Except as provided in subclause (ii), a State may not receive a Federal payment under this part for a given promising, supported, or well-supported practice unless (in accordance with subparagraph (B)(iii)(V)) the plan includes a well-designed and rigorous evaluation strategy for that practice.

“(ii) WAIVER OF LIMITATION.—The Secretary may waive the requirement for a well-designed and rigorous evaluation of any well-supported practice if the Secretary deems the evidence of the effectiveness of the practice to be compelling and the State meets the continuous quality improvement requirements included in subparagraph (B)(iii)(II) with regard to the practice.

“(6) PREVENTION SERVICES MEASURES.—

“(A) ESTABLISHMENT; ANNUAL UPDATES.—Beginning with fiscal year 2021, and annually thereafter, the Secretary shall establish the following prevention services measures based on information and data reported by States that elect to provide services and programs specified in paragraph (1):

“(i) PERCENTAGE OF CANDIDATES FOR FOSTER CARE WHO DO NOT ENTER FOSTER CARE.—The percentage of candidates for foster care for whom, or on whose behalf, the services or programs are provided who do not enter foster care, including those placed with a kin caregiver outside of foster care, during the 12-month period in which the services or programs are provided and through the end of the succeeding 12-month-period.

“(ii) PER-CHILD SPENDING.—The total amount of expenditures made for mental health and substance abuse prevention and treatment services or in-home parent skill-based programs, respectively, for, or on behalf of, each child described in paragraph (2).

“(B) DATA.—The Secretary shall establish and annually update the prevention services measures—

“(i) based on the median State values of the information reported under each clause of subparagraph (A) for the 3 then most recent years; and

“(ii) taking into account State differences in the price levels of consumption goods and services using the most recent regional price parities published by the Bureau of Economic Analysis of the Department of Commerce or such other data as the Secretary determines appropriate.

“(C) PUBLICATION OF STATE PREVENTION SERVICES MEASURES.—The Secretary shall annually make available to the public the prevention services measures of each State.

“(7) MAINTENANCE OF EFFORT FOR STATE FOSTER CARE PREVENTION EXPENDITURES.—

“(A) IN GENERAL.—If a State elects to provide services and programs specified in paragraph (1) for a fiscal year, the State foster care prevention expenditures for the fiscal year shall not be less than the amount of the expenditures for fiscal year 2014 (or, at the option of a State described in subparagraph (E), fiscal year 2015 or fiscal year 2016 (whichever the State elects)).

“(B) STATE FOSTER CARE PREVENTION EXPENDITURES.—The term ‘State foster care prevention expenditures’ means the following:

“(i) TANF; IV-B; SSBG.—State expenditures for foster care prevention services and activities under the State program funded under part A (including from amounts made available by the Federal Government), under the State plan developed under part B (including any such amounts), or under the Social Services Block Grant Programs under subtitle A of title XX (including any such amounts).

“(ii) OTHER STATE PROGRAMS.—State expenditures for foster care prevention services and activities under any State program that is not described in clause (i) (other than any State expenditures for foster care prevention services and activities under the State program under this part (including under a waiver of the program)).

“(C) STATE EXPENDITURES.—The term ‘State expenditures’ means all State or local funds that are expended by the State or a local agency including State or local funds

that are matched or reimbursed by the Federal Government and State or local funds that are not matched or reimbursed by the Federal Government.

“(D) DETERMINATION OF PREVENTION SERVICES AND ACTIVITIES.—The Secretary shall require each State that elects to provide services and programs specified in paragraph (1) to report the expenditures specified in subparagraph (B) for fiscal year 2014 and for such fiscal years thereafter as are necessary to determine whether the State is complying with the maintenance of effort requirement in subparagraph (A). The Secretary shall specify the specific services and activities under each program referred to in subparagraph (B) that are ‘prevention services and activities’ for purposes of the reports.

“(E) STATE DESCRIBED.—For purposes of subparagraph (A), a State is described in this subparagraph if the population of children in the State in 2014 was less than 200,000 (as determined by the Bureau of the Census).

“(8) PROHIBITION AGAINST USE OF STATE FOSTER CARE PREVENTION EXPENDITURES AND FEDERAL IV-E PREVENTION FUNDS FOR MATCHING OR EXPENDITURE REQUIREMENT.—A State that elects to provide services and programs specified in paragraph (1) shall not use any State foster care prevention expenditures for a fiscal year for the State share of expenditures under section 474(a)(6) for a fiscal year.

“(9) ADMINISTRATIVE COSTS.—Expenditures described in section 474(a)(6)(B)—

“(A) shall not be eligible for payment under subparagraph (A), (B), or (E) of section 474(a)(3); and

“(B) shall be eligible for payment under section 474(a)(6)(B) without regard to whether the expenditures are incurred on behalf of a child who is, or is potentially, eligible for foster care maintenance payments under this part.

“(10) APPLICATION.—

“(A) IN GENERAL.—The provision of services or programs under this subsection to or on behalf of a child described in paragraph (2) shall not be considered to be receipt of aid or assistance under the State plan under this part for purposes of eligibility for any other program established under this Act.

“(B) CANDIDATES IN KINSHIP CARE.—A child described in paragraph (2) for whom such services or programs under this subsection are provided for more than 6 months while in the home of a kin caregiver, and who would satisfy the AFDC eligibility requirement of section 472(a)(3)(A)(ii)(II) but for residing in the home of the caregiver for more than 6 months, is deemed to satisfy that requirement for purposes of determining whether the child is eligible for foster care maintenance payments under section 472.”

(b) DEFINITION.—Section 475 of such Act (42 U.S.C. 675) is amended by adding at the end the following:

“(13) The term ‘child who is a candidate for foster care’ means, a child who is identified in a prevention plan under section 471(e)(4)(A) as being at imminent risk of entering foster care (without regard to whether the child would be eligible for foster care maintenance payments under section 472 or is or would be eligible for adoption assistance or kinship guardianship assistance payments under section 473) but who can remain safely in the child’s home or in a kinship placement as long as services or programs specified in section 471(e)(1) that are necessary to prevent the entry of the child into foster care are provided. The term includes a child whose adoption or guardianship arrangement is at risk of a disruption or dissolution that would result in a foster care placement.”

(c) PAYMENTS UNDER TITLE IV-E.—Section 474(a) of such Act (42 U.S.C. 674(a)) is amended—

(1) in paragraph (5), by striking the period at the end and inserting “; plus”; and

(2) by adding at the end the following:

“(6) subject to section 471(e)—

“(A) for each quarter—

“(i) subject to clause (ii)—

“(I) beginning after September 30, 2019, and before October 1, 2025, an amount equal to 50 percent of the total amount expended during the quarter for the provision of services or programs specified in subparagraph (A) or (B) of section 471(e)(1) that are provided in accordance with promising, supported, or well-supported practices that meet the applicable criteria specified for the practices in section 471(e)(4)(C); and

“(II) beginning after September 30, 2025, an amount equal to the Federal medical assistance percentage (which shall be as defined in section 1905(b), in the case of a State other than the District of Columbia, or 70 percent, in the case of the District of Columbia) of the total amount expended during the quarter for the provision of services or programs specified in subparagraph (A) or (B) of section 471(e)(1) that are provided in accordance with promising, supported, or well-supported practices that meet the applicable criteria specified for the practices in section 471(e)(4)(C) (or, with respect to the payments made during the quarter under a cooperative agreement or contract entered into by the State and an Indian tribe, tribal organization, or tribal consortium for the administration or payment of funds under this part, an amount equal to the Federal medical assistance percentage that would apply under section 479B(d) (in this paragraph referred to as the ‘tribal FMAP’) if the Indian tribe, tribal organization, or tribal consortium made the payments under a program operated under that section, unless the tribal FMAP is less than the Federal medical assistance percentage that applies to the State); except that

“(ii) not less than 50 percent of the total amount payable to a State under clause (i) for a fiscal year shall be for the provision of services or programs specified in subparagraph (A) or (B) of section 471(e)(1) that are provided in accordance with well-supported practices; plus

“(B) for each quarter specified in subparagraph (A), an amount equal to the sum of the following proportions of the total amount expended during the quarter:

“(i) 50 percent of so much of the expenditures as are found necessary by the Secretary for the proper and efficient administration of the State plan for the provision of services or programs specified in section 471(e)(1), including expenditures for activities approved by the Secretary that promote the development of necessary processes and procedures to establish and implement the provision of the services and programs for individuals who are eligible for the services and programs and expenditures attributable to data collection and reporting; and

“(ii) 50 percent of so much of the expenditures with respect to the provision of services and programs specified in section 471(e)(1) as are for training of personnel employed or preparing for employment by the State agency or by the local agency administering the plan in the political subdivision and of the members of the staff of State-licensed or State-approved child welfare agencies providing services to children described in section 471(e)(2) and their parents or kin caregivers, including on how to determine who are individuals eligible for the services or programs, how to identify and provide appropriate services and programs, and how to oversee and evaluate the ongoing appropriateness of the services and programs.”

(d) TECHNICAL ASSISTANCE AND BEST PRACTICES, CLEARINGHOUSE, AND DATA COLLECTION

AND EVALUATIONS.—Section 476 of such Act (42 U.S.C. 676) is amended by adding at the end the following:

“(d) TECHNICAL ASSISTANCE AND BEST PRACTICES, CLEARINGHOUSE, DATA COLLECTION, AND EVALUATIONS RELATING TO PREVENTION SERVICES AND PROGRAMS.—

“(1) TECHNICAL ASSISTANCE AND BEST PRACTICES.—The Secretary shall provide to States and, as applicable, to Indian tribes, tribal organizations, and tribal consortia, technical assistance regarding the provision of services and programs described in section 471(e)(1) and shall disseminate best practices with respect to the provision of the services and programs, including how to plan and implement a well-designed and rigorous evaluation of a promising, supported, or well-supported practice.

“(2) CLEARINGHOUSE OF PROMISING, SUPPORTED, AND WELL-SUPPORTED PRACTICES.—The Secretary shall, directly or through grants, contracts, or interagency agreements, evaluate research on the practices specified in clauses (iii), (iv), and (v), respectively, of section 471(e)(4)(C), and programs that meet the requirements described in section 427(a)(1), including culturally specific, or location- or population-based adaptations of the practices, to identify and establish a public clearinghouse of the practices that satisfy each category described by such clauses. In addition, the clearinghouse shall include information on the specific outcomes associated with each practice, including whether the practice has been shown to prevent child abuse and neglect and reduce the likelihood of foster care placement by supporting birth families and kinship families and improving targeted supports for pregnant and parenting youth and their children.

“(3) DATA COLLECTION AND EVALUATIONS.—The Secretary, directly or through grants, contracts, or interagency agreements, may collect data and conduct evaluations with respect to the provision of services and programs described in section 471(e)(1) for purposes of assessing the extent to which the provision of the services and programs—

“(A) reduces the likelihood of foster care placement;

“(B) increases use of kinship care arrangements; or

“(C) improves child well-being.

“(4) REPORTS TO CONGRESS.—

“(A) IN GENERAL.—The Secretary shall submit to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives periodic reports based on the provision of services and programs described in section 471(e)(1) and the activities carried out under this subsection.

“(B) PUBLIC AVAILABILITY.—The Secretary shall make the reports to Congress submitted under this paragraph publicly available.

“(5) APPROPRIATION.—Out of any money in the Treasury of the United States not otherwise appropriated, there is appropriated to the Secretary \$1,000,000 for fiscal year 2017 and each fiscal year thereafter to carry out this subsection.”

(e) APPLICATION TO PROGRAMS OPERATED BY INDIAN TRIBAL ORGANIZATIONS.—

(1) IN GENERAL.—Section 479B of such Act (42 U.S.C. 679c) is amended—

(A) in subsection (c)(1)—

(i) in subparagraph (C)(i)—

(I) in subclause (II), by striking “and” after the semicolon;

(II) in subclause (III), by striking the period at the end and inserting “; and”; and

(III) by adding at the end the following:

“(IV) at the option of the tribe, organization, or consortium, services and programs specified in section 471(e)(1) to children described in section 471(e)(2) and their parents

or kin caregivers, in accordance with section 471(e) and subparagraph (E).”; and

(ii) by adding at the end the following:

“(E) PREVENTION SERVICES AND PROGRAMS FOR CHILDREN AND THEIR PARENTS AND KIN CAREGIVERS.—

“(i) IN GENERAL.—In the case of a tribe, organization, or consortium that elects to provide services and programs specified in section 471(e)(1) to children described in section 471(e)(2) and their parents or kin caregivers under the plan, the Secretary shall specify the requirements applicable to the provision of the services and programs. The requirements shall, to the greatest extent practicable, be consistent with the requirements applicable to States under section 471(e) and shall permit the provision of the services and programs in the form of services and programs that are adapted to the culture and context of the tribal communities served.

“(ii) PERFORMANCE MEASURES.—The Secretary shall establish specific performance measures for each tribe, organization, or consortium that elects to provide services and programs specified in section 471(e)(1). The performance measures shall, to the greatest extent practicable, be consistent with the prevention services measures required for States under section 471(e)(6) but shall allow for consideration of factors unique to the provision of the services by tribes, organizations, or consortia.”; and

(B) in subsection (d)(1), by striking “and (5)” and inserting “(5), and (6)(A)”.

(2) CONFORMING AMENDMENT.—The heading for subsection (d) of section 479B of such Act (42 U.S.C. 679c) is amended by striking “FOR FOSTER CARE MAINTENANCE AND ADOPTION ASSISTANCE PAYMENTS”.

(f) APPLICATION TO PROGRAMS OPERATED BY TERRITORIES.—Section 1108(a)(2) of the Social Security Act (42 U.S.C. 1308(a)(2)) is amended by striking “or 413(f)” and inserting “413(f), or 474(a)(6)”.

SEC. 112. FOSTER CARE MAINTENANCE PAYMENTS FOR CHILDREN WITH PARENTS IN A LICENSED RESIDENTIAL FAMILY-BASED TREATMENT FACILITY FOR SUBSTANCE ABUSE.

(a) IN GENERAL.—Section 472 of the Social Security Act (42 U.S.C. 672) is amended—

(1) in subsection (a)(2)(C), by striking “or” and inserting “, with a parent residing in a licensed residential family-based treatment facility, but only to the extent permitted under subsection (j), or in a”; and

(2) by adding at the end the following:

“(j) CHILDREN PLACED WITH A PARENT RESIDING IN A LICENSED RESIDENTIAL FAMILY-BASED TREATMENT FACILITY FOR SUBSTANCE ABUSE.—

“(1) IN GENERAL.—Notwithstanding the preceding provisions of this section, a child who is eligible for foster care maintenance payments under this section, or who would be eligible for the payments if the eligibility were determined without regard to paragraphs (1)(B) and (3) of subsection (a), shall be eligible for the payments for a period of not more than 12 months during which the child is placed with a parent who is in a licensed residential family-based treatment facility for substance abuse, but only if—

“(A) the recommendation for the placement is specified in the child’s case plan before the placement;

“(B) the treatment facility provides, as part of the treatment for substance abuse, parenting skills training, parent education, and individual and family counseling; and

“(C) the substance abuse treatment, parenting skills training, parent education, and individual and family counseling is provided under an organizational structure and treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma and in accord-

ance with recognized principles of a trauma-informed approach and trauma-specific interventions to address the consequences of trauma and facilitate healing.

“(2) APPLICATION.—With respect to children for whom foster care maintenance payments are made under paragraph (1), only the children who satisfy the requirements of paragraphs (1)(B) and (3) of subsection (a) shall be considered to be children with respect to whom foster care maintenance payments are made under this section for purposes of subsection (h) or section 473(b)(3)(B).”

(b) CONFORMING AMENDMENT.—Section 474(a)(1) of such Act (42 U.S.C. 674(a)(1)) is amended by inserting “subject to section 472(j),” before “an amount equal to the Federal” the first place it appears.

SEC. 113. TITLE IV-E PAYMENTS FOR EVIDENCE-BASED KINSHIP NAVIGATOR PROGRAMS.

Section 474(a) of the Social Security Act (42 U.S.C. 674(a)), as amended by section 111(c), is amended—

(1) in paragraph (6), by striking the period at the end and inserting “; plus”; and

(2) by adding at the end the following:

“(7) an amount equal to 50 percent of the amounts expended by the State during the quarter as the Secretary determines are for kinship navigator programs that meet the requirements described in section 427(a)(1) and that the Secretary determines are operated in accordance with promising, supported, or well-supported practices that meet the applicable criteria specified for the practices in section 471(e)(4)(C), without regard to whether the expenditures are incurred on behalf of children who are, or are potentially, eligible for foster care maintenance payments under this part.”

Subtitle B—Enhanced Support Under Title IV-B

SEC. 121. ELIMINATION OF TIME LIMIT FOR FAMILY REUNIFICATION SERVICES WHILE IN FOSTER CARE AND PERMITTING TIME-LIMITED FAMILY REUNIFICATION SERVICES WHEN A CHILD RETURNS HOME FROM FOSTER CARE.

(a) IN GENERAL.—Section 431(a)(7) of the Social Security Act (42 U.S.C. 629a(a)(7)) is amended—

(1) in the paragraph heading, by striking “TIME-LIMITED FAMILY” and inserting “FAMILY”; and

(2) in subparagraph (A)—

(A) by striking “time-limited family” and inserting “family”;

(B) by inserting “or a child who has been returned home” after “child care institution”; and

(C) by striking “, but only during the 15-month period that begins on the date that the child, pursuant to section 475(5)(F), is considered to have entered foster care” and inserting “and to ensure the strength and stability of the reunification. In the case of a child who has been returned home, the services and activities shall only be provided during the 15-month period that begins on the date that the child returns home”.

(b) CONFORMING AMENDMENTS.—

(1) Section 430 of such Act (42 U.S.C. 629) is amended in the matter preceding paragraph (1), by striking “time-limited”.

(2) Subsections (a)(4), (a)(5)(A), and (b)(1) of section 432 of such Act (42 U.S.C. 629b) are amended by striking “time-limited” each place it appears.

SEC. 122. REDUCING BUREAUCRACY AND UNNECESSARY DELAYS WHEN PLACING CHILDREN IN HOMES ACROSS STATE LINES.

(a) STATE PLAN REQUIREMENT.—Section 471(a)(25) of the Social Security Act (42 U.S.C. 671(a)(25)) is amended—

(1) by striking “provide” and insert “provides”; and

(2) by inserting “, which, not later than October 1, 2026, shall include the use of an electronic interstate case-processing system” before the first semicolon.

(b) GRANTS FOR THE DEVELOPMENT OF AN ELECTRONIC INTERSTATE CASE-PROCESSING SYSTEM TO EXPEDITE THE INTERSTATE PLACEMENT OF CHILDREN IN FOSTER CARE OR GUARDIANSHIP, OR FOR ADOPTION.—Section 437 of such Act (42 U.S.C. 629g) is amended by adding at the end the following:

“(g) GRANTS FOR THE DEVELOPMENT OF AN ELECTRONIC INTERSTATE CASE-PROCESSING SYSTEM TO EXPEDITE THE INTERSTATE PLACEMENT OF CHILDREN IN FOSTER CARE OR GUARDIANSHIP, OR FOR ADOPTION.—

“(1) PURPOSE.—The purpose of this subsection is to facilitate the development of an electronic interstate case-processing system for the exchange of data and documents to expedite the placements of children in foster, guardianship, or adoptive homes across State lines.

“(2) APPLICATION REQUIREMENTS.—A State that desires a grant under this subsection shall submit to the Secretary an application containing the following:

“(A) A description of the goals and outcomes to be achieved during the period for which grant funds are sought, which goals and outcomes must result in—

“(i) reducing the time it takes for a child to be provided with a safe and appropriate permanent living arrangement across State lines;

“(ii) improving administrative processes and reducing costs in the foster care system; and

“(iii) the secure exchange of relevant case files and other necessary materials in real time, and timely communications and placement decisions regarding interstate placements of children.

“(B) A description of the activities to be funded in whole or in part with the grant funds, including the sequencing of the activities.

“(C) A description of the strategies for integrating programs and services for children who are placed across State lines.

“(D) Such other information as the Secretary may require.

“(3) GRANT AUTHORITY.—The Secretary may make a grant to a State that complies with paragraph (2).

“(4) USE OF FUNDS.—A State to which a grant is made under this subsection shall use the grant to support the State in connecting with the electronic interstate case-processing system described in paragraph (1).

“(5) EVALUATIONS.—Not later than 1 year after the final year in which grants are awarded under this subsection, the Secretary shall submit to the Congress, and make available to the general public by posting on a website, a report that contains the following information:

“(A) How using the electronic interstate case-processing system developed pursuant to paragraph (4) has changed the time it takes for children to be placed across State lines.

“(B) The number of cases subject to the Interstate Compact on the Placement of Children that were processed through the electronic interstate case-processing system, and the number of interstate child placement cases that were processed outside the electronic interstate case-processing system, by each State in each year.

“(C) The progress made by States in implementing the electronic interstate case-processing system.

“(D) How using the electronic interstate case-processing system has affected various metrics related to child safety and well-

being, including the time it takes for children to be placed across State lines.

“(E) How using the electronic interstate case-processing system has affected administrative costs and caseworker time spent on placing children across State lines.

“(6) DATA INTEGRATION.—The Secretary, in consultation with the Secretariat for the Interstate Compact on the Placement of Children and the States, shall assess how the electronic interstate case-processing system developed pursuant to paragraph (4) could be used to better serve and protect children that come to the attention of the child welfare system, by—

“(A) connecting the system with other data systems (such as systems operated by State law enforcement and judicial agencies, systems operated by the Federal Bureau of Investigation for the purposes of the Innocence Lost National Initiative, and other systems);

“(B) simplifying and improving reporting related to paragraphs (34) and (35) of section 471(a) regarding children or youth who have been identified as being a sex trafficking victim or children missing from foster care; and

“(C) improving the ability of States to quickly comply with background check requirements of section 471(a)(20), including checks of child abuse and neglect registries as required by section 471(a)(20)(B).”.

(c) RESERVATION OF FUNDS TO IMPROVE THE INTERSTATE PLACEMENT OF CHILDREN.—Section 437(b) of such Act (42 U.S.C. 629g(b)) is amended by adding at the end the following:

“(4) IMPROVING THE INTERSTATE PLACEMENT OF CHILDREN.—The Secretary shall reserve \$5,000,000 of the amount made available for fiscal year 2017 for grants under subsection (g), and the amount so reserved shall remain available through fiscal year 2021.”.

SEC. 123. ENHANCEMENTS TO GRANTS TO IMPROVE WELL-BEING OF FAMILIES AFFECTED BY SUBSTANCE ABUSE.

Section 437(f) of the Social Security Act (42 U.S.C. 629g(f)) is amended—

(1) in the subsection heading, by striking “INCREASE THE WELL-BEING OF, AND TO IMPROVE THE PERMANENCY OUTCOMES FOR, CHILDREN AFFECTED BY” and inserting “IMPLEMENT IV-E PREVENTION SERVICES, AND IMPROVE THE WELL-BEING OF, AND IMPROVE PERMANENCY OUTCOMES FOR, CHILDREN AND FAMILIES AFFECTED BY HEROIN, OPIOIDS, AND OTHER”;

(2) by striking paragraph (2) and inserting the following:

“(2) REGIONAL PARTNERSHIP DEFINED.—In this subsection, the term ‘regional partnership’ means a collaborative agreement (which may be established on an interstate, State, or intrastate basis) entered into by the following:

“(A) MANDATORY PARTNERS FOR ALL PARTNERSHIP GRANTS.—

“(i) The State child welfare agency that is responsible for the administration of the State plan under this part and part E.

“(ii) The State agency responsible for administering the substance abuse prevention and treatment block grant provided under subpart II of part B of title XIX of the Public Health Service Act.

“(B) MANDATORY PARTNERS FOR PARTNERSHIP GRANTS PROPOSING TO SERVE CHILDREN IN OUT-OF-HOME PLACEMENTS.—If the partnership proposes to serve children in out-of-home placements, the Juvenile Court or Administrative Office of the Court that is most appropriate to oversee the administration of court programs in the region to address the population of families who come to the attention of the court due to child abuse or neglect.

“(C) OPTIONAL PARTNERS.—At the option of the partnership, any of the following:

“(i) An Indian tribe or tribal consortium.

“(ii) Nonprofit child welfare service providers.

“(iii) For-profit child welfare service providers.

“(iv) Community health service providers, including substance abuse treatment providers.

“(v) Community mental health providers.

“(vi) Local law enforcement agencies.

“(vii) School personnel.

“(viii) Tribal child welfare agencies (or a consortia of the agencies).

“(ix) Any other providers, agencies, personnel, officials, or entities that are related to the provision of child and family services under a State plan approved under this subpart.

“(D) EXCEPTION FOR REGIONAL PARTNERSHIPS WHERE THE LEAD APPLICANT IS AN INDIAN TRIBE OR TRIBAL CONSORTIA.—If an Indian tribe or tribal consortium enters into a regional partnership for purposes of this subsection, the Indian tribe or tribal consortium—

“(i) may (but is not required to) include the State child welfare agency as a partner in the collaborative agreement;

“(ii) may not enter into a collaborative agreement only with tribal child welfare agencies (or a consortium of the agencies); and

“(iii) if the condition described in paragraph (2)(B) applies, may include tribal court organizations in lieu of other judicial partners.”;

(3) in paragraph (3)—

(A) in subparagraph (A)—

(i) by striking “2012 through 2016” and inserting “2017 through 2021”; and

(ii) by striking “\$500,000 and not more than \$1,000,000” and inserting “\$250,000 and not more than \$1,000,000”;

(B) in subparagraph (B)—

(i) in the subparagraph heading, by inserting “; PLANNING” after “APPROVAL”;

(ii) in clause (i), by striking “clause (ii)” and inserting “clauses (ii) and (iii)”; and

(iii) by adding at the end the following:

“(iii) SUFFICIENT PLANNING.—A grant awarded under this subsection shall be disbursed in two phases: a planning phase (not to exceed 2 years); and an implementation phase. The total disbursement to a grantee for the planning phase may not exceed \$250,000, and may not exceed the total anticipated funding for the implementation phase.”; and

(C) by adding at the end the following:

“(D) LIMITATION ON PAYMENT FOR A FISCAL YEAR.—No payment shall be made under subparagraph (A) or (C) for a fiscal year until the Secretary determines that the eligible partnership has made sufficient progress in meeting the goals of the grant and that the members of the eligible partnership are coordinating to a reasonable degree with the other members of the eligible partnership.”;

(4) in paragraph (4)—

(A) in subparagraph (B)—

(i) in clause (i), by inserting “, parents, and families” after “children”;

(ii) in clause (ii), by striking “safety and permanence for such children; and” and inserting “safe, permanent caregiving relationships for the children.”;

(iii) in clause (iii), by striking “or” and inserting “increase reunification rates for children who have been placed in out of home care, or decrease.”; and

(iv) by redesignating clause (iii) as clause (v) and inserting after clause (ii) the following:

“(iii) improve the substance abuse treatment outcomes for parents including retention in treatment and successful completion of treatment;

“(iv) facilitate the implementation, delivery, and effectiveness of prevention services and programs under section 471(e); and”;

(B) in subparagraph (D), by striking “where appropriate,”; and

(C) by striking subparagraphs (E) and (F) and inserting the following:

“(E) A description of a plan for sustaining the services provided by or activities funded under the grant after the conclusion of the grant period, including through the use of prevention services and programs under section 471(e) and other funds provided to the State for child welfare and substance abuse prevention and treatment services.

“(F) Additional information needed by the Secretary to determine that the proposed activities and implementation will be consistent with research or evaluations showing which practices and approaches are most effective.”;

(5) in paragraph (5)(A), by striking “abuse treatment” and inserting “use disorder treatment including medication assisted treatment and in-home substance abuse disorder treatment and recovery”;

(6) in paragraph (7)—

(A) by striking “and” at the end of subparagraph (C); and

(B) by redesignating subparagraph (D) as subparagraph (E) and inserting after subparagraph (C) the following:

“(D) demonstrate a track record of successful collaboration among child welfare, substance abuse disorder treatment and mental health agencies; and”;

(7) in paragraph (8)—

(A) in subparagraph (A)—

(i) by striking “establish indicators that will be” and inserting “review indicators that are”; and

(ii) by striking “in using funds made available under such grants to achieve the purpose of this subsection” and inserting “and establish a set of core indicators related to child safety, parental recovery, parenting capacity, and family well-being. In developing the core indicators, to the extent possible, indicators shall be made consistent with the outcome measures described in section 471(e)(6)”;

(B) in subparagraph (B)—

(i) in the matter preceding clause (i), by inserting “base the performance measures on lessons learned from prior rounds of regional partnership grants under this subsection, and” before “consult”; and

(ii) by striking clauses (iii) and (iv) and inserting the following:

“(iii) Other stakeholders or constituencies as determined by the Secretary.”;

(8) in paragraph (9)(A), by striking clause (i) and inserting the following:

“(i) SEMIANNUAL REPORTS.—Not later than September 30 of each fiscal year in which a recipient of a grant under this subsection is paid funds under the grant, and every 6 months thereafter, the grant recipient shall submit to the Secretary a report on the services provided and activities carried out during the reporting period, progress made in achieving the goals of the program, the number of children, adults, and families receiving services, and such additional information as the Secretary determines is necessary. The report due not later than September 30 of the last such fiscal year shall include, at a minimum, data on each of the performance indicators included in the evaluation of the regional partnership.”; and

(9) in paragraph (10), by striking “2012 through 2016” and inserting “2017 through 2021”.

Subtitle C—Miscellaneous

SEC. 131. REVIEWING AND IMPROVING LICENSING STANDARDS FOR PLACEMENT IN A RELATIVE FOSTER FAMILY HOME.

(a) IDENTIFICATION OF REPUTABLE MODEL LICENSING STANDARDS.—Not later than October 1, 2017, the Secretary of Health and Human Services shall identify reputable model licensing standards with respect to the licensing of foster family homes (as defined in section 472(c)(1) of the Social Security Act).

(b) STATE PLAN REQUIREMENT.—Section 471(a) of the Social Security Act (42 U.S.C. 671(a)) is amended—

(1) in paragraph (34)(B), by striking “and” after the semicolon;

(2) in paragraph (35)(B), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(36) provides that, not later than April 1, 2018, the State shall submit to the Secretary information addressing—

“(A) whether the State licensing standards are in accord with model standards identified by the Secretary, and if not, the reason for the specific deviation and a description as to why having a standard that is reasonably in accord with the corresponding national model standards is not appropriate for the State;

“(B) whether the State has elected to waive standards established in 471(a)(10)(A) for relative foster family homes (pursuant to waiver authority provided by 471(a)(10)(D)), a description of which standards the State most commonly waives, and if the State has not elected to waive the standards, the reason for not waiving these standards;

“(C) if the State has elected to waive standards specified in subparagraph (B), how caseworkers are trained to use the waiver authority and whether the State has developed a process or provided tools to assist caseworkers in waiving nonsafety standards per the authority provided in 471(a)(10)(D) to quickly place children with relatives; and

“(D) a description of the steps the State is taking to improve caseworker training or the process, if any; and”.

SEC. 132. DEVELOPMENT OF A STATEWIDE PLAN TO PREVENT CHILD ABUSE AND NEGLECT FATALITIES.

Section 422(b)(19) of the Social Security Act (42 U.S.C. 622(b)(19)) is amended to read as follows:

“(19) document steps taken to track and prevent child maltreatment deaths by including—

“(A) a description of the steps the State is taking to compile complete and accurate information on the deaths required by Federal law to be reported by the State agency referred to in paragraph (1), including gathering relevant information on the deaths from the relevant organizations in the State including entities such as State vital statistics department, child death review teams, law enforcement agencies, offices of medical examiners or coroners; and

“(B) a description of the steps the state is taking to develop and implement a comprehensive, statewide plan to prevent the fatalities that involves and engages relevant public and private agency partners, including those in public health, law enforcement, and the courts.”.

SEC. 133. MODERNIZING THE TITLE AND PURPOSE OF TITLE IV-E.

(a) PART HEADING.—The heading for part E of title IV of the Social Security Act (42 U.S.C. 670 et seq.) is amended to read as follows:

“PART E—FEDERAL PAYMENTS FOR FOSTER CARE, PREVENTION, AND PERMANENCY”.

(b) PURPOSE.—The first sentence of section 470 of such Act (42 U.S.C. 670) is amended—

(1) by striking “1995) and” and inserting “1995,”;

(2) by inserting “kinship guardianship assistance, and prevention services or programs specified in section 471(e)(1),” after “needs,”; and

(3) by striking “(commencing with the fiscal year which begins October 1, 1980)”.

SEC. 134. EFFECTIVE DATES.

(a) EFFECTIVE DATES.—

(1) IN GENERAL.—Except as provided in paragraph (2), subject to subsection (b), the amendments made by this title shall take effect on January 1, 2017.

(2) EXCEPTIONS.—The amendments made by sections 131 and 133 shall take effect on the date of enactment of this Act.

(b) TRANSITION RULE.—

(1) IN GENERAL.—In the case of a State plan under part B or E of title IV of the Social Security Act which the Secretary of Health and Human Services determines requires State legislation (other than legislation appropriating funds) in order for the plan to meet the additional requirements imposed by the amendments made by this title, the State plan shall not be regarded as failing to comply with the requirements of such part solely on the basis of the failure of the plan to meet such additional requirements before the first day of the first calendar quarter beginning after the close of the first regular session of the State legislature that begins after the date of enactment of this Act. For purposes of the previous sentence, in the case of a State that has a 2-year legislative session, each year of the session shall be deemed to be a separate regular session of the State legislature.

(2) APPLICATION TO PROGRAMS OPERATED BY INDIAN TRIBAL ORGANIZATIONS.—In the case of an Indian tribe, tribal organization, or tribal consortium which the Secretary of Health and Human Services determines requires time to take action necessary to comply with the additional requirements imposed by the amendments made by this title (whether the tribe, organization, or tribal consortium has a plan under section 479B of the Social Security Act or a cooperative agreement or contract entered into with a State), the Secretary shall provide the tribe, organization, or tribal consortium with such additional time as the Secretary determines is necessary for the tribe, organization, or tribal consortium to take the action to comply with the additional requirements before being regarded as failing to comply with the requirements.

TITLE II—ENSURING THE NECESSITY OF A PLACEMENT THAT IS NOT IN A FOSTER FAMILY HOME

SEC. 201. LIMITATION ON FEDERAL FINANCIAL PARTICIPATION FOR PLACEMENTS THAT ARE NOT IN FOSTER FAMILY HOMES.

(a) LIMITATION ON FEDERAL FINANCIAL PARTICIPATION.—

(1) IN GENERAL.—Section 472 of the Social Security Act (42 U.S.C. 672), as amended by section 112, is amended—

(A) in subsection (a)(2)(C), by inserting “, but only to the extent permitted under subsection (k)” after “institution”; and

(B) by adding at the end the following:

“(k) LIMITATION ON FEDERAL FINANCIAL PARTICIPATION.—

“(1) IN GENERAL.—Beginning with the third week for which foster care maintenance payments are made under this section on behalf of a child placed in a child-care institution, no Federal payment shall be made to the

State under section 474(a)(1) for amounts expended for foster care maintenance payments on behalf of the child unless—

“(A) the child is placed in a child-care institution that is a setting specified in paragraph (2) (or is placed in a licensed residential family-based treatment facility consistent with subsection (j)); and

“(B) in the case of a child placed in a qualified residential treatment program (as defined in paragraph (4)), the requirements specified in paragraph (3) and section 475A(c) are met.

“(2) SPECIFIED SETTINGS FOR PLACEMENT.—The settings for placement specified in this paragraph are the following:

“(A) A qualified residential treatment program (as defined in paragraph (4)).

“(B) A setting specializing in providing prenatal, post-partum, or parenting supports for youth.

“(C) In the case of a child who has attained 18 years of age, a supervised setting in which the child is living independently.

“(D) A setting providing high-quality residential care and supportive services to children and youth who have been found to be, or are at risk of becoming, sex trafficking victims, in accordance with section 471(a)(9)(C).

“(3) ASSESSMENT TO DETERMINE APPROPRIATENESS OF PLACEMENT IN A QUALIFIED RESIDENTIAL TREATMENT PROGRAM.—

“(A) DEADLINE FOR ASSESSMENT.—In the case of a child who is placed in a qualified residential treatment program, if the assessment required under section 475A(c)(1) is not completed within 30 days after the placement is made, no Federal payment shall be made to the State under section 474(a)(1) for any amounts expended for foster care maintenance payments on behalf of the child during the placement.

“(B) DEADLINE FOR TRANSITION OUT OF PLACEMENT.—If the assessment required under section 475A(c)(1) determines that the placement of a child in a qualified residential treatment program is not appropriate, a court disapproves such a placement under section 475A(c)(2), or a child who has been in an approved placement in a qualified residential treatment program is going to return home or be placed with a fit and willing relative, a legal guardian, or an adoptive parent, or in a foster family home, Federal payments shall be made to the State under section 474(a)(1) for amounts expended for foster care maintenance payments on behalf of the child while the child remains in the qualified residential treatment program only during the period necessary for the child to transition home or to such a placement. In no event shall a State receive Federal payments under section 474(a)(1) for amounts expended for foster care maintenance payments on behalf of a child who remains placed in a qualified residential treatment program after the end of the 30-day period that begins on the date a determination is made that the placement is no longer the recommended or approved placement for the child.

“(4) QUALIFIED RESIDENTIAL TREATMENT PROGRAM.—For purposes of this part, the term ‘qualified residential treatment program’ means a program that—

“(A) has a trauma-informed treatment model that is designed to address the needs, including clinical needs as appropriate, of children with serious emotional or behavioral disorders or disturbances and, with respect to a child, is able to implement the treatment identified for the child by the assessment of the child required under section 475A(c);

“(B) subject to paragraphs (5) and (6), has registered or licensed nursing staff and other licensed clinical staff who—

“(i) provide care within the scope of their practice as defined by State law;

“(ii) are on-site during business hours; and

“(iii) are available 24 hours a day and 7 days a week;

“(C) to extent appropriate, and in accordance with the child’s best interests, facilitates participation of family members in the child’s treatment program;

“(D) facilitates outreach to the family members of the child, including siblings, documents how the outreach is made (including contact information), and maintains contact information for any known biological family and fictive kin of the child;

“(E) documents how family members are integrated into the treatment process for the child, including post-discharge, and how sibling connections are maintained;

“(F) provides discharge planning and family-based aftercare support for at least 6 months post-discharge; and

“(G) is licensed in accordance with section 471(a)(10) and is accredited by any of the following independent, not-for-profit organizations:

“(i) The Commission on Accreditation of Rehabilitation Facilities (CARF).

“(ii) The Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

“(iii) The Council on Accreditation (COA).

“(iv) Any other independent, not-for-profit accrediting organization approved by the Secretary.

“(5) FLEXIBILITY IN STAFFING REQUIREMENTS FOR QUALIFIED RESIDENTIAL TREATMENT PROGRAMS.—

“(A) IN GENERAL.—In the case of any State that the Secretary determines is described in subparagraph (B) and satisfies the requirements of subparagraphs (C) and (D), respectively, the State may elect to satisfy the requirement of paragraph (4)(B) that a qualified residential treatment program have registered or licensed nursing staff and other licensed clinical staff with clinical staff which include staff licensed to monitor medications and physical and behavioral health and that have demonstrated training in child development and trauma, in lieu of with registered or licensed nursing staff and other licensed clinical staff.

“(B) STATE DESCRIBED.—Subject to subparagraph (E), a State is described in this subparagraph if for the most recent fiscal year for which data are available—

“(i) the percentage of children on whose behalf foster care maintenance payments are being made under this part who have been placed in congregate care settings—

“(I) is at or below 7.5 percent for the fiscal year; or

“(II) has been reduced by at least 20 percent from the preceding fiscal year; and

“(ii) the average length of stay for children in foster care under the responsibility of the State in congregate care settings is at or below 12 months.

“(C) DEMONSTRATION OF CAPACITY AND NEED.—A State described in subparagraph (B) shall be eligible to use the alternative staffing model permitted under subparagraph (A) if the State can demonstrate to the satisfaction of the Secretary that the qualified residential treatment programs utilizing the alternative staffing models permitted under subparagraph (A) have the capacity to serve children and youth whose treatment plans—

“(i) indicate a need for increased supervision based on behavioral history, history of juvenile delinquency, or history of sexual offenses; and

“(ii) require a placement that conforms to the alternative staffing model permitted under subparagraph (A).

“(D) ANNUAL DETERMINATION OF STATE ELIGIBILITY BASED ON AFCARS AND OTHER DATA.—The Secretary annually shall make the determinations required under subparagraph (B) with respect to a State and a fiscal year,

on the basis of data meeting the requirements of the system established pursuant to section 479, as reported by the State and approved by the Secretary, and, to the extent the Secretary determines necessary, on the basis of such other information reported to the Secretary as the Secretary may require to determine that a State is, or continues to be, a State described in subparagraph (B).

“(E) CONGREGATE CARE SETTINGS.—In this paragraph, the term ‘congregate care settings’ includes any settings described as ‘group homes’ or ‘institutions’ for purposes of data reported in accordance with the requirements of the system established pursuant to section 479 or any similar placement settings reported in accordance with such requirements.

“(6) AUTHORITY FOR FRONTIER STATES TO WAIVE OR MODIFY CERTAIN STAFFING REQUIREMENTS FOR QUALIFIED RESIDENTIAL TREATMENT PROGRAMS.—

“(A) IN GENERAL.—A frontier State may waive or modify the requirements of clause (ii) or (iii) of paragraph (4)(B) (or both) with respect to any qualified residential treatment program located in the frontier State.

“(B) FRONTIER STATE DEFINED.—In this paragraph:

“(i) FRONTIER STATE.—The term ‘frontier State’ means a State in which at least 50 percent of the counties in the State are frontier counties.

“(ii) FRONTIER COUNTY.—The term ‘frontier county’ means a county in which the population per square mile is 6 or less.

“(7) ADMINISTRATIVE COSTS.—The prohibition in paragraph (1) on Federal payments under section 474(a)(1) shall not be construed as prohibiting Federal payments for administrative expenditures incurred on behalf of a child placed in a child-care institution and for which payment is available under section 474(a)(3).

“(8) RULE OF CONSTRUCTION.—The requirements in paragraph (4)(B) shall not be construed as requiring a qualified residential treatment program to acquire nursing and behavioral health staff solely through means of a direct employer to employee relationship.”

(2) CONFORMING AMENDMENT.—Section 474(a)(1) of the Social Security Act (42 U.S.C. 674(a)(1)), as amended by section 112(b), is amended by striking “section 472(j)” and inserting “subsections (j) and (k) of section 472”.

(b) DEFINITION OF FOSTER FAMILY HOME, CHILD-CARE INSTITUTION.—Section 472(c) of such Act (42 U.S.C. 672(c)(1)) is amended to read as follows:

“(c) DEFINITIONS.—For purposes of this part:

“(1) FOSTER FAMILY HOME.—

“(A) IN GENERAL.—The term ‘foster family home’ means the home of an individual or family—

“(i) that is licensed or approved by the State in which it is situated as a foster family home that meets the standards established for the licensing or approval; and

“(ii) in which a child in foster care has been placed in the care of an individual, who resides with the child and who has been licensed or approved by the State to be a foster parent—

“(I) that the State deems capable of adhering to the reasonable and prudent parent standard;

“(II) that provides 24-hour substitute care for children placed away from their parents or other caretakers; and

“(III) that provides the care for not more than six children in foster care.

“(B) STATE FLEXIBILITY.—The number of foster children that may be cared for in a home under subparagraph (A) may exceed the numerical limitation in subparagraph

(A)(ii)(III), at the option of the State, for any of the following reasons:

“(i) To allow a parenting youth in foster care to remain with the child of the parenting youth.

“(ii) To allow siblings to remain together.

“(iii) To allow a child with an established meaningful relationship with the family to remain with the family.

“(iv) To allow a family with special training or skills to provide care to a child who has a severe disability.

“(C) RULE OF CONSTRUCTION.—Subparagraph (A) shall not be construed as prohibiting a foster parent from renting the home in which the parent cares for a foster child placed in the parent’s care.

“(2) CHILD-CARE INSTITUTION.—

“(A) IN GENERAL.—The term ‘child-care institution’ means a private child-care institution, or a public child-care institution which accommodates no more than 25 children, which is licensed by the State in which it is situated or has been approved by the agency of the State responsible for licensing or approval of institutions of this type as meeting the standards established for the licensing.

“(B) SUPERVISED SETTINGS.—In the case of a child who has attained 18 years of age, the term shall include a supervised setting in which the individual is living independently, in accordance with such conditions as the Secretary shall establish in regulations.

“(C) EXCLUSIONS.—The term shall not include detention facilities, forestry camps, training schools, or any other facility operated primarily for the detention of children who are determined to be delinquent.”

(C) TRAINING FOR STATE JUDGES, ATTORNEYS, AND OTHER LEGAL PERSONNEL IN CHILD WELFARE CASES.—Section 438(b)(1) of such Act (42 U.S.C. 629h(b)(1)) is amended in the matter preceding subparagraph (A) by inserting “shall provide for the training of judges, attorneys, and other legal personnel in child welfare cases on Federal child welfare policies and payment limitations with respect to children in foster care who are placed in settings that are not a foster family home,” after “with respect to the child.”

(d) ASSURANCE OF NONIMPACT ON JUVENILE JUSTICE SYSTEM.—

(1) STATE PLAN REQUIREMENT.—Section 471(a) of such Act (42 U.S.C. 671(a)), as amended by section 131, is further amended by adding at the end the following:

“(37) includes a certification that, in response to the limitation imposed under section 472(k) with respect to foster care maintenance payments made on behalf of any child who is placed in a setting that is not a foster family home, the State will not enact or advance policies or practices that would result in a significant increase in the population of youth in the State’s juvenile justice system.”

(2) GAO STUDY AND REPORT.—The Comptroller General of the United States shall evaluate the impact, if any, on State juvenile justice systems of the limitation imposed under section 472(k) of the Social Security Act (as added by section 201(a)(1)) on foster care maintenance payments made on behalf of any child who is placed in a setting that is not a foster family home, in accordance with the amendments made by subsections (a) and (b) of this section. In particular, the Comptroller General shall evaluate the extent to which children in foster care who also are subject to the juvenile justice system of the State are placed in a facility under the jurisdiction of the juvenile justice system and whether the lack of available congregate care placements under the jurisdiction of the child welfare systems is a contributing factor to that result. Not later than December 31, 2023, the Comptroller Gen-

eral shall submit to Congress a report on the results of the evaluation.

SEC. 202. ASSESSMENT AND DOCUMENTATION OF THE NEED FOR PLACEMENT IN A QUALIFIED RESIDENTIAL TREATMENT PROGRAM.

Section 475A of the Social Security Act (42 U.S.C. 675a) is amended by adding at the end the following:

“(c) ASSESSMENT, DOCUMENTATION, AND JUDICIAL DETERMINATION REQUIREMENTS FOR PLACEMENT IN A QUALIFIED RESIDENTIAL TREATMENT PROGRAM.—In the case of any child who is placed in a qualified residential treatment program (as defined in section 472(k)(4)), the following requirements shall apply for purposes of approving the case plan for the child and the case system review procedure for the child:

“(1)(A) Within 30 days of the start of each placement in such a setting, a qualified individual (as defined in subparagraph (D)) shall—

“(i) assess the strengths and needs of the child using an age-appropriate, evidence-based, validated, functional assessment tool approved by the Secretary;

“(ii) determine whether the needs of the child can be met with family members or through placement in a foster family home or, if not, which setting from among the settings specified in section 472(k)(2) would provide the most effective and appropriate level of care for the child in the least restrictive environment and be consistent with the short- and long-term goals for the child, as specified in the permanency plan for the child; and

“(iii) develop a list of child-specific short- and long-term mental and behavioral health goals.

“(B)(i) The State shall assemble a family and permanency team for the child in accordance with the requirements of clauses (i) and (iii). The qualified individual conducting the assessment required under subparagraph (A) shall work in conjunction with the family of, and permanency team for, the child while conducting and making the assessment.

“(ii) The family and permanency team shall consist of all appropriate biological family members, relative, and fictive kin of the child, as well as, as appropriate, professionals who are a resource to the family of the child, such as teachers, medical or mental health providers who have treated the child, or clergy. In the case of a child who has attained age 14, the family and permanency team shall include the members of the permanency planning team for the child that are selected by the child in accordance with section 475(5)(C)(iv).

“(iii) The State shall document in the child’s case plan—

“(I) the reasonable and good faith effort of the State to identify and include all such individuals on the family of, and permanency team for, the child;

“(II) all contact information for members of the family and permanency team, as well as contact information for other family members and fictive kin who are not part of the family and permanency team;

“(III) evidence that meetings of the family and permanency team, including meetings relating to the assessment required under subparagraph (A), are held at a time and place convenient for family;

“(IV) if reunification is the goal, evidence demonstrating that the parent from whom the child was removed provided input on the members of the family and permanency team;

“(V) evidence that the assessment required under subparagraph (A) is determined in conjunction with the family and permanency team;

“(VI) the placement preferences of the family and permanency team relative to the assessment that recognizes children should be placed with their siblings unless there is a finding by the court that such placement is contrary to their best interest; and

“(VII) if the placement preferences of the family and permanency team and child are not the placement setting recommended by the qualified individual conducting the assessment under subparagraph (A), the reasons why the preferences of the team and of the child were not recommended.

“(C) In the case of a child who the qualified individual conducting the assessment under subparagraph (A) determines should not be placed in a foster family home, the qualified individual shall specify in writing the reasons why the needs of the child cannot be met by the family of the child or in a foster family home. A shortage or lack of foster family homes shall not be an acceptable reason for determining that a needs of the child cannot be met in a foster family home. The qualified individual also shall specify in writing why the recommended placement in a qualified residential treatment program is the setting that will provide the child with the most effective and appropriate level of care in the least restrictive environment and how that placement is consistent with the short- and long-term goals for the child, as specified in the permanency plan for the child.

“(D)(i) Subject to clause (ii), in this subsection, the term ‘qualified individual’ means a trained professional or licensed clinician who is not an employee of the State agency and who is not connected to, or affiliated with, any placement setting in which children are placed by the State.

“(ii) The Secretary may approve a request of a State to waive any requirement in clause (i) upon a submission by the State, in accordance with criteria established by the Secretary, that certifies that the trained professionals or licensed clinicians with responsibility for performing the assessments described in subparagraph (A) shall maintain objectivity with respect to determining the most effective and appropriate placement for a child.

“(2) Within 60 days of the start of each placement in a qualified residential treatment program, a family or juvenile court or another court (including a tribal court) of competent jurisdiction, or an administrative body appointed or approved by the court, independently, shall—

“(A) consider the assessment, determination, and documentation made by the qualified individual conducting the assessment under paragraph (1);

“(B) determine whether the needs of the child can be met through placement in a foster family home or, if not, whether placement of the child in a qualified residential treatment program provides the most effective and appropriate level of care for the child in the least restrictive environment and whether that placement is consistent with the short- and long-term goals for the child, as specified in the permanency plan for the child; and

“(C) approve or disapprove the placement.

“(3) The written documentation made under paragraph (1)(C) and documentation of the determination and approval or disapproval of the placement in a qualified residential treatment program by a court or administrative body under paragraph (2) shall be included in and made part of the case plan for the child.

“(4) As long as a child remains placed in a qualified residential treatment program, the State agency shall submit evidence at each status review and each permanency hearing held with respect to the child—

“(A) demonstrating that ongoing assessment of the strengths and needs of the child continues to support the determination that the needs of the child cannot be met through placement in a foster family home, that the placement in a qualified residential treatment program provides the most effective and appropriate level of care for the child in the least restrictive environment, and that the placement is consistent with the short- and long-term goals for the child, as specified in the permanency plan for the child;

“(B) documenting the specific treatment or service needs that will be met for the child in the placement and the length of time the child is expected to need the treatment or services; and

“(C) documenting the efforts made by the State agency to prepare the child to return home or to be placed with a fit and willing relative, a legal guardian, or an adoptive parent, or in a foster family home.

“(5) In the case of any child who is placed in a qualified residential treatment program for more than 12 consecutive months or 18 nonconsecutive months (or, in the case of a child who has not attained age 13, for more than 6 consecutive or nonconsecutive months), the State agency shall submit to the Secretary—

“(A) the most recent versions of the evidence and documentation specified in paragraph (4); and

“(B) the signed approval of the head of the State agency for the continued placement of the child in that setting.”.

SEC. 203. PROTOCOLS TO PREVENT INAPPROPRIATE DIAGNOSES.

(a) STATE PLAN REQUIREMENT.—Section 422(b)(15)(A) of the Social Security Act (42 U.S.C. 622(b)(15)(A)) is amended—

(1) in clause (vi), by striking “and” after the semicolon;

(2) by redesignating clause (vii) as clause (viii); and

(3) by inserting after clause (vi) the following:

“(vii) the procedures and protocols the State has established to ensure that children in foster care placements are not inappropriately diagnosed with mental illness, other emotional or behavioral disorders, medically fragile conditions, or developmental disabilities, and placed in settings that are not foster family homes as a result of the inappropriate diagnoses; and”.

(b) EVALUATION.—Section 476 of such Act (42 U.S.C. 676), as amended by section 111(d), is further amended by adding at the end the following:

“(e) EVALUATION OF STATE PROCEDURES AND PROTOCOLS TO PREVENT INAPPROPRIATE DIAGNOSES OF MENTAL ILLNESS OR OTHER CONDITIONS.—The Secretary shall conduct an evaluation of the procedures and protocols established by States in accordance with the requirements of section 422(b)(15)(A)(vii). The evaluation shall analyze the extent to which States comply with and enforce the procedures and protocols and the effectiveness of various State procedures and protocols and shall identify best practices. Not later than January 1, 2019, the Secretary shall submit a report on the results of the evaluation to Congress.”.

SA 5166. Mr. PORTMAN (for himself and Mrs. CAPITO) submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

Beginning on page 14, strike line 18 and all that follows through page 15, line 9, and insert the following:

“(iv) GENERAL FUND TRANSFER.—If the transfer under this subparagraph for fiscal year 2017 (after any adjustment under paragraph (5)) is insufficient to pay health benefits under the plan for such year, including benefits of the individuals referred to in clause (ii)(II)(bb) for the period described in clause (ii)(II), the Secretary of the Treasury shall transfer to the Plan out of the general fund of the Treasury an amount sufficient to pay such benefits.”.

“(c) CONFORMING AMENDMENT.—Subparagraph (B) of section 402(h)(1) of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1232(h)(1)) is amended by inserting ‘(except as provided in paragraph (2)(C)(iv))’ after ‘not to exceed’.

SA 5167. Mr. DURBIN submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. _____. Notwithstanding sections 101 and 102, within amounts appropriated for the Department of Defense for “Defense Health Program”, \$1,832,000,000 shall be available only for the Congressionally Directed Medical Research Program for research, development, test, and evaluation.

SA 5168. Mr. DURBIN submitted an amendment intended to be proposed by him to the bill H.R. 2028, making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2016, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. _____. Notwithstanding sections 101 and 102, within amounts appropriated for the Department of Defense for “Procurement, Defense-Wide” and “Research, Development, Test and Evaluation, Defense-Wide”, an aggregate of \$600,735,000 shall be available for Israeli Cooperative Programs: *Provided*, That the availability of such amount for such Programs shall be subject to the same authority and conditions as are provided in the Department of Defense Appropriations Act, 2016 (division C of Public Law 114-113) with respect to the availability of amounts in that Act for such Programs.

SA 5169. Mr. BOOZMAN (for Mr. TOOMEY) proposed an amendment to the bill S. 1831, to revise section 48 of title 18, United States Code, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Preventing Animal Cruelty and Torture Act” or the “PACT Act”.

SEC. 2. REVISION OF SECTION 48.

(a) IN GENERAL.—Section 48 of title 18, United States Code, is amended to read as follows:

“§ 48. Animal crushing

“(a) OFFENSES.—

“(1) CRUSHING.—It shall be unlawful for any person to purposely engage in animal crushing in or affecting interstate or foreign

commerce or within the special maritime and territorial jurisdiction of the United States.

“(2) CREATION OF ANIMAL CRUSH VIDEOS.—It shall be unlawful for any person to knowingly create an animal crush video, if—

“(A) the person intends or has reason to know that the animal crush video will be distributed in, or using a means or facility of, interstate or foreign commerce; or

“(B) the animal crush video is distributed in, or using a means or facility of, interstate or foreign commerce.

“(3) DISTRIBUTION OF ANIMAL CRUSH VIDEOS.—It shall be unlawful for any person to knowingly sell, market, advertise, exchange, or distribute an animal crush video in, or using a means or facility of, interstate or foreign commerce.

“(b) EXTRATERRITORIAL APPLICATION.—This section applies to the knowing sale, marketing, advertising, exchange, distribution, or creation of an animal crush video outside of the United States, if—

“(1) the person engaging in such conduct intends or has reason to know that the animal crush video will be transported into the United States or its territories or possessions; or

“(2) the animal crush video is transported into the United States or its territories or possessions.

“(c) PENALTIES.—Whoever violates this section shall be fined under this title, imprisoned for not more than 7 years, or both.

“(d) EXCEPTIONS.—

“(1) IN GENERAL.—This section does not apply with regard to any conduct, or a visual depiction of that conduct, that is—

“(A) a customary and normal veterinary, agricultural husbandry, or other animal management practice;

“(B) the slaughter of animals for food;

“(C) hunting, trapping, fishing, a sporting activity not otherwise prohibited by Federal law, predator control, or pest control;

“(D) medical or scientific research;

“(E) necessary to protect the life or property of a person; or

“(F) performed as part of euthanizing an animal.

“(2) GOOD-FAITH DISTRIBUTION.—This section does not apply to the good-faith distribution of an animal crush video to—

“(A) a law enforcement agency; or

“(B) a third party for the sole purpose of analysis to determine if referral to a law enforcement agency is appropriate.

“(3) UNINTENTIONAL CONDUCT.—This section does not apply to unintentional conduct that injures or kills an animal.

“(4) CONSISTENCY WITH RFRA.—This section shall be enforced in a manner that is consistent with section 3 of the Religious Freedom Restoration Act of 1993 (42 U.S.C. 2000bb-1).

“(e) NO PREEMPTION.—Nothing in this section shall be construed to preempt the law of any State or local subdivision thereof to protect animals.

“(f) DEFINITIONS.—In this section—

“(1) the term ‘animal crushing’ means actual conduct in which one or more living non-human mammals, birds, reptiles, or amphibians is purposely crushed, burned, drowned, suffocated, impaled, or otherwise subjected to serious bodily injury (as defined in section 1365 and including conduct that, if committed against a person and in the special maritime and territorial jurisdiction of the United States, would violate section 2241 or 2242);

“(2) the term ‘animal crush video’ means any photograph, motion-picture film, video or digital recording, or electronic image that—

“(A) depicts animal crushing; and

“(B) is obscene; and

“(3) the term ‘euthanizing an animal’ means the humane destruction of an animal accomplished by a method that—

“(A) produces rapid unconsciousness and subsequent death without evidence of pain or distress; or

“(B) uses anesthesia produced by an agent that causes painless loss of consciousness and subsequent death.”.

(b) TECHNICAL AND CONFORMING AMENDMENT.—The table of sections for chapter 3 of title 18, United States Code, is amended by striking the item relating to section 48 and inserting the following:

“48. Animal crushing.”.

SA 5170. Mr. BOOZMAN (for Mr. PERDUE) proposed an amendment to the bill S. 2781, to improve homeland security, including domestic preparedness and response to terrorism, by reforming Federal Law Enforcement Training Centers to provide training to first responders, and for other purposes; as follows:

On page 3, line 15, insert “delegated” after “carry out”.

On page 4, strike lines 1 through 8 and insert the following:

“(B) maximizes opportunities for small business participation;

On page 11, beginning on line 20, strike “and to compensate such employees for time spent traveling from their homes to work sites”.

SA 5171. Mr. BOOZMAN (for Mr. PERDUE) proposed an amendment to the bill H.R. 3842, to improve homeland security, including domestic preparedness and response to terrorism, by reforming Federal Law Enforcement Training Centers to provide training to first responders, and for other purposes; as follows:

On page 3, line 19, insert “delegated” after “carry out”.

On page 4, strike lines 5 through 12 and insert the following:

“(B) maximizes opportunities for small business participation;

On page 11, beginning on line 25, strike “and to compensate such employees for time spent traveling from their homes to work sites”.

SA 5172. Mr. BOOZMAN (for Mr. SULLIVAN) proposed an amendment to the bill S. 3086, to reauthorize and amend the Marine Debris Act to promote international action to reduce marine debris and for other purposes; as follows:

At the appropriate place, insert the following:

SEC. 3. ASSISTANCE FOR SEVERE MARINE DEBRIS EVENTS.

Section 3 of the Marine Debris Act (33 U.S.C. 1952) is amended by adding at the end the following new subsection:

“(d) ASSISTANCE FOR SEVERE MARINE DEBRIS EVENTS.—

“(1) IN GENERAL.—At the discretion of the Administrator or at the request of the Governor of an affected State, the Administrator shall determine whether there is a severe marine debris event.

“(2) ASSISTANCE.—If the Administrator makes a determination under paragraph (1) that there is a severe marine debris event, the Administrator is authorized to make sums available to be used by the affected State or by the Administrator in cooperation with the affected State—

“(A) to assist in the cleanup and response required by the severe marine debris event; or

“(B) such other activity as the Administrator determines is appropriate in response to the severe marine debris event.

“(3) FEDERAL SHARE.—The Federal share of the cost of any activity carried out under the authority of this subsection shall not exceed 75 percent of the cost of that activity.”.

SEC. 4. SENSE OF CONGRESS ON INTERNATIONAL ENGAGEMENT TO RESPOND TO MARINE DEBRIS.

It is the sense of Congress that the President should—

(1) work with representatives of foreign countries that produce the largest amounts of unmanaged municipal solid waste that reaches the ocean to learn about, and find solutions to, the contributions of such countries to marine debris in the world’s oceans;

(2) carry out studies to determine—
(A) the primary means by which solid waste enters the oceans;

(B) the manner in which waste management infrastructure can be most effective in preventing debris from reaching the oceans;

(C) the long-term economic impacts of marine debris on the national economies of each country set out in paragraph (1) and on the global economy; and

(D) the economic benefits of decreasing the amount of marine debris in the oceans;

(3) work with representatives of foreign countries that produce the largest amounts of unmanaged municipal solid waste that reaches the ocean to conclude one or more new international agreements—

(A) to mitigate the risk of land-based marine debris contributed by such countries reaching an ocean; and

(B) to increase technical assistance and investment in waste management infrastructure, if the President determines appropriate; and

(4) consider the benefits and appropriateness of having a senior official of the Department of State serve as a permanent member of the Interagency Marine Debris Coordinating Committee established under section 5 of the Marine Debris Act (33 U.S.C. 1954).

SA 5173. Mr. BOOZMAN (for Mr. MORAN) proposed an amendment to the bill S. 290, to amend title 38, United States Code, to improve the accountability of employees of the Department of Veterans Affairs, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Increasing the Department of Veterans Affairs Accountability to Veterans Act of 2016”.

“(e) DEFINITIONS.—In this section:

“(1) The term ‘covered position’ is—

“(A) a senior executive position; or

“(B) a position listed in section 7401(1) of this title that is not a senior executive position.

“(2) The term ‘covered service’ means, with respect to an individual subject to a removal or transfer from a covered position at the Department for performance or misconduct, the period of service beginning on the date that the Secretary determines that such individual engaged in activity that gave rise to such action and ending on the date that such individual is removed from the civil service or leaves employment at the Department prior to the issuance of a final decision with respect to such action, as the case may be.

“(3) The term ‘lump-sum credit’ has the meaning given such term in section 8331 or 8401 of title 5, as the case may be.

“(4) The term ‘senior executive position’ has the meaning given such term in section 713(g) of this title.

“(5) The term ‘service’ has the meaning given such term in section 8331 or 8401 of title 5, as the case may be.”.

(b) APPLICATION.—Section 715 of such title, as added by subsection (a), shall apply to any action of removal or transfer from a covered position (as defined in subsection (e) of such section) at the Department of Veterans Affairs commencing on or after the date of the enactment of this Act.

(c) CLERICAL AMENDMENT.—The table of sections at the beginning of such chapter is amended by adding at the end the following new item:

“715. Senior executives and section 7401(1) employees: reduction of benefits of individuals convicted of a felony.”.

SEC. 3. LIMITATION ON ADMINISTRATIVE LEAVE FOR EMPLOYEES OF DEPARTMENT OF VETERANS AFFAIRS.

(a) IN GENERAL.—Chapter 7 of title 38, United States Code, is further amended by adding at the end the following new section:

“§ 717. Administrative leave limitation and report

“(a) LIMITATION APPLICABLE TO EMPLOYEES WITHIN THE DEPARTMENT.—(1) The Secretary may not place any covered individual on administrative leave for more than a total of 14 business days during any 365-day period.

“(2)(A) The Secretary may waive the limitation under paragraph (1) and extend the period of administrative leave of a covered individual if the Secretary submits to the Committee on Veterans’ Affairs of the Senate and the Committee on Veterans’ Affairs of the House of Representatives a detailed explanation of the reasons the covered individual was placed on administrative leave and the reasons for the extension of such leave.

“(B) Such explanation shall include the position of the covered individual and the location where the covered individual is employed.

“(3) In this subsection, the term ‘covered individual’ means an employee of the Department, including an employee in a senior executive position (as defined in section 713(g) of this title)—

“(A) who is subject to an investigation for purposes of determining whether such individual should be subject to any disciplinary action under this title or title 5; or

“(B) against whom any disciplinary action is proposed or initiated under this title or title 5.

“(b) REPORT ON ADMINISTRATIVE LEAVE.—

(1) Not later than 30 days after the end of each fiscal year, the Secretary shall submit to the Committee on Veterans’ Affairs of the Senate and the Committee on Veterans’ Affairs of the House of Representatives a report listing the position of each employee of the Department (if any) who has been placed on administrative leave for a period longer than 14 business days during such fiscal year.

“(2) Each report submitted under paragraph (1) shall include, with respect to each employee listed in such report, the following:

“(A) The position occupied by the employee.

“(B) The number of business days of such leave.

“(C) The reason that such employee was placed on such leave.

“(3) In submitting each report under paragraph (1), the Secretary shall take such measures to protect the privacy of the employees listed in the report as the Secretary considers appropriate.

“(c) ADMINISTRATIVE LEAVE DEFINED.—In this section, the term ‘administrative leave’—

“(1) means an administratively authorized absence from duty without loss of pay or charge to leave for which the employee is placed due to an investigation on or for whom any disciplinary action is proposed or initiated; and

“(2) includes any type of paid non-duty status without a charge to leave.”.

(b) APPLICATION.—

(1) ADMINISTRATIVE LEAVE LIMITATION.—Subsection (a) of section 717 of title 38, United States Code (as added by subsection (a)), shall apply to any period of administrative leave (as defined in such section) commencing on or after the date of the enactment of this Act.

(2) REPORT.—The report under section 717(b) of such title (as added by subsection (a)) shall apply beginning in the first quarter that ends after the date that is 180 days after the date of the enactment of this Act.

(c) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 7 of such title is further amended by adding at the end the following new item:

“717. Administrative leave limitation and report.”.

SEC. 4. ACCOUNTABILITY OF LEADERS FOR MANAGING THE DEPARTMENT OF VETERANS AFFAIRS.

(a) IN GENERAL.—Chapter 7 of title 38, United States Code, is amended by inserting after section 709 the following new section:

“§ 710. Annual performance plan for political appointees

“(a) IN GENERAL.—The Secretary shall conduct an annual performance plan for each political appointee of the Department that is similar to the annual performance plan conducted for an employee of the Department who is appointed as a career appointee (as that term is defined in section 3132(a)(4) of title 5) within the Senior Executive Service at the Department.

“(b) ELEMENTS OF PLAN.—Each annual performance plan conducted under subsection (a) with respect to a political appointee of the Department shall include, to the extent applicable, an assessment of whether the appointee is meeting the following goals:

“(1) Recruiting, selecting, and retaining well-qualified individuals for employment at the Department.

“(2) Engaging and motivating employees.

“(3) Training and developing employees and preparing those employees for future leadership roles within the Department.

“(4) Holding each employee of the Department that is a manager accountable for addressing issues relating to performance, in particular issues relating to the performance of employees that report to the manager.”.

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 7 of such title is further amended by inserting after the item relating to section 709 the following new item:

“710. Annual performance plan for political appointees.”.

SEC. 5. ACCOUNTABILITY OF SUPERVISORS AT DEPARTMENT OF VETERANS AFFAIRS FOR HIRING WELL-QUALIFIED PEOPLE.

(a) ASSESSMENT DURING PROBATIONARY PERIOD.—

(1) DETERMINATION REQUIRED.—With respect to any employee of the Department of Veterans Affairs who is required to serve a probationary period in a position in the Department, the Secretary of Veterans Affairs shall require the supervisor of such employee to determine, during the 30-day period ending on the date on which the probationary period ends, whether the employee—

(A) has demonstrated successful performance; and

(B) should continue past the probationary period.

(2) LIMITATION ON EMPLOYMENT AFTER PROBATIONARY PERIOD.—

(A) IN GENERAL.—Except as provided in subparagraph (B), no employee of the Department serving a probationary period as described in paragraph (1) may complete that probationary period unless and until the supervisor of the employee, or another supervisor capable of making the requisite determination, has made an affirmative determination under such paragraph.

(B) PROBATIONARY PERIOD DEEMED COMPLETED.—

(1) NO DETERMINATION.—If no determination under paragraph (1) is made with respect to an employee before the end of the 60-day period following the end of the 30-day period specified in such paragraph, the employee shall be deemed to have completed the probationary period of the employee effective as of the end of that 60-day period.

(ii) RETROACTIVE EFFECT OF DETERMINATION.—If an affirmative determination under paragraph (1) is made with respect to an employee after the end of the 30-day period specified in such paragraph, the employee shall be deemed to have completed the probationary period of the employee effective as of the end of that 30-day period.

(3) NOTIFICATION TO CONGRESS REGARDING DETERMINATIONS.—Not less frequently than monthly, the Secretary shall notify the Committee on Veterans' Affairs of the Senate and the Committee on Veterans' Affairs of the House of Representatives regarding—

(A) each instance during such month in which a supervisor did not make a determination required under paragraph (1) during the period required in such paragraph; and

(B) each such instance included in a previous notification under this paragraph for which the supervisor still has not made such a determination.

(b) SUPERVISORS.—With respect to any employee of the Department who is serving a probationary period in a supervisory position at the Department, successful performance under subsection (a) shall include demonstrating management competencies in addition to the technical skills required for such position.

(c) PERFORMANCE PLAN.—Each annual performance plan conducted for a supervisor of an employee serving a probationary period shall hold the supervisor accountable for—

(1) providing regular feedback to such employee during such period before making a determination under subsection (a) regarding the probationary status of such employee; and

(2) making a timely determination under subsection (a) regarding the probationary status of such employee.

(d) SUPERVISOR DEFINED.—In this section, the term “supervisor” has the meaning given such term in section 7103(a) of title 5, United States Code.

SEC. 6. ACCOUNTABILITY OF MANAGERS FOR ADDRESSING PERFORMANCE OF EMPLOYEES.

The Secretary of Veterans Affairs shall ensure that, as a part of the annual performance plan of an employee of the Department of Veterans Affairs who is a manager, the manager is evaluated on the following:

(1) Taking action to address poor performance and misconduct among the employees that report to the manager.

(2) Taking steps to improve or sustain high levels of employee engagement.

SEC. 7. EXPANSION OF DEFINITION OF PERSONNEL ACTION TO INCLUDE PERFORMANCE EVALUATIONS OF EMPLOYEES OF THE DEPARTMENT OF VETERANS AFFAIRS.

Section 2302(a)(2)(A)(viii) of title 5, United States Code, is amended by inserting “or

under title 38” after “chapter 43 of this title”.

SEC. 8. WRITTEN OPINION ON CERTAIN EMPLOYMENT RESTRICTIONS AFTER TERMINATING EMPLOYMENT WITH THE DEPARTMENT OF VETERANS AFFAIRS.

(a) IN GENERAL.—Chapter 7 of title 38, United States Code, is further amended by adding at the end the following new section:

“§ 719. Written opinion on certain employment restrictions after terminating employment with the Department

“(a) IN GENERAL.—Before terminating employment with the Department, any official of the Department who has participated personally and substantially during the one-year period ending on the date of the termination in an acquisition by the Department that exceeds \$10,000,000 shall obtain a written opinion from an appropriate ethics counselor at the Department regarding any restrictions on activities that the official may undertake on behalf of a covered contractor during the two-year period beginning on the date on which the official terminates such employment.

“(b) COVERED CONTRACTOR DEFINED.—In this section, the term ‘covered contractor’ means a contractor carrying out a contract entered into with the Department, including pursuant to a subcontract.”.

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 7 of such title is further amended by inserting after the item relating to section 717 the following new item:

“719. Written opinion on certain employment restrictions after leaving the Department.”.

SEC. 9. REQUIREMENT FOR CONTRACTORS OF THE DEPARTMENT EMPLOYING CERTAIN RECENTLY SEPARATED DEPARTMENT EMPLOYEES.

(a) IN GENERAL.—Subchapter II of chapter 81 of title 38, United States Code, is amended by adding at the end the following new section:

“§ 8129. Requirement for contractors employing certain recently separated Department employees

“(a) IN GENERAL.—A covered contractor may not knowingly provide compensation to an individual described in subsection (b) during the two-year period beginning on the date on which the individual terminates employment with the Department unless the covered contractor determines that the individual—

“(1) has obtained the written opinion required under section 719(a) of this title; or

“(2) has requested such written opinion not later than 30 days before receiving compensation from the covered contractor.

“(b) INDIVIDUAL DESCRIBED.—An individual described in this subsection is any official of the Department who participated personally and substantially during the one-year period ending on the date of the termination individual's employment with the Department in an acquisition by the Department that exceeds \$10,000,000.

“(c) COVERED CONTRACTOR DEFINED.—In this section, the term ‘covered contractor’ means a contractor carrying out a contract entered into with the Department, including pursuant to a subcontract.”.

(b) APPLICATION.—The requirement under section 8129(a) of title 38, United States Code, as added by subsection (a), shall apply with respect to any entity that enters into a contract with the Department on or after the date of the enactment of this Act.

(c) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 81 of such title is amended by inserting after the item relating to section 8128 the following new item:

“8129. Requirement for contractors employing certain recently separated Department employees.”.

SA 5174. Mr. PORTMAN (for Mr. HATCH) proposed an amendment to the concurrent resolution S. Con. Res. 57, honoring in praise and remembrance the extraordinary life, steady leadership, and remarkable, 70-year reign of King Bhumibol Adulyadej of Thailand; as follows:

In the 8th whereas clause, strike “2006” and insert “2009”.

SA 5175. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to the bill H.R. 1150, to amend the International Religious Freedom Act of 1998 to improve the ability of the United States to advance religious freedom globally through enhanced diplomacy, training, counterterrorism, and foreign assistance efforts, and through stronger and more flexible political responses to religious freedom violations and violent extremism worldwide, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) **SHORT TITLE.**—This Act may be cited as the “Frank R. Wolf International Religious Freedom Act”.

(b) **TABLE OF CONTENTS.**—The table of contents for this Act is as follows:

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

**TITLE I—DEPARTMENT OF STATE
 ACTIVITIES**

Sec. 101. Office on International Religious Freedom; Ambassador at Large for International Religious Freedom.

Sec. 102. Annual Report on International Religious Freedom.

Sec. 103. Training for Foreign Service officers.

Sec. 104. Prisoner lists and issue briefs on religious freedom concerns.

TITLE II—NATIONAL SECURITY COUNCIL

Sec. 201. Special Adviser for International Religious Freedom.

TITLE III—PRESIDENTIAL ACTIONS

Sec. 301. Non-state actor designations.

Sec. 302. Presidential actions in response to particularly severe violations of religious freedom.

Sec. 303. Report to Congress.

Sec. 304. Presidential waiver.

Sec. 305. Publication in the Federal Register.

**TITLE IV—PROMOTION OF RELIGIOUS
 FREEDOM**

Sec. 401. Assistance for promoting religious freedom.

**TITLE V—DESIGNATED PERSONS LIST
 FOR PARTICULARLY SEVERE VIOLATIONS
 OF RELIGIOUS FREEDOM**

Sec. 501. Designated Persons List for Particularly Severe Violations of Religious Freedom.

TITLE VI—MISCELLANEOUS PROVISIONS

Sec. 601. Miscellaneous provisions.

Sec. 602. Clerical amendments.

SEC. 2. FINDINGS; POLICY; SENSE OF CONGRESS.

(a) **FINDINGS.**—Section 2(a) of the International Religious Freedom Act of 1998 (22 U.S.C. 6401(a)) is amended—

(1) in paragraph (3), by inserting “The freedom of thought, conscience, and religion is

understood to protect theistic and non-theistic beliefs and the right not to profess or practice any religion.” before “Governments”;

(2) in paragraph (4), by adding at the end the following: “A policy or practice of routinely denying applications for visas for religious workers in a country can be indicative of a poor state of religious freedom in that country.”; and

(3) in paragraph (6)—

(A) by inserting “and the specific targeting of non-theists, humanists, and atheists because of their beliefs” after “religious persecution”; and

(B) by inserting “and in regions where non-state actors exercise significant political power and territorial control” before the period at the end.

(b) **POLICY.**—Section 2(b) of the International Religious Freedom Act of 1998 (22 U.S.C. 6401(b)) is amended—

(1) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E);

(2) by striking the matter preceding subparagraph (A), as redesignated, and inserting the following:

“(1) **IN GENERAL.**—The following shall be the policy of the United States.”; and

(3) by adding at the end the following:

“(2) **EVOLVING POLICIES AND COORDINATED DIPLOMATIC RESPONSES.**—Because the promotion of international religious freedom protects human rights, advances democracy abroad, and advances United States interests in stability, security, and development globally, the promotion of international religious freedom requires new and evolving policies and diplomatic responses that—

“(A) are drawn from the expertise of the national security agencies, the diplomatic services, and other governmental agencies and nongovernmental organizations; and

“(B) are coordinated across and carried out by the entire range of Federal agencies.”.

(c) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) a policy or practice by the government of any foreign country of routinely denying visa applications for religious workers can be indicative of a poor state of religious freedom in that country; and

(2) the United States Government should seek to reverse any such policy by reviewing the entirety of the bilateral relationship between such country and the United States.

SEC. 3. DEFINITIONS.

Section 3 of the International Religious Freedom Act of 1998 (22 U.S.C. 6402) is amended—

(1) by redesignating paragraph (13) as paragraph (16);

(2) by redesignating paragraphs (10), (11), and (12) as paragraphs (12), (13), and (14), respectively;

(3) by inserting after paragraph (9) the following:

“(10) **INSTITUTION OF HIGHER EDUCATION.**—The term ‘institution of higher education’ has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

“(11) **NON-STATE ACTOR.**—The term ‘non-state actor’ means a nonsovereign entity that—

“(A) exercises significant political power and territorial control;

“(B) is outside the control of a sovereign government; and

“(C) often employs violence in pursuit of its objectives.”;

(4) by inserting after paragraph (14), as redesignated, the following:

“(15) **SPECIAL WATCH LIST.**—The term ‘Special Watch List’ means the Special Watch List described in section 402(b)(1)(A)(iii).”; and

(5) in paragraph (16), as redesignated—

(A) in subparagraph (A)—

(i) by redesignating clauses (iv) and (v) as clauses (v) and (vi), respectively; and

(ii) by inserting after clause (iii) the following:

“(iv) not professing a particular religion, or any religion.”; and

(B) in subparagraph (B)—

(i) by inserting “conscience, non-theistic views, or” before “religious belief or practice”; and

(ii) by inserting “forcibly compelling non-believers or non-theists to recant their beliefs or to convert,” after “forced religious conversion.”.

**TITLE I—DEPARTMENT OF STATE
 ACTIVITIES**

**SEC. 101. OFFICE ON INTERNATIONAL RELIGIOUS
 FREEDOM; AMBASSADOR AT LARGE
 FOR INTERNATIONAL RELIGIOUS
 FREEDOM.**

(a) **IN GENERAL.**—Section 101 of the International Religious Freedom Act of 1998 (22 U.S.C. 6411) is amended—

(1) in subsection (b), by inserting “, and shall report directly to the Secretary of State” before the period at the end;

(2) in subsection (c)—

(A) in paragraph (1)—

(i) by striking “responsibility” and inserting “responsibilities”;

(ii) by striking “shall be to advance” and inserting the following: “shall be to—

“(A) advance”;

(iii) in subparagraph (A), as redesignated, by striking the period at the end and inserting “; and”;

(iv) by adding at the end the following:

“(B) integrate United States international religious freedom policies and strategies into the foreign policy efforts of the United States.”;

(B) in paragraph (2), by inserting “the principal adviser to” before “the Secretary of State”;

(C) in paragraph (3)—

(i) in subparagraph (A), by striking “and” at the end;

(ii) in subparagraph (B), by striking the period at the end and inserting “; and”;

(iii) by adding at the end the following:

“(C) contacts with nongovernmental organizations that have an impact on the state of religious freedom in their respective societies or regions, or internationally.”;

(D) by redesignating paragraph (4) as paragraph (5); and

(E) by inserting after paragraph (3) the following:

“(4) **COORDINATION RESPONSIBILITIES.**—In order to promote religious freedom as an interest of United States foreign policy, the Ambassador at Large—

“(A) shall coordinate international religious freedom policies across all programs, projects, and activities of the United States; and

“(B) should participate in any interagency processes on issues in which the promotion of international religious freedom policy can advance United States national security interests, including in democracy promotion, stability, security, and development globally.”; and

(3) in subsection (d), by striking “staff for the Office” and all that follows and inserting “appropriate staff for the Office, including full-time equivalent positions and other temporary staff positions needed to compile, edit, and manage the Annual Report under the direct supervision of the Ambassador at Large, and for the conduct of investigations by the Office and for necessary travel to carry out this Act. The Secretary of State should provide the Ambassador at Large with sufficient funding to carry out the duties described in this section, including, as

necessary, representation funds. On the date on which the President's annual budget request is submitted to Congress, the Secretary shall submit an annual report to the appropriate congressional committees that includes a report on staffing levels for the International Religious Freedom Office."

(b) SENSE OF CONGRESS.—It is the sense of Congress that maintaining an adequate staffing level at the Office, such as was in place during fiscal year 2016, is necessary for the Office to carry out its important work.

SEC. 102. ANNUAL REPORT ON INTERNATIONAL RELIGIOUS FREEDOM.

(a) IN GENERAL.—Section 102(b)(1) of the International Religious Freedom Act of 1998 (22 U.S.C. 6412(b)(1)) is amended—

(1) in the matter preceding subparagraph (A), by striking "September 1" and inserting "May 1";

(2) in subparagraph (A)—

(A) in clause (iii), by striking "and" and inserting "as well as the routine denial of visa applications for religious workers;";

(B) by redesignating clause (iv) as clause (vii); and

(C) by inserting after clause (iii) the following:

"(iv) particularly severe violations of religious freedom in that country if such country does not have a functioning government or the government of such country does not control its territory;

"(v) the identification of prisoners, to the extent possible, in that country pursuant to section 108(d);

"(vi) any action taken by the government of that country to censor religious content, communications, or worship activities online, including descriptions of the targeted religious group, the content, communication, or activities censored, and the means used; and";

(3) in subparagraph (B), in the matter preceding clause (i)—

(A) by inserting "persecution of lawyers, politicians, or other human rights advocates seeking to defend the rights of members of religious groups or highlight religious freedom violations, prohibitions on ritual animal slaughter or male infant circumcision," after "entire religions,"; and

(B) by inserting "policies that ban or restrict the public manifestation of religious belief and the peaceful involvement of religious groups or their members in the political life of each such foreign country," after "such groups,";

(4) in subparagraph (C), by striking "A description of United States actions and" and inserting "A detailed description of United States actions, diplomatic and political coordination efforts, and other"; and

(5) in subparagraph (F)(i)—

(A) by striking "section 402(b)(1)" and inserting "section 402(b)(1)(A)(ii)"; and

(B) by adding at the end the following: "Any country in which a non-state actor designated as an entity of particular concern for religious freedom under section 301 of the Frank R. Wolf International Religious Freedom Act is located shall be included in this section of the report."

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the original intent of the International Religious Freedom Act of 1998 (22 U.S.C. 6401 et seq.) was to require annual reports from both the Department of State and the Commission on International Religious Freedom to be delivered each year, during the same calendar year, and with at least 5 months separating these reports, in order to provide updated information for policymakers, Members of Congress, and nongovernmental organizations; and

(2) given that the annual Country Reports on Human Rights Practices no longer con-

tain updated information on religious freedom conditions globally, it is important that the Department of State coordinate with the Commission to fulfill the original intent of the International Religious Freedom Act of 1998.

SEC. 103. TRAINING FOR FOREIGN SERVICE OFFICERS.

(a) AMENDMENT TO FOREIGN SERVICE ACT OF 1980.—Section 708 of the Foreign Service Act of 1980 (22 U.S.C. 4028) is amended—

(1) by redesignating subsections (b) and (c) as subsections (e) and (f), respectively;

(2) in subsection (a)—

(A) by redesignating paragraphs (1), (2), and (3) as subparagraphs (A), (B), and (C), respectively;

(B) by striking "(a) The Secretary of State" and inserting the following:

"(a) HUMAN RIGHTS, RELIGIOUS FREEDOM, AND HUMAN TRAFFICKING TRAINING.—

"(1) IN GENERAL.—The Secretary of State"; and

(C) by adding at the end the following:

"(2) ADDITIONAL TRAINING.—Not later than the one year after the date of the enactment of the Frank R. Wolf International Religious Freedom Act, the Director of the George P. Shultz National Foreign Affairs Training Center shall, consistent with this section, conduct training on religious freedom for all Foreign Service officers, including all entry level officers, all officers prior to departure for posting outside the United States, and all outgoing deputy chiefs of mission and ambassadors. Such training shall be included in each of—

"(A) the A-100 course attended by all Foreign Service officers;

"(B) the courses required of every Foreign Service officer prior to a posting outside the United States, with segments tailored to the particular religious demography, religious freedom conditions, and United States strategies for advancing religious freedom, in each receiving country; and

"(C) the courses required of all outgoing deputy chiefs of mission and ambassadors.";

(3) by inserting after subsection (a) the following:

"(b) DEVELOPMENT OF CURRICULUM.—The Ambassador at Large for International Religious Freedom, in coordination with the Director of the George P. Shultz National Foreign Affairs Training Center and other Federal officials, as appropriate, and in consultation with the United States Commission on International Religious Freedom established under section 201(a) of the International Religious Freedom Act of 1998, shall make recommendations to the Secretary of State regarding the curriculum required under subsection (a)(2) for training United States Foreign Service officers on the scope and strategic value of international religious freedom, how violations of international religious freedom harm fundamental United States interests, how the advancement of international religious freedom can advance such interests, how United States international religious freedom policy should be carried out in practice by United States diplomats and other Foreign Service officers, and the relevance and relationship of international religious freedom to United States defense, diplomacy, development, and public affairs efforts. The Secretary of State should ensure the availability of sufficient resources to develop and implement such curriculum.

"(c) INFORMATION SHARING.—The curriculum and training materials developed pursuant to subsections (a)(2) and (b) shall be shared with the United States Armed Forces and other Federal departments and agencies with personnel who are stationed overseas, as appropriate, to provide training on—

"(1) United States religious freedom policies;

"(2) religious traditions;

"(3) religious engagement strategies;

"(4) religious and cultural issues; and

"(5) efforts to counter violent religious extremism.";

(4) in subsection (e), as redesignated, by striking "The Secretary of State" and inserting "REFUGEES.—The Secretary of State"; and

(5) in subsection (f), as redesignated, by striking "The Secretary of State" and inserting "CHILD SOLDIERS.—The Secretary of State".

(b) REPORT.—Not later than 180 days after the date of the enactment of this Act, the Secretary of State, with the assistance of the Ambassador at Large for International Religious Freedom, and the Director of the Foreign Service Institute, located at the George P. Shultz National Foreign Affairs Training Center, shall submit a report to the Committee on Foreign Affairs of the House of Representatives and the Committee on Foreign Relations of the Senate that contains a plan for undertaking training for Foreign Service officers under section 708 of the Foreign Services Act of 1980, as amended by subsection (a).

SEC. 104. PRISONER LISTS AND ISSUE BRIEFS ON RELIGIOUS FREEDOM CONCERNS.

Section 108 of the International Religious Freedom Act of 1998 (22 U.S.C. 6417) is amended—

(1) in subsection (b), by striking "faith," and inserting "activities, religious freedom advocacy, or efforts to protect and advance the universally recognized right to the freedom of religion.";

(2) in subsection (c), by striking "as appropriate, provide" and insert "make available"; and

(3) by adding at the end the following:

"(d) VICTIMS LIST MAINTAINED BY THE UNITED STATES COMMISSION ON INTERNATIONAL RELIGIOUS FREEDOM.—

"(1) IN GENERAL.—The Commission shall make publicly available, to the extent practicable, online and in official publications, lists of persons it determines are imprisoned or detained, have disappeared, been placed under house arrest, been tortured, or subjected to forced renunciations of faith for their religious activity or religious freedom advocacy by the government of a foreign country that the Commission recommends for designation as a country of particular concern for religious freedom under section 402(b)(1)(A)(ii) or by a non-state actor that the Commission recommends for designation as an entity of particular concern for religious freedom under section 301 of the Frank R. Wolf International Religious Freedom Act and include as much publicly available information as practicable on the conditions and circumstances of such persons.

"(2) DISCRETION.—In compiling lists under paragraph (1), the Commission shall exercise all appropriate discretion, including consideration of the safety and security of, and benefit to, the persons who may be included on the lists and the families of such persons."

**TITLE II—NATIONAL SECURITY COUNCIL
SEC. 201. SPECIAL ADVISER FOR INTERNATIONAL RELIGIOUS FREEDOM.**

The position described in section 101(k) of the National Security Act of 1947 (50 U.S.C. 3021(k)) should assist the Ambassador at Large for International Religious Freedom to coordinate international religious freedom policies and strategies throughout the executive branch and within any interagency policy committee of which the Ambassador at Large is a member.

TITLE III—PRESIDENTIAL ACTIONS**SEC. 301. NON-STATE ACTOR DESIGNATIONS.**

(a) **IN GENERAL.**—The President, concurrent with the annual foreign country review required under section 402(b)(1)(A) of the International Religious Freedom Act of 1998 (22 U.S.C. 6442(b)(1)(A)), shall—

(1) review and identify any non-state actors operating in any such reviewed country or surrounding region that have engaged in particularly severe violations of religious freedom; and

(2) designate, in a manner consistent with such Act, each such non-state actor as an entity of particular concern for religious freedom.

(b) **REPORT.**—Whenever the President designates a non-state actor under subsection (a) as an entity of particular concern for religious freedom, the President, as soon as practicable after the designation is made, shall submit a report to the appropriate congressional committees that describes the reasons for such designation.

(c) **ACTIONS.**—The President should take specific actions, when practicable, to address severe violations of religious freedom of non-state actors that are designated under subsection (a)(2).

(d) **DEPARTMENT OF STATE ANNUAL REPORT.**—The Secretary of State should include information detailing the reasons the President designated a non-state actor as an entity of particular concern for religious freedom under subsection (a) in the Annual Report required under section 102(b)(1) of the International Religious Freedom Act of 1998 (22 U.S.C. 6412(b)(1)).

(e) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) the Secretary of State should work with Congress and the U.S. Commission on International Religious Freedom—

(A) to create new political, financial, and diplomatic tools to address severe violations of religious freedom by non-state actors; and

(B) to update the actions the President can take under section 405 of the International Religious Freedom Act of 1998 (22 U.S.C. 6445);

(2) governments must ultimately be held accountable for the abuses that occur in their territories; and

(3) any actions the President takes after designating a non-state actor as an entity of particular concern should also involve high-level diplomacy with the government of the country in which the non-state actor is operating.

(f) **DETERMINATIONS OF RESPONSIBLE PARTIES.**—In order to appropriately target Presidential actions under the International Religious Freedom Act of 1998 (22 U.S.C. 6401 et seq.), the President, with respect to each non-state actor designated as an entity of particular concern for religious freedom under subsection (a), shall seek to determine, to the extent practicable, the specific officials or members that are responsible for the particularly severe violations of religious freedom engaged in or tolerated by such non-state actor.

(g) **DEFINITIONS.**—In this section, the terms “appropriate congressional committees”, “non-state actor”, and “particularly severe violations of religious freedom” have the meanings given such terms in section 3 of the International Religious Freedom Act of 1998 (22 U.S.C. 6402), as amended by section 3 of this Act.

SEC. 302. PRESIDENTIAL ACTIONS IN RESPONSE TO PARTICULARLY SEVERE VIOLATIONS OF RELIGIOUS FREEDOM.

Section 402 of the International Religious Freedom Act of 1998 (22 U.S.C. 6442) is amended—

(1) in subsection (b)—

(A) in paragraph (1)—

(i) by amending subparagraph (A) to read as follows:

“(A) **IN GENERAL.**—Not later than 90 days after the date on which each Annual Report is submitted under section 102(b), the President shall—

“(i) review the status of religious freedom in each foreign country to determine whether the government of that country has engaged in or tolerated particularly severe violations of religious freedom in each such country during the preceding 12 months or longer;

“(ii) designate each country the government of which has engaged in or tolerated violations described in clause (i) as a country of particular concern for religious freedom; and

“(iii) designate each country that engaged in or tolerated severe violations of religious freedom during the previous year, but does not meet, in the opinion of the President at the time of publication of the Annual Report, all of the criteria described in section 3(15) for designation under clause (ii) as being placed on a ‘Special Watch List.’”; and

(ii) in subparagraph (C), by striking “prior to September 1 of the respective year” and inserting “before the date on which each Annual Report is submitted under section 102(b)”;

(B) by amending paragraph (3) to read as follows:

“(3) **CONGRESSIONAL NOTIFICATION.**—

“(A) **IN GENERAL.**—Whenever the President designates a country as a country of particular concern for religious freedom under paragraph (1)(A)(ii), the President, not later than 90 days after such designation, shall submit to the appropriate congressional committees—

“(i) the designation of the country, signed by the President;

“(ii) the identification, if any, of responsible parties determined under paragraph (2); and

“(iii) a description of the actions taken under subsection (c), the purposes of the actions taken, and the effectiveness of the actions taken.

“(B) **REMOVAL OF DESIGNATION.**—A country that is designated as a country of particular concern for religious freedom under paragraph (1)(A)(ii) shall retain such designation until the President determines and reports to the appropriate congressional committees that the country should no longer be so designated.”; and

(C) by adding at the end the following:

“(4) **EFFECT ON DESIGNATION AS COUNTRY OF PARTICULAR CONCERN.**—The presence or absence of a country from the Special Watch List in any given year shall not preclude the designation of such country as a country of particular concern for religious freedom under paragraph (1)(A)(ii) in any such year.”; and

(2) in subsection (c)(5), by striking “the President must designate the specific sanction or sanctions which he determines satisfy the requirements of this subsection.” and inserting “the President shall designate the specific sanction or sanctions that the President determines satisfy the requirements under this subsection and include a description of the impact of such sanction or sanctions on each country.”.

SEC. 303. REPORT TO CONGRESS.

Section 404(a)(4)(A) of the International Religious Freedom Act of 1998 (22 U.S.C. 6444(a)(4)(A)) is amended—

(1) in clause (ii), by striking “and” at the end;

(2) in clause (iii), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(iv) the impact on the advancement of United States interests in democracy, human rights, and security, and a description of policy tools being applied in the country, including programs that target democratic stability, economic growth, and counterterrorism.”.

SEC. 304. PRESIDENTIAL WAIVER.

Section 407 of the International Religious Freedom Act of 1998 (22 U.S.C. 6447) is amended—

(1) in subsection (a)—

(A) by striking “subsection (b)” and inserting “subsection (c)”;

(B) by inserting “, for a single, 180-day period,” after “may waive”;

(C) by striking paragraph (1); and

(D) by redesignating paragraphs (2) and (3) as paragraphs (1) and (2), respectively;

(2) by redesignating subsection (b) as subsection (c);

(3) by inserting after subsection (a) the following:

“(b) **ADDITIONAL AUTHORITY.**—Subject to subsection (c), the President may waive, for any additional specified period of time after the 180-day period described in subsection (a), the application of any of the actions described in paragraphs (9) through (15) of section 405(a) (or a commensurate substitute action) with respect to a country, if the President determines and reports to the appropriate congressional committees that—

“(1) the respective foreign government has ceased the violations giving rise to the Presidential action; or

“(2) the important national interest of the United States requires the exercise of such waiver authority.”;

(4) in subsection (c), as redesignated, by inserting “or (b)” after “subsection (a)”;

(5) by adding at the end the following:

“(d) **SENSE OF CONGRESS.**—It is the sense of Congress that—

“(1) ongoing and persistent waivers of the application of any of the actions described in paragraphs (9) through (15) of section 405(a) (or commensurate substitute action) with respect to a country do not fulfill the purposes of this Act; and

“(2) because the promotion of religious freedom is an important interest of United States foreign policy, the President, the Secretary of State, and other executive branch officials, in consultation with Congress, should seek to find ways to address existing violations, on a case-by-case basis, through the actions described in section 405 or other commensurate substitute action.”.

SEC. 305. PUBLICATION IN THE FEDERAL REGISTER.

Section 408(a)(1) of the International Religious Freedom Act of 1998 (22 U.S.C. 6448(a)(1)) is amended by adding at the end the following: “Any designation of a non-state actor as an entity of particular concern for religious freedom under section 301 of the Frank R. Wolf International Religious Freedom Act and, if applicable and to the extent practicable, the identities of individuals determined to be responsible for violations described in subsection (f) of such section.”.

TITLE IV—PROMOTION OF RELIGIOUS FREEDOM**SEC. 401. ASSISTANCE FOR PROMOTING RELIGIOUS FREEDOM.**

(a) **AVAILABILITY OF ASSISTANCE.**—It is the sense of Congress that for each fiscal year that begins on or after the date of the enactment of this Act, the President should request sufficient appropriations from Congress to support—

(1) the vigorous promotion of international religious freedom and for projects to advance United States interests in the protection and advancement of international religious freedom, in particular, through grants to groups that—

(A) are capable of developing legal protections or promoting cultural and societal understanding of international norms of religious freedom;

(B) seek to address and mitigate religiously motivated and sectarian violence and combat violent extremism; or

(C) seek to strengthen investigations, reporting, and monitoring of religious freedom violations, including genocide perpetrated against religious minorities; and

(2) the establishment of an effective Religious Freedom Defense Fund, to be administered by the Ambassador at Large for International Religious Freedom, to provide grants for—

(A) victims of religious freedom abuses and their families to cover legal and other expenses that may arise from detention, imprisonment, torture, fines, and other restrictions; and

(B) projects to help create and support training of a new generation of defenders of religious freedom, including legal and political advocates, and civil society projects which seek to create advocacy networks, strengthen legal representation, train and educate new religious freedom defenders, and build the capacity of religious communities and rights defenders to protect against religious freedom violations, mitigate societal or sectarian violence, or minimize legal or other restrictions of the right to freedom of religion.

(b) PREFERENCE.—It is the sense of Congress that, in providing grants under subsection (a), the Ambassador at Large for International Religious Freedom should, as appropriate, give preference to projects targeting religious freedom violations in countries—

(1) designated as countries of particular concern for religious freedom under section 402(b)(1) of the International Religious Freedom Act of 1998 (22 U.S.C. 6442(b)(1)); or

(2) included on the Special Watch List described in section 402(b)(1)(A)(iii) of the International Religious Freedom Act of 1998, as added by section 302(1)(A)(i) of this Act.

(c) ADMINISTRATION AND CONSULTATIONS.—

(1) ADMINISTRATION.—Amounts made available under subsection (a) shall be administered by the Ambassador at Large for International Religious Freedom.

(2) CONSULTATIONS.—In developing priorities and policies for providing grants authorized under subsection (a), including programming and policy, the Ambassador at Large for International Religious Freedom should consult with other Federal agencies, including the United States Commission on International Religious Freedom and, as appropriate, nongovernmental organizations.

TITLE V—DESIGNATED PERSONS LIST FOR PARTICULARLY SEVERE VIOLATIONS OF RELIGIOUS FREEDOM

SEC. 501. DESIGNATED PERSONS LIST FOR PARTICULARLY SEVERE VIOLATIONS OF RELIGIOUS FREEDOM.

Title VI of the International Religious Freedom Act of 1998 (22 U.S.C. 6471 et seq.) is amended—

(1) by redesignating section 605 as section 606; and

(2) by inserting after section 604 the following:

“SEC. 605. DESIGNATED PERSONS LIST FOR PARTICULARLY SEVERE VIOLATIONS OF RELIGIOUS FREEDOM.

“(a) LIST.—

“(1) IN GENERAL.—The Secretary of State, in coordination with the Ambassador at Large and in consultation with relevant government and nongovernment experts, shall establish and maintain a list of foreign individuals to whom a consular post has denied a visa on the grounds of particularly severe

violations of religious freedom under section 212(a)(2)(G) of the Immigration and Nationality Act (8 U.S.C. 1182(a)(2)(G)), or who are subject to financial sanctions or other measures for particularly severe violations of freedom religion.

“(2) REFERENCE.—The list required under paragraph (1) shall be known as the ‘Designated Persons List for Particularly Severe Violations of Religious Freedom’.

“(b) REPORT.—

“(1) IN GENERAL.—The Secretary of State shall submit a report to the appropriate congressional committees that contains the list required under subsection (a), including, with respect to each foreign individual on the list—

“(A) the name of the individual and a description of the particularly severe violation of religious freedom committed by the individual;

“(B) the name of the country or other location in which such violation took place; and

“(C) a description of the actions taken pursuant to this Act or any other Act or Executive order in response to such violation.

“(2) SUBMISSION AND UPDATES.—The Secretary of State shall submit to the appropriate congressional committees—

“(A) the initial report required under paragraph (1) not later than 180 days after the date of the enactment of the Frank R. Wolf International Religious Freedom Act; and

“(B) updates to the report every 180 days thereafter and as new information becomes available.

“(3) FORM.—The report required under paragraph (1) should be submitted in unclassified form but may contain a classified annex.

“(4) DEFINITION.—In this subsection, the term ‘appropriate congressional committees’ means—

“(A) the Committee on Foreign Relations of the Senate;

“(B) the Committee on Appropriations of the Senate;

“(C) the Committee on Banking, Housing, and Urban Affairs of the Senate;

“(D) the Committee on Foreign Affairs of the House of Representatives;

“(E) the Committee on Appropriations of the House of Representatives; and

“(F) the Committee on Financial Services of the House of Representatives.”.

TITLE VI—MISCELLANEOUS PROVISIONS

SEC. 601. MISCELLANEOUS PROVISIONS.

Title VII of the International Religious Freedom Act of 1998 (22 U.S.C. 6481 et seq.) is amended by adding at the end the following:

“SEC. 702. VOLUNTARY CODES OF CONDUCT FOR UNITED STATES INSTITUTIONS OF HIGHER EDUCATION OUTSIDE THE UNITED STATES.

“(a) FINDING.—Congress recognizes the enduring importance of United States institutions of higher education worldwide—

“(1) for their potential for shaping positive leadership and new educational models in host countries; and

“(2) for their emphasis on teaching universally recognized rights of free inquiry and academic freedom.

“(b) SENSE OF CONGRESS.—It is the sense of Congress that United States institutions of higher education operating campuses outside the United States or establishing any educational entities with foreign governments, particularly with or in countries the governments of which engage in or tolerate severe violations of religious freedom as identified in the Annual Report, should seek to adopt a voluntary code of conduct for operating in such countries that should—

“(1) uphold the right of freedom of religion of their employees and students, including the right to manifest that religion peacefully as protected in international law;

“(2) ensure that the religious views and peaceful practice of religion in no way affect, or be allowed to affect, the status of a worker’s or faculty member’s employment or a student’s enrollment; and

“(3) make every effort in all negotiations, contracts, or memoranda of understanding engaged in or constructed with a foreign government to protect academic freedom and the rights enshrined in the United Nations Declaration of Human Rights.

“SEC. 703. SENSE OF CONGRESS REGARDING NATIONAL SECURITY STRATEGY TO PROMOTE RELIGIOUS FREEDOM THROUGH UNITED STATES FOREIGN POLICY.

“It is the sense of Congress that the annual national security strategy report of the President required under section 108 of the National Security Act of 1947 (50 U.S.C. 3043)—

“(1) should promote international religious freedom as a foreign policy and national security priority; and

“(2) should articulate that promotion of the right to freedom of religion is a strategy that—

“(A) protects other, related human rights, and advances democracy outside the United States; and

“(B) makes clear its importance to United States foreign policy goals of stability, security, development, and diplomacy;

“(3) should be a guide for the strategies and activities of relevant Federal agencies; and

“(4) should inform the Department of Defense quadrennial defense review under section 118 of title 10, United States Code, and the Department of State Quadrennial Diplomacy and Development Review.”.

SEC. 602. CLERICAL AMENDMENTS.

The table of contents of the International Religious Freedom Act of 1998 (22 U.S.C. 6401 note) is amended—

(1) by striking the item relating to section 605 and inserting the following:

“Sec. 606. Studies on the effect of expedited removal provisions on asylum claims.”;

(2) by inserting after the item relating to section 604 the following:

“Sec. 605. Designated Persons List for Particularly Severe Violations of Religious Freedom.”;

and

(3) by adding at the end the following:

“Sec. 702. Voluntary codes of conduct for United States institutions of higher education operating outside the United States.

“Sec. 703. Sense of Congress regarding national security strategy to promote religious freedom through United States foreign policy.”.

SA 5176. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to amendment SA 5175 proposed by Mr. PORTMAN (for Mr. CORKER) to the bill H.R. 1150, to amend the International Religious Freedom Act of 1998 to improve the ability of the United States to advance religious freedom globally through enhanced diplomacy, training, counterterrorism, and foreign assistance efforts, and through stronger and more flexible political responses to religious freedom violations and violent extremism worldwide, and for other purposes; as follows:

Beginning on page 13, strike line 12 and all that follows through page 16, line 20, and insert the following:

(a) AMENDMENTS TO FOREIGN SERVICE ACT OF 1980.—Section 708 of the Foreign Service Act of 1980 (22 U.S.C. 4028) is amended—

(1) in subsection (a)—

(A) by redesignating paragraphs (1), (2), and (3) as subparagraphs (A), (B), and (C), respectively;

(B) by striking “(a) The Secretary of State” and inserting the following:

“(a) HUMAN RIGHTS, RELIGIOUS FREEDOM, AND HUMAN TRAFFICKING TRAINING.—

“(1) IN GENERAL.—The Secretary of State”;

and

(C) by adding at the end the following:

“(2) RELIGIOUS FREEDOM TRAINING.—

“(A) IN GENERAL.—In carrying out the training required under paragraph (1)(B), the Director of the George P. Shultz National Foreign Affairs Training Center shall, not later than the one year after the date of the enactment of the Frank R. Wolf International Religious Freedom Act, conduct training on religious freedom for all Foreign Service officers, including all entry level officers, all officers prior to departure for posting outside the United States, and all outgoing deputy chiefs of mission and ambassadors. Such training shall be included in—

“(i) the A-100 course attended by all Foreign Service officers;

“(ii) the courses required of every Foreign Service officer prior to a posting outside the United States, with segments tailored to the particular religious demography, religious freedom conditions, and United States strategies for advancing religious freedom, in each receiving country; and

“(iii) the courses required of all outgoing deputy chiefs of mission and ambassadors.

“(B) DEVELOPMENT OF CURRICULUM.—In carrying out the training required under paragraph (1)(B), the Ambassador at Large for International Religious Freedom, in coordination with the Director of the George P. Shultz National Foreign Affairs Training Center and other Federal officials, as appropriate, and in consultation with the United States Commission on International Religious Freedom established under section 201(a) of the International Religious Freedom Act of 1998 (22 U.S.C. 6431(a)), shall make recommendations to the Secretary of State regarding a curriculum for the training of United States Foreign Service officers under paragraph (1)(B) on the scope and strategic value of international religious freedom, how violations of international religious freedom harm fundamental United States interests, how the advancement of international religious freedom can advance such interests, how United States international religious freedom policy should be carried out in practice by United States diplomats and other Foreign Service officers, and the relevance and relationship of international religious freedom to United States defense, diplomacy, development, and public affairs efforts. The Secretary of State should ensure the availability of sufficient resources to develop and implement such curriculum.

“(C) INFORMATION SHARING.—The curriculum and training materials developed under this paragraph shall be shared with the United States Armed Forces and other Federal departments and agencies with personnel who are stationed overseas, as appropriate, to provide training on—

“(i) United States religious freedom policies;

“(ii) religious traditions;

“(iii) religious engagement strategies;

“(iv) religious and cultural issues; and

“(v) efforts to counter violent religious extremism.”;

(2) in subsection (b), by striking “The Secretary of State” and inserting “REFUGEES.—The Secretary of State”;

(3) in subsection (c), by striking “The Secretary of State” and inserting “CHILD SOLDIERS.—The Secretary of State”.

SA 5177. Mr. PORTMAN (for Mr. CORKER) proposed an amendment to the bill H.R. 4939, to increase engagement with the governments of the Caribbean region, the Caribbean diaspora community in the United States, and the private sector and civil society in both the United States and the Caribbean, and for other purposes; as follows:

On page 11, beginning on line 3, strike “with respect to” and all that follows through line 5 and insert “with respect to human rights and democracy”.

SA 5178. Mr. PORTMAN (for Mr. JOHNSON) proposed an amendment to the bill H.R. 6302, to provide an increase in premium pay for protective services during 2016, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Overtime Pay for Protective Services Act of 2016”.

SEC. 2. PREMIUM PAY EXCEPTION IN 2016 FOR PROTECTIVE SERVICES.

(a) DEFINITION.—In this section, the term “covered employee” means any officer, employee, or agent employed by the United States Secret Service who performs protective services for an individual or event protected by the United States Secret Service during 2016.

(b) EXCEPTION TO THE LIMITATION ON PREMIUM PAY FOR PROTECTIVE SERVICES.—

(1) IN GENERAL.—Notwithstanding any other provision of law, during 2016, section 5547(a) of title 5, United States Code, shall not apply to any covered employee to the extent that its application would prevent a covered employee from receiving premium pay, as provided under the amendment made by paragraph (2).

(2) TECHNICAL AND CONFORMING AMENDMENT.—Section 118 of the Treasury and General Government Appropriations Act, 2001 (as enacted into law by section 1(3) of Public Law 106-554; 114 Stat. 2763A-134) is amended, in the first sentence, by inserting “or, if the employee qualifies for an exception to such limitation under section 2(b)(1) of the Overtime Pay for Protective Services Act of 2016, to the extent that such aggregate amount would exceed the rate of basic pay payable for a position at level II of the Executive Schedule under section 5313 of title 5, United States Code” after “of that limitation”.

(c) TREATMENT OF ADDITIONAL PAY.—If subsection (b) results in the payment of additional premium pay to a covered employee of a type that is normally creditable as basic pay for retirement or any other purpose, that additional pay shall not—

(1) be considered to be basic pay of the covered employee for any purpose; or

(2) be used in computing a lump-sum payment to the covered employee for accumulated and accrued annual leave under section 5551 or section 5552 of title 5, United States Code.

(d) AGGREGATE LIMIT.—With respect to the application of section 5307 of title 5, United States Code, the payment of any additional premium pay to a covered employee as a result of subsection (b) shall not be counted as part of the aggregate compensation of the covered employee.

(e) EFFECTIVE DATE.—This section and the amendments made by this section shall take effect as if enacted on December 31, 2015.

SA 5179. Mr. PORTMAN (for Mr. JOHNSON) proposed an amendment to the bill H.R. 6302, to provide an increase in premium pay for protective services during 2016, and for other purposes; as follows:

Amend the title to read as follows: “A bill to provide an increase in premium pay for protective services during 2016, and for other purposes.”.

SA 5180. Mr. PORTMAN (for Mr. CRUZ (for himself and Mr. NELSON)) proposed an amendment to the bill S. 3346, to authorize the programs of the National Aeronautics and Space Administration, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “National Aeronautics and Space Administration Transition Authorization Act of 2016”.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

TITLE I—AUTHORIZATION OF APPROPRIATIONS

Sec. 101. Fiscal year 2017.

TITLE II—SUSTAINING NATIONAL SPACE COMMITMENTS

Sec. 201. Sense of Congress on sustaining national space commitments.

Sec. 202. Findings.

TITLE III—MAXIMIZING UTILIZATION OF THE ISS AND LOW-EARTH ORBIT

Sec. 301. Operation of the ISS.

Sec. 302. Transportation to ISS.

Sec. 303. ISS transition plan.

Sec. 304. Space communications.

Sec. 305. Indemnification; NASA launch services and reentry services.

TITLE IV—ADVANCING HUMAN DEEP SPACE EXPLORATION

Subtitle A—Human Space Flight and Exploration Goals and Objectives

Sec. 411. Human space flight and exploration long-term goals.

Sec. 412. Key objectives.

Sec. 413. Vision for space exploration.

Sec. 414. Stepping stone approach to exploration.

Sec. 415. Update of exploration plan and programs.

Sec. 416. Repeals.

Sec. 417. Assured access to space.

Subtitle B—Assuring Core Capabilities for Exploration

Sec. 421. Space Launch System, Orion, and Exploration Ground Systems.

Subtitle C—Journey to Mars

Sec. 431. Findings on human space exploration.

Sec. 432. Human exploration roadmap.

Sec. 433. Advanced space suit capability.

Sec. 434. Asteroid robotic redirect mission.

Sec. 435. Mars 2033 report.

Subtitle D—TREAT Astronauts Act

Sec. 441. Short title.

Sec. 442. Findings; sense of Congress.

Sec. 443. Medical monitoring and research relating to human space flight.

TITLE V—ADVANCING SPACE SCIENCE

Sec. 501. Maintaining a balanced space science portfolio.

Sec. 502. Planetary science.

Sec. 503. James Webb Space Telescope.

Sec. 504. Wide-Field Infrared Survey Telescope.

- Sec. 505. Mars 2020 rover.
- Sec. 506. Europa.
- Sec. 507. Congressional declaration of policy and purpose.
- Sec. 508. Extrasolar planet exploration strategy.
- Sec. 509. Astrobiology strategy.
- Sec. 510. Astrobiology public-private partnerships.
- Sec. 511. Near-earth objects.
- Sec. 512. Near-Earth objects public-private partnerships.
- Sec. 513. Assessment of science mission extensions.
- Sec. 514. Stratospheric observatory for infrared astronomy.
- Sec. 515. Radioisotope power systems.
- Sec. 516. Assessment of Mars architecture.
- Sec. 517. Collaboration.

TITLE VI—AERONAUTICS

- Sec. 601. Sense of Congress on aeronautics.
- Sec. 602. Transformative aeronautics research.
- Sec. 603. Hypersonic research.
- Sec. 604. Supersonic research.
- Sec. 605. Rotorcraft research.

TITLE VII—SPACE TECHNOLOGY

- Sec. 701. Space technology infusion.
- Sec. 702. Space technology program.

TITLE VIII—MAXIMIZING EFFICIENCY

- Subtitle A—Agency Information Technology and Cybersecurity
- Sec. 811. Information technology governance.
- Sec. 812. Information technology strategic plan.
- Sec. 813. Cybersecurity.
- Sec. 814. Security management of foreign national access.
- Sec. 815. Cybersecurity of web applications.

Subtitle B—Collaboration Among Mission Directorates and Other Matters

- Sec. 821. Collaboration among mission directorates.
- Sec. 822. NASA launch capabilities collaboration.
- Sec. 823. Detection and avoidance of counterfeit parts.
- Sec. 824. Education and outreach.
- Sec. 825. Leveraging commercial satellite servicing capabilities across mission directorates.
- Sec. 826. Flight opportunities.
- Sec. 827. Sense of Congress on small class launch missions.
- Sec. 828. Baseline and cost controls.
- Sec. 829. Commercial technology transfer program.
- Sec. 830. Avoiding organizational conflicts of interest in major administration acquisition programs.
- Sec. 831. Protection of Apollo landing sites.
- Sec. 832. NASA lease of non-excess property.
- Sec. 833. Termination liability.
- Sec. 834. Independent reviews.
- Sec. 835. NASA Advisory Council.
- Sec. 836. Cost estimation.
- Sec. 837. Facilities and infrastructure.
- Sec. 838. Human space flight accident investigations.
- Sec. 839. Orbital debris.
- Sec. 840. Review of orbital debris removal concepts.

SEC. 2. DEFINITIONS.

In this Act:

- (1) **ADMINISTRATION.**—The term “Administration” means the National Aeronautics and Space Administration.
- (2) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the National Aeronautics and Space Administration.
- (3) **APPROPRIATE COMMITTEES OF CONGRESS.**—The term “appropriate committees of Congress” means—

(A) the Committee on Commerce, Science, and Transportation of the Senate; and

(B) the Committee on Science, Space, and Technology of the House of Representatives.

(4) **CIS-LUNAR SPACE.**—The term “cis-lunar space” means the region of space from the Earth out to and including the region around the surface of the Moon.

(5) **DEEP SPACE.**—The term “deep space” means the region of space beyond low-Earth orbit, to include cis-lunar space.

(6) **GOVERNMENT ASTRONAUT.**—The term “government astronaut” has the meaning given the term in section 50902 of title 51, United States Code.

(7) **ISS.**—The term “ISS” means the International Space Station.

(8) **ISS MANAGEMENT ENTITY.**—The term “ISS management entity” means the organization with which the Administrator has a cooperative agreement under section 504(a) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18354(a)).

(9) **NASA.**—The term “NASA” means the National Aeronautics and Space Administration.

(10) **ORION.**—The term “Orion” means the multipurpose crew vehicle described under section 303 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18323).

(11) **SPACE LAUNCH SYSTEM.**—The term “Space Launch System” has the meaning given the term in section 3 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18302).

(12) **UNITED STATES GOVERNMENT ASTRONAUT.**—The term “United States government astronaut” has the meaning given the term “government astronaut” in section 50902 of title 51, United States Code, except it does not include an individual who is an international partner astronaut.

TITLE I—AUTHORIZATION OF APPROPRIATIONS

SEC. 101. FISCAL YEAR 2017.

There are authorized to be appropriated to NASA for fiscal year 2017, \$19,508,000,000, as follows:

- (1) For Exploration, \$4,330,000,000.
- (2) For Space Operations, \$5,023,000,000.
- (3) For Science, \$5,500,000,000.
- (4) For Aeronautics, \$640,000,000.
- (5) For Space Technology, \$686,000,000.
- (6) For Education, \$115,000,000.
- (7) For Safety, Security, and Mission Services, \$2,788,600,000.
- (8) For Construction and Environmental Compliance and Restoration, \$388,000,000.
- (9) For Inspector General, \$37,400,000.

TITLE II—SUSTAINING NATIONAL SPACE COMMITMENTS

SEC. 201. SENSE OF CONGRESS ON SUSTAINING NATIONAL SPACE COMMITMENTS.

It is the sense of Congress that—

- (1) honoring current national space commitments and building upon investments in space across successive Administrations demonstrates clear continuity of purpose by the United States, in collaboration with its international, academic, and industry partners, to extend humanity’s reach into deep space, including cis-lunar space, the Moon, the surface and moons of Mars, and beyond;
- (2) NASA leaders can best leverage investments in the United States space program by continuing to develop a balanced portfolio for space exploration and space science, including continued development of the Space Launch System, Orion, Commercial Crew Program, space and planetary science missions such as the James Webb Space Telescope, Wide-Field Infrared Survey Telescope, and Europa mission, and ongoing operations of the ISS and Commercial Resupply Services Program;

(3) a national, government-led space program that builds on current science and exploration programs, advances human knowledge and capabilities, and opens the frontier beyond Earth for ourselves, commercial enterprise, and science, and with our international partners, is of critical importance to our national destiny and to a future guided by United States values and freedoms;

(4) continuity of purpose and effective execution of core NASA programs are essential for efficient use of resources in pursuit of timely and tangible accomplishments;

(5) NASA could improve its efficiency and effectiveness by working with industry to streamline existing programs and requirements, procurement practices, institutional footprint, and bureaucracy while preserving effective program oversight, accountability, and safety;

(6) it is imperative that the United States maintain and enhance its leadership in space exploration and space science, and continue to expand freedom and economic opportunities in space for all Americans that are consistent with the Constitution of the United States; and

(7) NASA should be a multi-mission space agency, and should have a balanced and robust set of core missions in space science, space technology, aeronautics, human space flight and exploration, and education.

SEC. 202. FINDINGS.

Congress makes the following findings:

(1) Returns on the Nation’s investments in science, technology, and exploration accrue over decades-long timeframes, and a disruption of such investments could prevent returns from being fully realized.

(2) Past challenges to the continuity of such investments, particularly threats regarding the cancellation of authorized programs with bipartisan and bicameral support, have disrupted completion of major space systems thereby—

(A) impeding planning and pursuit of national objectives in space science and human space exploration;

(B) placing such investments in space science and space exploration at risk; and

(C) degrading the aerospace industrial base.

(3) The National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109-155; 119 Stat. 2895), National Aeronautics and Space Administration Authorization Act of 2008 (Public Law 110-422; 122 Stat. 4779), and National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18301 et seq.) reflect a broad, bipartisan agreement on the path forward for NASA’s core missions in science, space technology, aeronautics, human space flight and exploration, and education, that serves as the foundation for the policy updates by this Act.

(4) Sufficient investment and maximum utilization of the ISS and ISS National Laboratory with our international and industry partners is—

(A) consistent with the goals and objectives of the United States space program; and

(B) imperative to continuing United States global leadership in human space exploration, science, research, technology development, and education opportunities that contribute to development of the next generation of American scientists, engineers, and leaders, and to creating the opportunity for economic development of low-Earth orbit.

(5) NASA has made measurable progress in the development and testing of the Space Launch System and Orion exploration systems with the near-term objectives of the initial integrated test flight and launch in

2018, a human mission in 2021, and continued missions with an annual cadence in cis-lunar space and eventually to the surface of Mars.

(6) The Commercial Crew Program has made measurable progress toward reestablishing the capability to launch United States government astronauts from United States soil into low-Earth orbit by the end of 2018.

(7) The Aerospace Safety Advisory Panel, in its 2015 Annual Report, urged continuity of purpose noting concerns over the potential for cost overruns and schedule slips that could accompany significant changes to core NASA programs.

TITLE III—MAXIMIZING UTILIZATION OF THE ISS AND LOW-EARTH ORBIT

SEC. 301. OPERATION OF THE ISS.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) after 15 years of continuous human presence in low-Earth orbit, the ISS continues to overcome challenges and operate safely;

(2) the ISS is a unique testbed for future space exploration systems development, including long-duration space travel;

(3) the expansion of partnerships, scientific research, and commercial applications of the ISS is essential to ensuring the greatest return on investments made by the United States and its international space partners in the development, assembly, and operations of that unique facility;

(4) utilization of the ISS will sustain United States leadership and progress in human space exploration by—

(A) facilitating the commercialization and economic development of low-Earth orbit;

(B) serving as a testbed for technologies and a platform for scientific research and development; and

(C) serving as an orbital facility enabling research upon—

(i) the health, well-being, and performance of humans in space; and

(ii) the development of in-space systems enabling human space exploration beyond low-Earth orbit; and

(5) the ISS provides a platform for fundamental, microgravity, discovery-based space life and physical sciences research that is critical for enabling space exploration, protecting humans in space, increasing pathways for commercial space development that depend on advances in basic research, and contributes to advancing science, technology, engineering, and mathematics research.

(b) OBJECTIVES.—The primary objectives of the ISS program shall be—

(1) to achieve the long term goal and objectives under section 202 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18312); and

(2) to pursue a research program that advances knowledge and provides other benefits to the Nation.

(c) CONTINUATION OF THE ISS.—Section 501 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18351) is amended to read as follows:

“SEC. 501. CONTINUATION OF THE INTERNATIONAL SPACE STATION.

“(a) POLICY OF THE UNITED STATES.—It shall be the policy of the United States, in consultation with its international partners in the ISS program, to support full and complete utilization of the ISS through at least 2024.

“(b) NASA ACTION.—In furtherance of the policy set forth in subsection (a), NASA shall—

“(1) pursue international, commercial, and intragovernmental means to maximize ISS logistics supply, maintenance, and operational capabilities, reduce risks to ISS sys-

tems sustainability, and offset and minimize United States operations costs relating to the ISS;

“(2) utilize, to the extent practicable, the ISS for the development of capabilities and technologies needed for the future of human space exploration beyond low-Earth orbit; and

“(3) utilize, if practical and cost effective, the ISS for Science Mission Directorate missions in low-Earth orbit.”

SEC. 302. TRANSPORTATION TO ISS.

(a) FINDINGS.—Congress finds that reliance on foreign carriers for United States crew transfer is unacceptable, and the Nation’s human space flight program must acquire the capability to launch United States government astronauts on vehicles using United States rockets from United States soil as soon as is safe, reliable, and affordable to do so.

(b) SENSE OF CONGRESS ON COMMERCIAL CREW PROGRAM AND COMMERCIAL RESUPPLY SERVICES PROGRAM.—It is the sense of Congress that—

(1) once developed and certified to meet the Administration’s safety and reliability requirements, United States commercially provided crew transportation systems offer the potential of serving as the primary means of transporting United States government astronauts and international partner astronauts to and from the ISS and serving as ISS crew rescue vehicles;

(2) the budgetary assumptions used by the Administration in its planning for the Commercial Crew Program have consistently assumed significantly higher funding levels than have been authorized and appropriated by Congress;

(3) credibility in the Administration’s budgetary estimates for the Commercial Crew Program can be enhanced by an independently developed cost estimate;

(4) such credibility in budgetary estimates is an important factor in understanding program risk;

(5) United States access to low-Earth orbit is paramount to the continued success of the ISS and ISS National Laboratory;

(6) a stable and successful Commercial Resupply Services Program and Commercial Crew Program are critical to ensuring timely provisioning of the ISS and to reestablishing the capability to launch United States government astronauts from United States soil into orbit, ending reliance upon Russian transport of United States government astronauts to the ISS which has not been possible since the retirement of the Space Shuttle program in 2011;

(7) NASA should build upon the success of the Commercial Orbital Transportation Services Program and Commercial Resupply Services Program that have allowed private sector companies to partner with NASA to deliver cargo and scientific experiments to the ISS since 2012;

(8) the 21st Century Launch Complex Program has enabled significant modernization and infrastructure improvements at launch sites across the United States to support NASA’s Commercial Resupply Services Program and other civil and commercial space flight missions; and

(9) the 21st Century Launch Complex Program should be continued in a manner that leverages State and private investments to achieve the goals of that program.

(c) REAFFIRMATION.—Congress reaffirms—

(1) its commitment to the use of a commercially developed, private sector launch and delivery system to the ISS for crew missions as expressed in the National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109-155; 119 Stat. 2895), the National Aeronautics and Space Administra-

tion Authorization Act of 2008 (Public Law 110-422; 122 Stat. 4779), and the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18301 et seq.); and

(2) the requirement under section 50111(b)(1)(A) of title 51, United States Code, that the Administration shall make use of United States commercially provided ISS crew transfer and crew rescue services to the maximum extent practicable.

(d) USE OF NON-UNITED STATES HUMAN SPACE FLIGHT TRANSPORTATION CAPABILITIES.—Section 201(a) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18311(a)) is amended to read as follows:

“(a) USE OF NON-UNITED STATES HUMAN SPACE FLIGHT TRANSPORTATION SERVICES.—

“(1) IN GENERAL.—The Federal Government may not acquire human space flight transportation services from a foreign entity unless—

“(A) no United States Government-operated human space flight capability is available;

“(B) no United States commercial provider is available; and

“(C) it is a qualified foreign entity.

“(2) DEFINITIONS.—In this subsection:

“(A) COMMERCIAL PROVIDER.—The term ‘commercial provider’ means any person providing human space flight transportation services, primary control of which is held by persons other than the Federal Government, a State or local government, or a foreign government.

“(B) QUALIFIED FOREIGN ENTITY.—The term ‘qualified foreign entity’ means a foreign entity that is in compliance with all applicable safety standards and is not prohibited from providing space transportation services under other law.

“(C) UNITED STATES COMMERCIAL PROVIDER.—The term ‘United States commercial provider’ means a commercial provider, organized under the laws of the United States or of a State, that is more than 50 percent owned by United States nationals.

“(3) ARRANGEMENTS WITH FOREIGN ENTITIES.—Nothing in this subsection shall prevent the Administrator from negotiating or entering into human space flight transportation arrangements with foreign entities to ensure safety of flight and continued ISS operations.”

(e) COMMERCIAL CREW PROGRAM.—

(1) SAFETY.—

(A) IN GENERAL.—The Administrator shall protect the safety of government astronauts by ensuring that each commercially provided transportation system under this subsection meets all applicable human rating requirements in accordance with section 403(b)(1) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18342(b)(1)).

(B) LESSONS LEARNED.—Consistent with the findings and recommendations of the Columbia Accident Investigation Board, the Administration shall ensure that safety and the minimization of the probability of loss of crew are the critical priorities of the Commercial Crew Program.

(2) COST MINIMIZATION.—The Administrator shall strive through the competitive selection process to minimize the life cycle cost to the Administration through the planned period of commercially provided crew transportation services.

(f) COMMERCIAL CARGO PROGRAM.—Section 401 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18341) is amended by striking ‘Commercial Orbital Transportation Services’ and inserting ‘Commercial Resupply Services’.

(g) **COMPETITION.**—It is the policy of the United States that, to foster the competitive development, operation, improvement, and commercial availability of space transportation services, and to minimize the life cycle cost to the Administration, the Administrator shall procure services for Federal Government access to and return from the ISS, whenever practicable, via fair and open competition for well-defined, milestone-based, Federal Acquisition Regulation-based contracts under section 201(a) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18311(a)).

(h) **TRANSPARENCY.**—

(1) **SENSE OF CONGRESS.**—It is the sense of Congress that cost transparency and schedule transparency aid in effective program management and risk assessment.

(2) **IN GENERAL.**—The Administrator shall, to the greatest extent practicable and in a manner that does not add costs or schedule delays to the program, ensure all Commercial Crew Program and Commercial Resupply Services Program providers provide evidence-based support for their costs and schedules.

(i) **ISS CARGO RESUPPLY SERVICES LESSONS LEARNED.**—Not later than 120 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report that—

(1) identifies the lessons learned to date from previous and existing Commercial Resupply Services contracts;

(2) indicates whether changes are needed to the manner in which the Administration procures and manages similar services prior to the issuance of future Commercial Resupply Services procurement opportunities; and

(3) identifies any lessons learned from the Commercial Resupply Services contracts that should be applied to the procurement and management of commercially provided crew transfer services to and from the ISS or to other future procurements.

SEC. 303. ISS TRANSITION PLAN.

(a) **FINDINGS.**—Congress finds that—

(1) NASA has been both the primary supplier and consumer of human space flight capabilities and services of the ISS and in low-Earth orbit; and

(2) according to the National Research Council report “Pathways to Exploration: Rationales and Approaches for a U.S. Program of Human Space Exploration” extending ISS beyond 2020 to 2024 or 2028 will have significant negative impacts on the schedule of crewed missions to Mars, without significant increases in funding.

(b) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) an orderly transition for United States human space flight activities in low-Earth orbit from the current regime, that relies heavily on NASA sponsorship, to a regime where NASA is one of many customers of a low-Earth orbit commercial human space flight enterprise may be necessary; and

(2) decisions about the long-term future of the ISS impact the ability to conduct future deep space exploration activities, and that such decisions regarding the ISS should be considered in the context of the Human Exploration Roadmap under section 432 of this Act.

(c) **REPORTS.**—Section 50111 of title 51, United States Code, is amended by adding at the end the following:

“(c) **ISS TRANSITION PLAN.**—

“(1) **IN GENERAL.**—The Administrator, in coordination with the ISS management entity (as defined in section 2 of the National Aeronautics and Space Administration Transition Authorization Act of 2016), ISS partners, the scientific user community, and the

commercial space sector, shall develop a plan to transition in a step-wise approach from the current regime that relies heavily on NASA sponsorship to a regime where NASA could be one of many customers of a low-Earth orbit non-governmental human space flight enterprise.

“(2) **REPORTS.**—Not later than December 1, 2017, and biennially thereafter until 2023, the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that includes—

“(A) a description of the progress in achieving the Administration’s deep space human exploration objectives on ISS and prospects for accomplishing future mission requirements, space exploration objectives, and other research objectives on future commercially supplied low-Earth orbit platforms or migration of those objectives to cis-lunar space;

“(B) steps NASA is taking and will take, including demonstrations that could be conducted on the ISS, to stimulate and facilitate commercial demand and supply of products and services in low-Earth orbit;

“(C) an identification of barriers preventing the commercialization of low-Earth orbit, including issues relating to policy, regulations, commercial intellectual property, data, and confidentiality, that could inhibit the use of the ISS as a commercial incubator;

“(D) the criteria for defining the ISS as a research success;

“(E) the criteria used to determine whether the ISS is meeting the objective under section 301(b)(2) of the National Aeronautics and Space Administration Transition Authorization Act of 2016;

“(F) an assessment of whether the criteria under subparagraphs (D) and (E) are consistent with the research areas defined in, and recommendations and schedules under, the current National Academies of Sciences, Engineering, and Medicine Decadal Survey on Biological and Physical Sciences in Space;

“(G) any necessary contributions that ISS extension would make to enabling execution of the Human Exploration Roadmap under section 432 of the National Aeronautics and Space Administration Transition Authorization Act of 2016;

“(H) the cost estimates for operating the ISS to achieve the criteria required under subparagraphs (D) and (E) and the contributions identified under subparagraph (G);

“(I) the cost estimates for extending operations of the ISS to 2024, 2028, and 2030;

“(J) an evaluation of the feasible and preferred service life of the ISS beyond the period described in section 503 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18353), through at least 2028, as a unique scientific, commercial, and space exploration-related facility, including—

“(i) a general discussion of international partner capabilities and prospects for extending the partnership;

“(ii) the cost associated with extending the service life;

“(iii) an assessment on the technical limiting factors of the service life of the ISS, including a list of critical components and their expected service life and availability; and

“(iv) such other information as may be necessary to fully describe the justification for and feasibility of extending the service life of the ISS, including the potential scientific or technological benefits to the Federal Government, public, or to academic or commercial entities;

“(K) an identification of the necessary actions and an estimate of the costs to deorbit the ISS once it has reached the end of its service life;

“(L) the impact on deep space exploration capabilities, including a crewed mission to Mars in the 2030s, if the preferred service life of the ISS is extended beyond 2024 and NASA maintains a flat budget profile; and

“(M) an evaluation of the functions, roles, and responsibilities for management and operation of the ISS and a determination of—

“(i) those functions, roles, and responsibilities the Federal Government should retain during the lifecycle of the ISS;

“(ii) those functions, roles, and responsibilities that could be transferred to the commercial space sector;

“(iii) the metrics that would indicate the commercial space sector’s readiness and ability to assume the functions, roles, and responsibilities described in clause (ii); and

“(iv) any necessary changes to any agreements or other documents and the law to enable the activities described in subparagraphs (A) and (B).

“(3) **DEMONSTRATIONS.**—If additional Government crew, power, and transportation resources are available after meeting the Administration’s requirements for ISS activities defined in the Human Exploration Roadmap and related research, demonstrations identified under paragraph (2) may—

“(A) test the capabilities needed to meet future mission requirements, space exploration objectives, and other research objectives described in paragraph (2)(A); and

“(B) demonstrate or test capabilities, including commercial modules or deep space habitats, Environmental Control and Life Support Systems, orbital satellite assembly, exploration space suits, a node that enables a wide variety of activity, including multiple commercial modules and airlocks, additional docking or berthing ports for commercial crew and cargo, opportunities for the commercial space sector to cost share for transportation and other services on the ISS, other commercial activities, or services obtained through alternate acquisition approaches.”

SEC. 304. SPACE COMMUNICATIONS.

(a) **PLAN.**—The Administrator shall develop a plan, in consultation with relevant Federal agencies, to meet the Administration’s projected space communication and navigation needs for low-Earth orbit and deep space operations in the 20-year period following the date of enactment of this Act.

(b) **CONTENTS.**—The plan shall include—

(1) the lifecycle cost estimates and a 5-year funding profile;

(2) the performance capabilities required to meet the Administration’s projected space communication and navigation needs;

(3) the measures the Administration will take to sustain the existing space communications and navigation architecture;

(4) an identification of the projected space communications and navigation network and infrastructure needs;

(5) a description of the necessary upgrades to meet the needs identified in paragraph (4), including—

(A) an estimate of the cost of the upgrades;

(B) a schedule for implementing the upgrades; and

(C) an assessment of whether and how any related missions will be impacted if resources are not secured at the level needed;

(6) the cost estimates for the maintenance of existing space communications network capabilities necessary to meet the needs identified in paragraph (4);

(7) the criteria for prioritizing resources for the upgrades described in paragraph (5) and the maintenance described in paragraph (6);

(8) an estimate of any reimbursement amounts the Administration may receive from other Federal agencies;

(9) an identification of the projected Tracking and Data Relay Satellite System needs in the 20-year period following the date of enactment of this Act, including in support of relevant Federal agencies, and cost and schedule estimates to maintain and upgrade the Tracking and Data Relay Satellite System to meet the projected needs;

(10) the measures the Administration is taking to meet space communications needs after all Tracking and Data Relay Satellite System third-generation communications satellites are operational; and

(11) the measures the Administration is taking to mitigate threats to electromagnetic spectrum use.

(c) SCHEDULE.—Not later than 1 year after the date of enactment of this Act, the Administrator shall submit the plan to the appropriate committees of Congress.

SEC. 305. INDEMNIFICATION; NASA LAUNCH SERVICES AND REENTRY SERVICES.

(a) IN GENERAL.—Subchapter III of chapter 201 of title 51, United States Code, is amended by adding at the end the following:

“§ 20148. Indemnification; NASA launch services and reentry services

“(a) IN GENERAL.—Under such regulations in conformity with this section as the Administrator shall prescribe taking into account the availability, cost, and terms of liability insurance, any contract between the Administration and a provider may provide that the United States will indemnify the provider against successful claims (including reasonable expenses of litigation or settlement) by third parties for death, bodily injury, or loss of or damage to property resulting from launch services and reentry services carried out under the contract that the contract defines as unusually hazardous or nuclear in nature, but only to the extent the total amount of successful claims related to the activities under the contract—

“(1) is more than the amount of insurance or demonstration of financial responsibility described in subsection (c)(3); and

“(2) is not more than the amount specified in section 50915(a)(1)(B).

“(b) TERMS OF INDEMNIFICATION.—A contract made under subsection (a) that provides indemnification shall provide for—

“(1) notice to the United States of any claim or suit against the provider for death, bodily injury, or loss of or damage to property; and

“(2) control of or assistance in the defense by the United States, at its election, of that claim or suit and approval of any settlement.

“(c) LIABILITY INSURANCE OF THE PROVIDER.—

“(1) IN GENERAL.—The provider under subsection (a) shall obtain liability insurance or demonstrate financial responsibility in amounts to compensate for the maximum probable loss from claims by—

“(A) a third party for death, bodily injury, or property damage or loss resulting from a launch service or reentry service carried out under the contract; and

“(B) the United States Government for damage or loss to Government property resulting from a launch service or reentry service carried out under the contract.

“(2) MAXIMUM PROBABLE LOSSES.—

“(A) IN GENERAL.—The Administrator shall determine the maximum probable losses under subparagraphs (A) and (B) of paragraph (1) not later than 90 days after the date that the provider requests such a determination and submits all information the Administrator requires.

“(B) REVISIONS.—The Administrator may revise a determination under subparagraph

(A) of this paragraph if the Administrator determines the revision is warranted based on new information.

“(3) AMOUNT OF INSURANCE.—For the total claims related to one launch or reentry, a provider shall not be required to obtain insurance or demonstrate financial responsibility of more than—

“(A)(i) \$500,000,000 under paragraph (1)(A); or

“(ii) \$100,000,000 under paragraph (1)(B); or

“(B) the maximum liability insurance available on the world market at reasonable cost.

“(4) COVERAGE.—An insurance policy or demonstration of financial responsibility under this subsection shall protect the following, to the extent of their potential liability for involvement in launch services or reentry services:

“(A) The Government.

“(B) Personnel of the Government.

“(C) Related entities of the Government.

“(D) Related entities of the provider.

“(E) Government astronauts.

“(d) NO INDEMNIFICATION WITHOUT CROSS-WAIVER.—Notwithstanding subsection (a), the Administrator may not indemnify a provider under this section unless there is a cross-waiver between the Administration and the provider as described in subsection (e).

“(e) CROSS-WAIVERS.—

“(1) IN GENERAL.—The Administrator, on behalf of the United States and its departments, agencies, and instrumentalities, shall reciprocally waive claims with a provider under which each party to the waiver agrees to be responsible, and agrees to ensure that its related entities are responsible, for damage or loss to its property, or for losses resulting from any injury or death sustained by its employees or agents, as a result of activities arising out of the performance of the contract.

“(2) LIMITATION.—The waiver made by the Government under paragraph (1) shall apply only to the extent that the claims are more than the amount of insurance or demonstration of financial responsibility required under subsection (c)(1)(B).

“(f) WILLFUL MISCONDUCT.—Indemnification under subsection (a) may exclude claims resulting from the willful misconduct of the provider or its related entities.

“(g) CERTIFICATION OF JUST AND REASONABLE AMOUNT.—No payment may be made under subsection (a) unless the Administrator or the Administrator’s designee certifies that the amount is just and reasonable.

“(h) PAYMENTS.—

“(1) IN GENERAL.—Upon the approval by the Administrator, payments under subsection (a) may be made from funds appropriated for such payments.

“(2) LIMITATION.—The Administrator shall not approve payments under paragraph (1), except to the extent provided in an appropriation law or to the extent additional legislative authority is enacted providing for such payments.

“(3) ADDITIONAL APPROPRIATIONS.—If the Administrator requests additional appropriations to make payments under this subsection, then the request for those appropriations shall be made in accordance with the procedures established under section 50915.

“(i) RULES OF CONSTRUCTION.—

“(1) IN GENERAL.—The authority to indemnify under this section shall not create any rights in third persons that would not otherwise exist by law.

“(2) OTHER AUTHORITY.—Nothing in this section may be construed as prohibiting the Administrator from indemnifying a provider or any other NASA contractor under other law, including under Public Law 85–804 (50 U.S.C. 1431 et seq.).

“(3) ANTI-DEFICIENCY ACT.—Notwithstanding any other provision of this section—

“(A) all obligations under this section are subject to the availability of funds; and

“(B) nothing in this section may be construed to require obligation or payment of funds in violation of sections 1341, 1342, 1349 through 1351, and 1511 through 1519 of title 31, United States Code (commonly referred to as the ‘Anti-Deficiency Act’).

“(j) RELATIONSHIP TO OTHER LAWS.—The Administrator may not provide indemnification under this section for an activity that requires a license or permit under chapter 509.

“(k) DEFINITIONS.—In this section:

“(1) GOVERNMENT ASTRONAUT.—The term ‘government astronaut’ has the meaning given the term in section 50902.

“(2) LAUNCH SERVICES.—The term ‘launch services’ has the meaning given the term in section 50902.

“(3) PROVIDER.—The term ‘provider’ means a person that provides domestic launch services or domestic reentry services to the Government.

“(4) REENTRY SERVICES.—The term ‘reentry services’ has the meaning given the term in section 50902.

“(5) RELATED ENTITY.—The term ‘related entity’ means a contractor or subcontractor.

“(6) THIRD PARTY.—The term ‘third party’ means a person except—

“(A) the United States Government;

“(B) related entities of the Government involved in launch services or reentry services;

“(C) a provider;

“(D) related entities of the provider involved in launch services or reentry services; or

“(E) a government astronaut.”.

(b) CONFORMING AMENDMENT.—The table of contents for subchapter III of chapter 201 of title 51, United States Code, is amended by inserting after the item relating to section 20147 the following:

“20148. Indemnification; NASA launch services and reentry services.”.

TITLE IV—ADVANCING HUMAN DEEP SPACE EXPLORATION

Subtitle A—Human Space Flight and Exploration Goals and Objectives

SEC. 411. HUMAN SPACE FLIGHT AND EXPLORATION LONG-TERM GOALS.

Section 202(a) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18312(a)) is amended to read as follows:

“(a) LONG-TERM GOALS.—The long-term goals of the human space flight and exploration efforts of NASA shall be—

“(1) to expand permanent human presence beyond low-Earth orbit and to do so, where practical, in a manner involving international, academic, and industry partners;

“(2) crewed missions and progress toward achieving the goal in paragraph (1) to enable the potential for subsequent human exploration and the extension of human presence throughout the solar system; and

“(3) to enable a capability to extend human presence, including potential human habitation on another celestial body and a thriving space economy in the 21st Century.”.

SEC. 412. KEY OBJECTIVES.

Section 202(b) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18312(b)) is amended—

(1) in paragraph (3), by striking “; and” and inserting a semicolon;

(2) in paragraph (4), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(5) to achieve human exploration of Mars and beyond through the prioritization of

those technologies and capabilities best suited for such a mission in accordance with the stepping stone approach to exploration under section 70504 of title 51, United States Code.”.

SEC. 413. VISION FOR SPACE EXPLORATION.

Section 20302 of title 51, United States Code, is amended—

(1) in subsection (a), by inserting “in cis-lunar space or” after “sustained human presence”;

(2) by amending subsection (b) to read as follows:

“(b) FUTURE EXPLORATION OF MARS.—The Administrator shall manage human space flight programs, including the Space Launch System and Orion, to enable humans to explore Mars and other destinations by defining a series of sustainable steps and conducting mission planning, research, and technology development on a timetable that is technically and fiscally possible, consistent with section 70504.”; and

(3) by adding at the end the following:

“(c) DEFINITIONS.—In this section:

“(1) ORION.—The term ‘Orion’ means the multipurpose crew vehicle described under section 303 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18323).

“(2) SPACE LAUNCH SYSTEM.—The term ‘Space Launch System’ means has the meaning given the term in section 3 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18302).”.

SEC. 414. STEPPING STONE APPROACH TO EXPLORATION.

Section 70504 of title 51, United States Code, is amended to read as follows:

“§ 70504. Stepping stone approach to exploration

“(a) IN GENERAL.—The Administration may conduct missions to intermediate destinations, including the surface of the Moon, cis-lunar space, near-Earth asteroids, Lagrangian points, and Martian moons, in a series of sustainable steps in accordance with section 20302(b) of title 51, United States Code, in order to achieve the objective of human exploration of Mars specified in section 202(b)(5) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18312(b)(5)).

“(b) COST-EFFECTIVENESS.—In order to maximize the cost-effectiveness of the long-term space exploration and utilization activities of the United States, the Administrator shall take all necessary steps, including engaging international, academic, and industry partners, to ensure that activities in the Administration’s human space exploration program balance how those activities might also help meet the requirements of future exploration and utilization activities leading to human habitation on the surface of Mars.

“(c) COMPLETION.—Within budgetary considerations, once an exploration-related project enters its development phase, the Administrator shall seek, to the maximum extent practicable, to complete that project without undue delays.

“(d) INTERNATIONAL PARTICIPATION.—In order to achieve the goal of successfully conducting a crewed mission to the surface of Mars, the President may invite the United States partners in the ISS program and other nations, as appropriate, to participate in an international initiative under the leadership of the United States.”.

SEC. 415. UPDATE OF EXPLORATION PLAN AND PROGRAMS.

Section 70502(2) of title 51, United States Code, is amended to read as follows:

“(2) implement an exploration research and technology development program to en-

able human and robotic operations consistent with section 20302(b) of this title;”.

SEC. 416. REPEALS.

(a) SPACE SHUTTLE CAPABILITY ASSURANCE.—Section 203 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18313) is amended—

(1) by striking subsection (b);

(2) in subsection (d), by striking “subsection (c)” and inserting “subsection (b)”;

(3) by redesignating subsections (c) and (d) as subsections (b) and (c), respectively.

(b) SHUTTLE PRICING POLICY FOR COMMERCIAL AND FOREIGN USERS.—Chapter 703 of title 51, United States Code, and the item relating to that chapter in the table of chapters for that title, are repealed.

(c) SHUTTLE PRIVATIZATION.—Section 50133 of title 51, United States Code, and the item relating to that section in the table of sections for chapter 501 of that title, are repealed.

SEC. 417. ASSURED ACCESS TO SPACE.

Section 70501 of title 51, United States Code, is amended—

(1) by amending subsection (a) to read as follows:

“(a) POLICY STATEMENT.—In order to ensure continuous United States participation and leadership in the exploration and utilization of space and as an essential instrument of national security, it is the policy of the United States to maintain an uninterrupted capability for human space flight and operations—

“(1) in low-Earth orbit; and

“(2) beyond low-Earth orbit once the capabilities described in section 421(e) of the National Aeronautics and Space Administration Transition Authorization Act of 2016 become available.”; and

(2) in subsection (b), by striking “Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate describing the progress being made toward developing the Crew Exploration Vehicle and the Crew Launch Vehicle” and inserting “Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives describing the progress being made toward developing the Space Launch System and Orion”.

Subtitle B—Assuring Core Capabilities for Exploration

SEC. 421. SPACE LAUNCH SYSTEM, ORION, AND EXPLORATION GROUND SYSTEMS.

(a) FINDINGS.—Congress makes the following findings:

(1) NASA has made steady progress in developing and testing the Space Launch System and Orion exploration systems with the successful Exploration Flight Test of Orion in December of 2014, the final qualification test firing of the 5-segment Space Launch System boosters in June 2016, and a full thrust, full duration test firing of the RS-25 Space Launch System core stage engine in August 2016.

(2) Through the 21st Century Launch Complex program and Exploration Ground Systems programs, NASA has made significant progress in transforming exploration ground systems infrastructure to meet NASA’s mission requirements for the Space Launch System and Orion and to modernize NASA’s launch complexes to the benefit of the civil, defense, and commercial space sectors.

(b) SPACE LAUNCH SYSTEM.—

(1) SENSE OF CONGRESS.—It is the sense of Congress that the Space Launch System is the most practical approach to reaching the Moon, Mars, and beyond.

(2) REAFFIRMATION.—Congress reaffirms the policy and minimum capability requirements for the Space Launch System under section 302 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18322).

(c) SENSE OF CONGRESS ON SPACE LAUNCH SYSTEM, ORION, AND EXPLORATION GROUND SYSTEMS.—It is the sense of Congress that—

(1) as the United States works to send humans on a series of missions to Mars in the 2030s, the United States national space program should continue to make progress on its commitment by fully developing the Space Launch System, Orion, and related Exploration Ground Systems;

(2) using the Space Launch System and Orion for a wide range of contemplated missions will facilitate the national defense, science, and exploration objectives of the United States;

(3) the United States should have continuity of purpose for the Space Launch System and Orion in deep space exploration missions, using them beginning with the uncrewed mission, EM-1, planned for 2018, followed by the crewed mission, EM-2, in cis-lunar space planned for 2021, and for subsequent missions beginning with EM-3 extending into cis-lunar space and eventually to Mars;

(4) the President’s annual budget requests for the Space Launch System and Orion development, test, and operational phases should strive to accurately reflect the resource requirements of each of those phases;

(5) the fully integrated Space Launch System, including an upper stage needed to go beyond low-Earth orbit, will safely enable human space exploration of the Moon, Mars, and beyond; and

(6) the Administrator should budget for and undertake a robust ground test and uncrewed and crewed flight test and demonstration program for the Space Launch System and Orion in order to promote safety and reduce programmatic risk.

(d) IN GENERAL.—The Administrator shall continue development of the fully integrated Space Launch System, including an upper stage needed to go beyond low-Earth orbit, in order to safely enable human space exploration of the Moon, Mars, and beyond over the course of the next century as required in section 302(c) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18322(c)).

(e) EXPLORATION MISSIONS.—The Administrator shall continue development of—

(1) an uncrewed exploration mission to demonstrate the capability of both the Space Launch System and Orion as an integrated system by 2018;

(2) subject to applicable human rating processes and requirements, a crewed exploration mission to demonstrate the Space Launch System, including the Core Stage and Exploration Upper Stages, by 2021;

(3) subsequent missions beginning with EM-3 at operational flight rate sufficient to maintain safety and operational readiness using the Space Launch System and Orion to extend into cis-lunar space and eventually to Mars; and

(4) a deep space habitat as a key element in a deep space exploration architecture along with the Space Launch System and Orion.

(f) OTHER USES.—The Administrator shall assess the utility of the Space Launch System for use by the science community and for other Federal Government launch needs, including consideration of overall cost and schedule savings from reduced transit times and increased science returns enabled by the unique capabilities of the Space Launch System.

(g) UTILIZATION REPORT.—

(1) IN GENERAL.—The Administrator, in consultation with the Secretary of Defense

and the Director of National Intelligence, shall prepare a report that addresses the effort and budget required to enable and utilize a cargo variant of the 130-ton Space Launch System configuration described in section 302(c) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18322(c)).

(2) CONTENTS.—In preparing the report, the Administrator shall—

(A) consider the technical requirements of the scientific and national security communities related to a cargo variant of the Space Launch System; and

(B) directly assess the utility and estimated cost savings obtained by using a cargo variant of the Space Launch System for national security and space science missions.

(3) SUBMISSION TO CONGRESS.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit the report to the appropriate committees of Congress.

Subtitle C—Journey to Mars

SEC. 431. FINDINGS ON HUMAN SPACE EXPLORATION.

Congress makes the following findings:

(1) In accordance with section 204 of the National Aeronautics and Space Administration Authorization Act of 2010 (124 Stat. 2813), the National Academies of Sciences, Engineering, and Medicine, through its Committee on Human Spaceflight, conducted a review of the goals, core capabilities, and direction of human space flight, and published the findings and recommendations in a 2014 report entitled, “Pathways to Exploration: Rationales and Approaches for a U.S. Program of Human Space Exploration”.

(2) The Committee on Human Spaceflight included leaders from the aerospace, scientific, security, and policy communities.

(3) With input from the public, the Committee on Human Spaceflight concluded that many practical and aspirational rationales for human space flight together constitute a compelling case for continued national investment and pursuit of human space exploration toward the horizon goal of Mars.

(4) According to the Committee on Human Spaceflight, the rationales include economic benefits, national security, national prestige, inspiring students and other citizens, scientific discovery, human survival, and a sense of shared destiny.

(5) The Committee on Human Spaceflight affirmed that Mars is the appropriate long-term goal for the human space flight program.

(6) The Committee on Human Spaceflight recommended that NASA define a series of sustainable steps and conduct mission planning and technology development as needed to achieve the long-term goal of placing humans on the surface of Mars.

(7) Expanding human presence beyond low-Earth orbit and advancing toward human missions to Mars requires early planning and timely decisions to be made in the near-term on the necessary courses of action for commitments to achieve short-term and long-term goals and objectives.

(8) In addition to the 2014 report described in paragraph (1), there are several independently developed reports or concepts that describe potential Mars architectures or concepts and identify Mars as the long-term goal for human space exploration, including NASA’s “The Global Exploration Roadmap” of 2013, “NASA’s Journey to Mars—Pioneering Next Steps in Space Exploration” of 2015, NASA Jet Propulsion Laboratory’s “Minimal Architecture for Human Journeys to Mars” of 2015, and Explore Mars’ “The Humans to Mars Report 2016”.

SEC. 432. HUMAN EXPLORATION ROADMAP.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) expanding human presence beyond low-Earth orbit and advancing toward human missions to Mars in the 2030s requires early strategic planning and timely decisions to be made in the near-term on the necessary courses of action for commitments to achieve short-term and long-term goals and objectives;

(2) for strong and sustained United States leadership, a need exists to advance a human exploration roadmap, addressing exploration objectives in collaboration with international, academic, and industry partners;

(3) an approach that incrementally advances toward a long-term goal is one in which nearer-term developments and implementation would influence future development and implementation; and

(4) a human exploration roadmap should begin with low-Earth orbit, then address in greater detail progress beyond low-Earth orbit to cis-lunar space, and then address future missions aimed at human arrival and activities near and then on the surface of Mars.

(b) HUMAN EXPLORATION ROADMAP.—

(1) IN GENERAL.—The Administrator shall develop a human exploration roadmap, including a critical decision plan, to expand human presence beyond low-Earth orbit to the surface of Mars and beyond, considering potential interim destinations such as cis-lunar space and the moons of Mars.

(2) SCOPE.—The human exploration roadmap shall include—

(A) an integrated set of exploration, science, and other goals and objectives of a United States human space exploration program to achieve the long-term goal of human missions near or on the surface of Mars in the 2030s;

(B) opportunities for international, academic, and industry partnerships for exploration-related systems, services, research, and technology if those opportunities provide cost-savings, accelerate program schedules, or otherwise benefit the goals and objectives developed under subparagraph (A);

(C) sets and sequences of precursor missions in cis-lunar space and other missions or activities necessary—

(i) to demonstrate the proficiency of the capabilities and technologies identified under subparagraph (D); and

(ii) to meet the goals and objectives developed under subparagraph (A), including anticipated timelines and missions for the Space Launch System and Orion;

(D) an identification of the specific capabilities and technologies, including the Space Launch System, Orion, a deep space habitat, and other capabilities, that facilitate the goals and objectives developed under subparagraph (A);

(E) a description of how cis-lunar elements, objectives, and activities advance the human exploration of Mars;

(F) an assessment of potential human health and other risks, including radiation exposure;

(G) mitigation plans, whenever possible, to address the risks identified in subparagraph (F);

(H) a description of those technologies already under development across the Federal Government or by other entities that facilitate the goals and objectives developed under subparagraph (A);

(I) a specific process for the evolution of the capabilities of the fully integrated Orion with the Space Launch System and a description of how these systems facilitate the goals and objectives developed under subparagraph (A) and demonstrate the capabilities and technologies described in subparagraph (D);

(J) a description of the capabilities and technologies that need to be demonstrated or

research data that could be gained through the utilization of the ISS and the status of the development of such capabilities and technologies;

(K) a framework for international cooperation in the development of all capabilities and technologies identified under this section, including an assessment of the risks posed by relying on international partners for capabilities and technologies on the critical path of development;

(L) a process for partnering with non-governmental entities using Space Act Agreements or other acquisition instruments for future human space exploration; and

(M) include information on the phasing of planned intermediate destinations, Mars mission risk areas and potential risk mitigation approaches, technology requirements and phasing of required technology development activities, the management strategy to be followed, related ISS activities, planned international collaborative activities, potential commercial contributions, and other activities relevant to the achievement of the goal established in this section.

(3) CONSIDERATIONS.—In developing the human exploration roadmap, the Administrator shall consider—

(A) using key exploration capabilities, namely the Space Launch System and Orion;

(B) using existing commercially available technologies and capabilities or those technologies and capabilities being developed by industry for commercial purposes;

(C) establishing an organizational approach to ensure collaboration and coordination among NASA’s Mission Directorates under section 821, when appropriate, including to collect and return to Earth a sample from the Martian surface;

(D) building upon the initial uncrewed mission, EM-1, and first crewed mission, EM-2, of the Space Launch System and Orion to establish a sustainable cadence of missions extending human exploration missions into cis-lunar space, including anticipated timelines and milestones;

(E) developing the robotic and precursor missions and activities that will demonstrate, test, and develop key technologies and capabilities essential for achieving human missions to Mars, including long-duration human operations beyond low-Earth orbit, space suits, solar electric propulsion, deep space habitats, environmental control life support systems, Mars lander and ascent vehicle, entry, descent, landing, ascent, Mars surface systems, and in-situ resource utilization;

(F) demonstrating and testing 1 or more habitat modules in cis-lunar space to prepare for Mars missions;

(G) using public-private, firm fixed-price partnerships, where practicable;

(H) collaborating with international, academic, and industry partners, when appropriate;

(I) any risks to human health and sensitive onboard technologies, including radiation exposure;

(J) any risks identified through research outcomes under the NASA Human Research Program’s Behavioral Health Element; and

(K) the recommendations and ideas of several independently developed reports or concepts that describe potential Mars architectures or concepts and identify Mars as the long-term goal for human space exploration, including the reports described under section 431.

(4) CRITICAL DECISION PLAN ON HUMAN SPACE EXPLORATION.—As part of the human exploration roadmap, the Administrator shall include a critical decision plan—

(A) identifying and defining key decisions guiding human space exploration priorities and plans that need to be made before June

30, 2020, including decisions that may guide human space exploration capability development, precursor missions, long-term missions, and activities;

(B) defining decisions needed to maximize efficiencies and resources for reaching the near, intermediate, and long-term goals and objectives of human space exploration; and

(C) identifying and defining timelines and milestones for a sustainable cadence of missions beginning with EM-3 for the Space Launch System and Orion to extend human exploration from cis-lunar space to the surface of Mars.

(5) REPORTS.—

(A) INITIAL HUMAN EXPLORATION ROADMAP.—The Administrator shall submit to the appropriate committees of Congress—

(i) an initial human exploration roadmap, including a critical decision plan, before December 1, 2017; and

(ii) an updated human exploration roadmap periodically as the Administrator considers necessary but not less than biennially.

(B) CONTENTS.—Each human exploration roadmap under this paragraph shall include a description of—

(i) the achievements and goals accomplished in the process of developing such capabilities and technologies during the 2-year period prior to the submission of the human exploration roadmap; and

(ii) the expected goals and achievements in the following 2-year period.

(C) SUBMISSION WITH BUDGET.—Each human exploration roadmap under this section shall be included in the budget for that fiscal year transmitted to Congress under section 1105(a) of title 31, United States Code.

SEC. 433. ADVANCED SPACE SUIT CAPABILITY.

Not later than 90 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a detailed plan for achieving an advanced space suit capability that aligns with the crew needs for exploration enabled by the Space Launch System and Orion, including an evaluation of the merit of delivering the planned suit system for use on the ISS.

SEC. 434. ASTEROID ROBOTIC REDIRECT MISSION.

(a) FINDINGS.—Congress makes the following findings:

(1) NASA initially estimated that the Asteroid Robotic Redirect Mission would launch in December 2020 and cost no more than \$1,250,000,000, excluding launch and operations.

(2) On July 15, 2016, NASA conducted its Key Decision Point-B review of the Asteroid Robotic Redirect Mission or approval for Phase B in mission formulation.

(3) During the Key Decision Point-B review, NASA estimated that costs have grown to \$1,400,000,000 excluding launch and operations for a launch in December 2021 and the agency must evaluate whether to accept the increase or reduce the Asteroid Robotic Redirect Mission's scope to stay within the cost cap set by the Administrator.

(4) In April 2015, the NASA Advisory Council—

(A) issued a finding that—

(i) high-performance solar electric propulsion will likely be an important part of an architecture to send humans to Mars; and

(ii) maneuvering a large test mass is not necessary to provide a valid in-space test of a new solar electric propulsion stage;

(B) determined that a solar electric propulsion mission will contribute more directly to the goal of sending humans to Mars if the mission is focused entirely on development and validation of the solar electric propulsion stage; and

(C) determined that other possible motivations for acquiring and maneuvering a boul-

der, such as asteroid science and planetary defense, do not have value commensurate with their probable cost.

(5) The Asteroid Robotic Redirect Mission is competing for resources with other critical exploration development programs, including the Space Launch System, Orion, commercial crew, and a habitation module.

(6) In 2014, the NASA Advisory Council recommended that NASA conduct an independent cost and technical assessment of the Asteroid Robotic Redirect Mission.

(7) In 2015, the NASA Advisory Council recommended that NASA preserve the following key objectives if the program needed to be descope:

(A) Development of high power solar electric propulsion.

(B) Ability to maneuver in a low gravity environment in deep space.

(8) In January 2015 and July 2015, the NASA Advisory Council expressed its concern to NASA about the potential for growing costs for the program and highlighted that choices would need to be made about the program's content.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the technological and scientific goals of the Asteroid Robotic Redirect Mission may not be commensurate with the cost; and

(2) alternative missions may provide a more cost effective and scientifically beneficial means to demonstrate the technologies needed for a human mission to Mars that would otherwise be demonstrated by the Asteroid Robotic Redirect Mission.

(c) EVALUATION AND REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall—

(1) conduct an evaluation of—

(A) alternative approaches to the Asteroid Robotic Redirect Mission for demonstrating the technologies and capabilities needed for a human mission to Mars that would otherwise be demonstrated by the Asteroid Robotic Redirect Mission;

(B) the scientific and technical benefits of the alternative approaches under subparagraph (A) to future human space exploration compared to scientific and technical benefits of the Asteroid Redirect Robotic Mission;

(C) the commercial benefits of the alternative approaches identified in subparagraph (A), including the impact on the development of domestic solar electric propulsion technology to bolster United States competitiveness in the global marketplace; and

(D) a comparison of the estimated costs of the alternative approaches identified in subparagraph (A); and

(2) submit to the appropriate committees of Congress a report on the evaluation under paragraph (1), including any recommendations.

SEC. 435. MARS 2033 REPORT.

(a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Administrator shall contract with an independent, non-governmental systems engineering and technical assistance organization to study a Mars human space flight mission to be launched in 2033.

(b) CONTENTS.—The study shall include—

(1) a technical development, test, fielding, and operations plan using the Space Launch System, Orion, and other systems to successfully launch such a Mars human space flight mission by 2033;

(2) an annual budget profile, including cost estimates, for the technical development, test, fielding, and operations plan to carry out a Mars human space flight mission by 2033; and

(3) a comparison of the annual budget profile to the 5-year budget profile contained in the President's budget request for fiscal year

2017 under section 1105 of title 31, United States Code.

(c) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report on the study, including findings and recommendations regarding the Mars 2033 human space flight mission described in subsection (a).

(d) ASSESSMENT.—Not later than 60 days after the date the report is submitted under subsection (c), the Administrator shall submit to the appropriate committees of Congress an assessment by the NASA Advisory Council of whether the proposal for a Mars human space flight mission to be launched in 2033 is in the strategic interests of the United States in space exploration.

Subtitle D—TREAT Astronauts Act

SEC. 441. SHORT TITLE.

This subtitle may be cited as the "To Research, Evaluate, Assess, and Treat Astronauts Act" or the "TREAT Astronauts Act".

SEC. 442. FINDINGS; SENSE OF CONGRESS.

(a) FINDINGS.—Congress makes the following findings:

(1) Human space exploration can pose significant challenges and is full of substantial risk, which has ultimately claimed the lives of 24 National Aeronautics and Space Administration astronauts serving in the line of duty.

(2) As United States government astronauts participate in long-duration and exploration space flight missions they may experience increased health risks, such as vision impairment, bone demineralization, and behavioral health and performance risks, and may be exposed to galactic cosmic radiation. Exposure to high levels of radiation and microgravity can result in acute and long-term health consequences that can increase the risk of cancer and tissue degeneration and have potential effects on the musculoskeletal system, central nervous system, cardiovascular system, immune function, and vision.

(3) To advance the goal of long-duration and exploration space flight missions, United States government astronaut Scott Kelly participated in a 1-year twins study in space while his identical twin brother, former United States government astronaut Mark Kelly, acted as a human control specimen on Earth, providing an understanding of the physical, behavioral, microbiological, and molecular reaction of the human body to an extended period of time in space.

(4) Since the Administration currently provides medical monitoring, diagnosis, and treatment for United States government astronauts during their active employment, given the unknown long-term health consequences of long-duration space exploration, the Administration has requested statutory authority from Congress to provide medical monitoring, diagnosis, and treatment to former United States government astronauts for psychological and medical conditions associated with human space flight.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the United States should continue to seek the unknown and lead the world in space exploration and scientific discovery as the Administration prepares for long-duration and exploration space flight in deep space and an eventual mission to Mars;

(2) data relating to the health of astronauts will become increasingly valuable to improving our understanding of many diseases humans face on Earth;

(3) the Administration should provide the type of monitoring, diagnosis, and treatment described in subsection (a) only for conditions the Administration considers unique to

the training or exposure to the space flight environment of United States government astronauts and should not require any former United States Government astronauts to participate in the Administration's monitoring;

(4) such monitoring, diagnosis, and treatment should not replace a former United States government astronaut's private health insurance;

(5) expanded data acquired from such monitoring, diagnosis, and treatment should be used to tailor treatment, inform the requirements for new space flight medical hardware, and develop controls in order to prevent disease occurrence in the astronaut corps; and

(6) the 340-day space mission of Scott Kelly aboard the ISS—

(A) was pivotal for the goal of the United States for humans to explore deep space and Mars as the mission generated new insight into how the human body adjusts to weightlessness, isolation, radiation, and the stress of long-duration space flight; and

(B) will help support the physical and mental well-being of astronauts during longer space exploration missions in the future.

SEC. 443. MEDICAL MONITORING AND RESEARCH RELATING TO HUMAN SPACE FLIGHT.

(a) IN GENERAL.—Subchapter III of chapter 201 of title 51, United States Code, as amended by section 305 of this Act, is further amended by adding at the end the following: “§20149. Medical monitoring and research relating to human space flight

“(a) IN GENERAL.—Notwithstanding any other provision of law, the Administrator may provide for—

“(1) the medical monitoring and diagnosis of a former United States government astronaut or a former payload specialist for conditions that the Administrator considers potentially associated with human space flight; and

“(2) the treatment of a former United States government astronaut or a former payload specialist for conditions that the Administrator considers associated with human space flight, including scientific and medical tests for psychological and medical conditions.

“(b) REQUIREMENTS.—

“(1) NO COST SHARING.—The medical monitoring, diagnosis, or treatment described in subsection (a) shall be provided without any deductible, copayment, or other cost sharing obligation.

“(2) ACCESS TO LOCAL SERVICES.—The medical monitoring, diagnosis, and treatment described in subsection (a) may be provided by a local health care provider if it is unadvisable due to the health of the applicable former United States government astronaut or former payload specialist for that former United States government astronaut or former payload specialist to travel to the Lyndon B. Johnson Space Center, as determined by the Administrator.

“(3) SECONDARY PAYMENT.—Payment or reimbursement for the medical monitoring, diagnosis, or treatment described in subsection (a) shall be secondary to any obligation of the United States Government or any third party under any other provision of law or contractual agreement to pay for or provide such medical monitoring, diagnosis, or treatment. Any costs for items and services that may be provided by the Administrator for medical monitoring, diagnosis, or treatment under subsection (a) that are not paid for or provided under such other provision of law or contractual agreement, due to the application of deductibles, copayments, coinsurance, other cost sharing, or otherwise, are reimbursable by the Administrator on behalf

of the former United States government astronaut or former payload specialist involved to the extent such items or services are authorized to be provided by the Administrator for such medical monitoring, diagnosis, or treatment under subsection (a).

“(4) CONDITIONAL PAYMENT.—The Administrator may provide for conditional payments for or provide medical monitoring, diagnosis, or treatment described in subsection (a) that is obligated to be paid for or provided by the United States or any third party under any other provision of law or contractual agreement to pay for or provide such medical monitoring, diagnosis, or treatment if—

“(A) a payment for (or the provision of) such medical monitoring, diagnosis, or treatment services has not been made (or provided) or cannot reasonably be expected to be made (or provided) promptly by the United States or such third party, respectively; and

“(B) such payment (or such provision of services) by the Administrator is conditioned on reimbursement by the United States or such third party, respectively, for such medical monitoring, diagnosis, or treatment.

“(c) EXCLUSIONS.—The Administrator may not—

“(1) provide for medical monitoring or diagnosis of a former United States government astronaut or former payload specialist under subsection (a) for any psychological or medical condition that is not potentially associated with human space flight;

“(2) provide for treatment of a former United States government astronaut or former payload specialist under subsection (a) for any psychological or medical condition that is not associated with human space flight; or

“(3) require a former United States government astronaut or former payload specialist to participate in the medical monitoring, diagnosis, or treatment authorized under subsection (a).

“(d) PRIVACY.—Consistent with applicable provisions of Federal law relating to privacy, the Administrator shall protect the privacy of all medical records generated under subsection (a) and accessible to the Administration.

“(e) REGULATIONS.—The Administrator shall promulgate such regulations as are necessary to carry out this section.

“(f) DEFINITION OF UNITED STATES GOVERNMENT ASTRONAUT.—In this section, the term ‘United States government astronaut’ has the meaning given the term ‘government astronaut’ in section 50902, except it does not include an individual who is an international partner astronaut.

“(g) DATA USE AND DISCLOSURE.—The Administrator may use or disclose data acquired in the course of medical monitoring, diagnosis, or treatment of a former United States government astronaut or a former payload specialist under subsection (a), in accordance with subsection (d). Former United States government astronaut or former payload specialist participation in medical monitoring, diagnosis, or treatment under subsection (a) shall constitute consent for the Administrator to use or disclose such data.”

(b) TABLE OF CONTENTS.—The table of contents for chapter 201 of title 51, United States Code, as amended by section 305 of this Act, is further amended by inserting after the item relating to section 20148 the following:

“20149. Medical monitoring and research relating to human space flight.”

(c) ANNUAL REPORTS.—

(1) IN GENERAL.—Each fiscal year, not later than the date of submission of the President's annual budget request for that fiscal year under section 1105 of title 31, United

States Code, the Administrator shall publish a report, in accordance with applicable Federal privacy laws, on the activities of the Administration under section 20149 of title 51, United States Code.

(2) CONTENTS.—Each report under paragraph (1) shall include a detailed cost accounting of the Administration's activities under section 20149 of title 51, United States Code, and a 5-year budget estimate.

(3) SUBMISSION TO CONGRESS.—The Administrator shall submit to the appropriate committees of Congress each report under paragraph (1) not later than the date of submission of the President's annual budget request for that fiscal year under section 1105 of title 31, United States Code.

(d) COST ESTIMATE.—

(1) REQUIREMENT.—Not later than 90 days after the date of enactment of this Act, the Administrator shall enter into an arrangement with an independent external organization to undertake an independent cost estimate of the cost to the Administration and the Federal Government to implement and administer the activities of the Administration under section 20149 of title 51, United States Code. The independent external organization may not be a NASA entity, such as the Office of Safety and Mission Assurance.

(2) SUBMITTAL TO CONGRESS.—Not later than 1 year after the date of the enactment of this Act, the Administrator shall submit to the appropriate committees of Congress the independent cost estimate under paragraph (1).

(e) PRIVACY STUDY.—

(1) STUDY.—The Administrator shall carry out a study on any potential privacy or legal issues related to the possible sharing beyond the Federal Government of data acquired under the activities of the Administration under section 20149 of title 51, United States Code.

(2) REPORT.—Not later than 270 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report containing the results of the study carried out under paragraph (1).

(f) INSPECTOR GENERAL AUDIT.—The Inspector General of NASA shall periodically audit or review, as the Inspector General considers necessary to prevent waste, fraud, and abuse, the activities of the Administration under section 20149 of title 51, United States Code.

TITLE V—ADVANCING SPACE SCIENCE

SEC. 501. MAINTAINING A BALANCED SPACE SCIENCE PORTFOLIO.

(a) SENSE OF CONGRESS ON SCIENCE PORTFOLIO.—Congress reaffirms the sense of Congress that—

(1) a balanced and adequately funded set of activities, consisting of research and analysis grant programs, technology development, suborbital research activities, and small, medium, and large space missions, contributes to a robust and productive science program and serves as a catalyst for innovation and discovery; and

(2) the Administrator should set science priorities by following the guidance provided by the scientific community through the National Academies of Sciences, Engineering, and Medicine's decadal surveys.

(b) POLICY.—It is the policy of the United States to ensure, to the extent practicable, a steady cadence of large, medium, and small science missions.

SEC. 502. PLANETARY SCIENCE.

(a) FINDINGS.—Congress finds that—

(1) Administration support for planetary science is critical to enabling greater understanding of the solar system and the origin of the Earth;

(2) the United States leads the world in planetary science and can augment its success in that area with appropriate international, academic, and industry partnerships;

(3) a mix of small, medium, and large planetary science missions is required to sustain a steady cadence of planetary exploration; and

(4) robotic planetary exploration is a key component of preparing for future human exploration.

(b) MISSION PRIORITIES.—

(1) IN GENERAL.—In accordance with the priorities established in the most recent Planetary Science Decadal Survey, the Administrator shall ensure, to the greatest extent practicable, the completion of a balanced set of Discovery, New Frontiers, and Flagship missions at the cadence recommended by the most recent Planetary Science Decadal Survey.

(2) MISSION PRIORITY ADJUSTMENTS.—Consistent with the set of missions described in paragraph (1), and while maintaining the continuity of scientific data and steady development of capabilities and technologies, the Administrator may seek, if necessary, adjustments to mission priorities, schedule, and scope in light of changing budget projections.

SEC. 503. JAMES WEBB SPACE TELESCOPE.

It is the sense of Congress that—

(1) the James Webb Space Telescope will—
(A) significantly advance our understanding of star and planet formation, and improve our knowledge of the early universe; and

(B) support United States leadership in astrophysics;

(2) consistent with annual Government Accountability Office reviews of the James Webb Space Telescope program, the Administrator should continue robust surveillance of the performance of the James Webb Space Telescope project and continue to improve the reliability of cost estimates and contractor performance data and other major space flight projects in order to enhance NASA's ability to successfully deliver the James Webb Space Telescope on-time and within budget;

(3) the on-time and on-budget delivery of the James Webb Space Telescope is a high congressional priority; and

(4) the Administrator should ensure that integrated testing is appropriately timed and sufficiently comprehensive to enable potential issues to be identified and addressed early enough to be handled within the James Webb Space Telescope's development schedule and prior to its launch.

SEC. 504. WIDE-FIELD INFRARED SURVEY TELESCOPE.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the Wide-Field Infrared Survey Telescope (referred to in this section as "WFIRST") mission has the potential to enable scientific discoveries that will transform our understanding of the universe; and

(2) the Administrator, to the extent practicable, should make progress on the technologies and capabilities needed to position the Administration to meet the objectives, as outlined in the 2010 National Academies' Astronomy and Astrophysics Decadal Survey, in a way that maximizes the scientific productivity of meeting those objectives for the resources invested.

(b) CONTINUITY OF DEVELOPMENT.—The Administrator shall ensure that the concept definition and pre-formulation activities of the WFIRST mission continue while the James Webb Space Telescope is being completed.

SEC. 505. MARS 2020 ROVER.

It is the sense of Congress that—

(1) the Mars 2020 mission, to develop a Mars rover and to enable the return of samples to Earth, should remain a priority for NASA; and

(2) the Mars 2020 mission—

(A) should significantly increase our understanding of Mars;

(B) should help determine whether life previously existed on that planet; and

(C) should provide opportunities to gather knowledge and demonstrate technologies that address the challenges of future human expeditions to Mars.

SEC. 506. EUROPA.

(a) FINDINGS.—Congress makes the following findings:

(1) Studies of Europa, Jupiter's moon, indicate that Europa may provide a habitable environment, as it contains key ingredients known to support life.

(2) In 2012, using the Hubble Space Telescope, NASA scientists observed water vapor around the south polar region of Europa, which provides potential evidence of water plumes in that region.

(3) For decades, the Europa mission has consistently ranked as a high priority mission for the scientific community.

(4) The Europa mission was ranked as the top priority mission in the previous Planetary Science Decadal Survey and ranked as the second-highest priority in the current Planetary Science Decadal Survey.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the Europa mission could provide another avenue in which to capitalize on our Nation's current investment in the Space Launch System that would significantly reduce the transit time for such a deep space mission; and

(2) a scientific, robotic exploration mission to Europa, as prioritized in both Planetary Science Decadal Surveys, should be supported.

SEC. 507. CONGRESSIONAL DECLARATION OF POLICY AND PURPOSE.

Section 20102(d) of title 51, United States Code, is amended by adding at the end the following:

"(10) The search for life's origin, evolution, distribution, and future in the universe."

SEC. 508. EXTRASOLAR PLANET EXPLORATION STRATEGY.

(a) STRATEGY.—

(1) IN GENERAL.—The Administrator shall enter into an arrangement with the National Academies to develop a science strategy for the study and exploration of extrasolar planets, including the use of the Transiting Exoplanet Survey Satellite, the James Webb Space Telescope, a potential Wide-Field Infrared Survey Telescope mission, or any other telescope, spacecraft, or instrument, as appropriate.

(2) REQUIREMENTS.—The strategy shall—

(A) outline key scientific questions;

(B) identify the most promising research in the field;

(C) indicate the extent to which the mission priorities in existing decadal surveys address the key extrasolar planet research and exploration goals;

(D) identify opportunities for coordination with international partners, commercial partners, and not-for-profit partners; and

(E) make recommendations regarding the activities under subparagraphs (A) through (D), as appropriate.

(b) USE OF STRATEGY.—The Administrator shall use the strategy—

(1) to inform roadmaps, strategic plans, and other activities of the Administration as they relate to extrasolar planet research and exploration; and

(2) to provide a foundation for future activities and initiatives related to extrasolar planet research and exploration.

(c) REPORT TO CONGRESS.—Not later than 18 months after the date of enactment of this Act, the National Academies shall submit to the Administrator and to the appropriate committees of Congress a report containing the strategy developed under subsection (a).

SEC. 509. ASTROBIOLOGY STRATEGY.

(a) STRATEGY.—

(1) IN GENERAL.—The Administrator shall enter into an arrangement with the National Academies to develop a science strategy for astrobiology that would outline key scientific questions, identify the most promising research in the field, and indicate the extent to which the mission priorities in existing decadal surveys address the search for life's origin, evolution, distribution, and future in the Universe.

(2) RECOMMENDATIONS.—The strategy shall include recommendations for coordination with international partners.

(b) USE OF STRATEGY.—The Administrator shall use the strategy developed under subsection (a) in planning and funding research and other activities and initiatives in the field of astrobiology.

(c) REPORT TO CONGRESS.—Not later than 18 months after the date of enactment of this Act, the National Academies shall submit to the Administrator and to the appropriate committees of Congress a report containing the strategy developed under subsection (a).

SEC. 510. ASTROBIOLOGY PUBLIC-PRIVATE PARTNERSHIPS.

Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report describing how the Administration can expand collaborative partnerships to study life's origin, evolution, distribution, and future in the universe.

SEC. 511. NEAR-EARTH OBJECTS.

Section 321 of the National Aeronautics and Space Administration Authorization Act of 2005 (51 U.S.C. note prec. 71101) is amended by adding at the end the following:

"(e) PROGRAM REPORT.—The Director of the Office of Science and Technology Policy and the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives, not later than 1 year after the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2016, an initial report that provides—

"(1) recommendations for carrying out the Survey program and an associated proposed budget;

"(2) an analysis of possible options that the Administration could employ to divert an object on a likely collision course with Earth; and

"(3) a description of the status of efforts to coordinate and cooperate with other countries to discover hazardous asteroids and comets, plan a mitigation strategy, and implement that strategy in the event of the discovery of an object on a likely collision course with Earth.

"(f) ANNUAL REPORTS.—After the initial report under subsection (e), the Administrator shall annually transmit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that includes—

"(1) a summary of all activities carried out under subsection (d) since the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2016, including the progress toward achieving 90 percent completion of the survey described in subsection (d); and

"(2) a summary of expenditures for all activities carried out under subsection (d)

since the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2016.

“(g) ASSESSMENT.—The Administrator, in collaboration with other relevant Federal agencies, shall carry out a technical and scientific assessment of the capabilities and resources—

“(1) to accelerate the survey described in subsection (d); and

“(2) to expand the Administration’s Near-Earth Object Program to include the detection, tracking, cataloguing, and characterization of potentially hazardous near-Earth objects less than 140 meters in diameter.

“(h) TRANSMITTAL.—Not later than 270 days after the date of enactment of the National Aeronautics and Space Administration Transition Authorization Act of 2016, the Administrator shall transmit the results of the assessment under subsection (g) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.”

SEC. 512. NEAR-EARTH OBJECTS PUBLIC-PRIVATE PARTNERSHIPS.

(a) SENSE OF CONGRESS.—It is the sense of Congress that the Administration should seek to leverage the capabilities of the private sector and philanthropic organizations to the maximum extent practicable in carrying out the Near-Earth Object Survey Program in order to meet the goal of that program under section 321(d)(1) of the National Aeronautics and Space Administration Authorization Act of 2005 (51 U.S.C. note prec. 71101(d)(1)).

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report describing how the Administration can expand collaborative partnerships to detect, track, catalogue, and categorize near-Earth objects.

SEC. 513. ASSESSMENT OF SCIENCE MISSION EXTENSIONS.

Section 30504 of title 51, United States Code, is amended to read as follows:

“§ 30504. Assessment of science mission extensions

“(a) ASSESSMENTS.—

“(1) IN GENERAL.—The Administrator shall carry out triennial reviews within each of the Science divisions to assess the cost and benefits of extending the date of the termination of data collection for those missions that exceed their planned missions’ lifetime.

“(2) CONSIDERATIONS.—In conducting an assessment under paragraph (1), the Administrator shall consider whether and how extending missions impacts the start of future missions.

“(b) CONSULTATION AND CONSIDERATION OF POTENTIAL BENEFITS OF INSTRUMENTS ON MISSIONS.—When deciding whether to extend a mission that has an operational component, the Administrator shall—

“(1) consult with any affected Federal agency; and

“(2) take into account the potential benefits of instruments on missions that are beyond their planned mission lifetime.

“(c) REPORTS.—The Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives, at the same time as the submission to Congress of the Administration’s annual budget request for each fiscal year, a report detailing any assessment under subsection (a) that was carried out during the previous year.”

SEC. 514. STRATOSPHERIC OBSERVATORY FOR INFRARED ASTRONOMY.

The Administrator may not terminate science operations of the Stratospheric Ob-

servatory for Infrared Astronomy before December 31, 2017.

SEC. 515. RADIOISOTOPE POWER SYSTEMS.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) exploration of the outer reaches of the solar system is enabled by radioisotope power systems;

(2) establishing continuity in the production of the material needed for radioisotope power systems is essential to maintaining the availability of such systems for future deep space exploration missions; and

(3) Federal agencies supporting the Administration through the production of such material should do so in a cost effective manner so as not to impose excessive reimbursement requirements on the Administration.

(b) ANALYSIS OF REQUIREMENTS AND RISKS.—The Director of the Office of Science and Technology Policy and the Administrator, in consultation with other Federal agencies, shall conduct an analysis of—

(1) the requirements of the Administration for radioisotope power system material that is needed to carry out planned, high priority robotic missions in the solar system and other surface exploration activities beyond low-Earth orbit; and

(2) the risks to missions of the Administration in meeting those requirements, or any additional requirements, due to a lack of adequate radioisotope power system material.

(c) CONTENTS OF ANALYSIS.—The analysis conducted under subsection (b) shall—

(1) detail the Administration’s current projected mission requirements and associated timeframes for radioisotope power system material;

(2) explain the assumptions used to determine the Administration’s requirements for the material, including—

(A) the planned use of advanced thermal conversion technology such as advanced thermocouples and Stirling generators and converters; and

(B) the risks and implications of, and contingencies for, any delays or unanticipated technical challenges affecting or related to the Administration’s mission plans for the anticipated use of advanced thermal conversion technology;

(3) assess the risk to the Administration’s programs of any potential delays in achieving the schedule and milestones for planned domestic production of radioisotope power system material;

(4) outline a process for meeting any additional Administration requirements for the material;

(5) estimate the incremental costs required to increase the amount of material produced each year, if such an increase is needed to support additional Administration requirements for the material;

(6) detail how the Administration and other Federal agencies will manage, operate, and fund production facilities and the design and development of all radioisotope power systems used by the Administration and other Federal agencies as necessary;

(7) specify the steps the Administration will take, in consultation with the Department of Energy, to preserve the infrastructure and workforce necessary for production of radioisotope power systems and ensure that its reimbursements to the Department of Energy associated with such preservation are equitable and justified; and

(8) detail how the Administration has implemented or rejected the recommendations from the National Research Council’s 2009 report titled “Radioisotope Power Systems: An Imperative for Maintaining U.S. Leadership in Space Exploration.”

(d) REPORT TO CONGRESS.—Not later than 180 days after the date of enactment of this

Act, the Administrator shall submit the results of the analysis to the appropriate committees of Congress.

SEC. 516. ASSESSMENT OF MARS ARCHITECTURE.

(a) ASSESSMENT.—The Administrator shall enter into an arrangement with the National Academies of Sciences, Engineering, and Medicine to assess—

(1) the Administration’s Mars exploration architecture and its responsiveness to the strategies, priorities, and guidelines put forward by the National Academies’ planetary science decadal surveys and other relevant National Academies Mars-related reports;

(2) the long-term goals of the Administration’s Mars Exploration Program and such program’s ability to optimize the science return, given the current fiscal posture of the program;

(3) the Mars exploration architecture’s relationship to Mars-related activities to be undertaken by foreign agencies and organizations; and

(4) the extent to which the Mars exploration architecture represents a reasonably balanced mission portfolio.

(b) REPORT TO CONGRESS.—Not later than 18 months after the date of enactment of this Act, the Administrator shall submit the results of the assessment to the appropriate committees of Congress.

SEC. 517. COLLABORATION.

The Administration shall continue to develop first-of-a-kind instruments that, once proved, can be transitioned to other agencies for operations. Whenever responsibilities for the development of sensors or for measurements are transferred to the Administration from another agency, the Administration shall seek, to the extent possible, to be reimbursed for the assumption of such responsibilities.

TITLE VI—AERONAUTICS

SEC. 601. SENSE OF CONGRESS ON AERONAUTICS.

It is the sense of Congress that—

(1) a robust aeronautics research portfolio will help maintain the United States status as a leader in aviation, enhance the competitiveness of the United States in the world economy, and improve the quality of life of all citizens;

(2) aeronautics research is essential to the Administration’s mission, continues to be an important core element of the Administration’s mission, and should be supported;

(3) the Administrator should coordinate and consult with relevant Federal agencies and the private sector to minimize duplication of efforts and leverage resources; and

(4) carrying aeronautics research to a level of maturity that allows the Administration’s research results to be transferred to the users, whether private or public sector, is critical to their eventual adoption.

SEC. 602. TRANSFORMATIVE AERONAUTICS RESEARCH.

It is the sense of Congress that the Administrator should look strategically into the future and ensure that the Administration’s Center personnel are at the leading edge of aeronautics research by encouraging investigations into the early-stage advancement of new processes, novel concepts, and innovative technologies that have the potential to meet national aeronautics needs.

SEC. 603. HYPERSONIC RESEARCH.

(a) ROADMAP FOR HYPERSONIC RESEARCH.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the heads of other relevant Federal agencies, shall develop and submit to the appropriate committees of Congress a research and development roadmap for hypersonic aircraft research.

(b) OBJECTIVE.—The objective of the roadmap is to explore hypersonic science and

technology using air-breathing propulsion concepts, through a mix of theoretical work, basic and applied research, and development of flight research demonstration vehicles.

(c) CONTENTS.—The roadmap shall recommend appropriate Federal agency contributions, coordination efforts, and technology milestones.

SEC. 604. SUPERSONIC RESEARCH.

(a) FINDINGS.—Congress finds that—

(1) the ability to fly commercial aircraft over land at supersonic speeds without adverse impacts on the environment or on local communities could open new global markets and enable new transportation capabilities; and

(2) continuing the Administration's research program is necessary to assess the impact in a relevant environment of commercial supersonic flight operations and provide the basis for establishing appropriate sonic boom standards for such flight operations.

(b) ROADMAP FOR SUPERSONIC RESEARCH.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall develop and submit to the appropriate committees of Congress a roadmap that allows for flexible funding profiles for supersonic aeronautics research and development.

(2) OBJECTIVE.—The objective of the roadmap is to develop and demonstrate, in a relevant environment, airframe and propulsion technologies to minimize the environmental impact, including noise, of supersonic overland flight in an efficient and economical manner.

(3) CONTENTS.—The roadmap shall include—

(A) the baseline research as embodied by the Administration's existing research on supersonic flight;

(B) a list of specific technological, environmental, and other challenges that must be overcome to minimize the environmental impact, including noise, of supersonic overland flight;

(C) a research plan to address the challenges under subparagraph (B), including a project timeline for accomplishing relevant research goals;

(D) a plan for coordination with stakeholders, including relevant government agencies and industry; and

(E) a plan for how the Administration will ensure that sonic boom research is coordinated as appropriate with relevant Federal agencies.

SEC. 605. ROTORCRAFT RESEARCH.

(a) ROADMAP FOR ROTORCRAFT RESEARCH.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the heads of other relevant Federal agencies, shall prepare and submit to the appropriate committees of Congress a roadmap for research relating to rotorcraft and other runway-independent air vehicles.

(b) OBJECTIVE.—The objective of the roadmap is to develop and demonstrate improved safety, noise, and environmental impact in a relevant environment.

(c) CONTENTS.—The roadmap shall include specific goals for the research, a timeline for implementation, metrics for success, and guidelines for collaboration and coordination with industry and other Federal agencies.

TITLE VII—SPACE TECHNOLOGY

SEC. 701. SPACE TECHNOLOGY INFUSION.

(a) SENSE OF CONGRESS ON SPACE TECHNOLOGY.—It is the sense of Congress that space technology is critical—

(1) to developing technologies and capabilities that will make the Administration's core missions more affordable and more reliable;

(2) to enabling a new class of Administration missions beyond low-Earth orbit; and

(3) to improving technological capabilities and promote innovation for the Administration and the Nation.

(b) SENSE OF CONGRESS ON PROPULSION TECHNOLOGY.—It is the sense of Congress that advancing propulsion technology would improve the efficiency of trips to Mars and could shorten travel time to Mars, reduce astronaut health risks, and reduce radiation exposure, consumables, and mass of materials required for the journey.

(c) POLICY.—It is the policy of the United States that the Administrator shall develop technologies to support the Administration's core missions, as described in section 2(3) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18301(3)), and support sustained investments in early stage innovation, fundamental research, and technologies to expand the boundaries of the national aerospace enterprise.

(d) PROPULSION TECHNOLOGIES.—A goal of propulsion technologies developed under subsection (c) shall be to significantly reduce human travel time to Mars.

SEC. 702. SPACE TECHNOLOGY PROGRAM.

(a) SPACE TECHNOLOGY PROGRAM AUTHORIZED.—The Administrator shall conduct a space technology program (referred to in this section as the "Program") to research and develop advanced space technologies that could deliver innovative solutions across the Administration's space exploration and science missions.

(b) CONSIDERATIONS.—In conducting the Program, the Administrator shall consider—

(1) the recommendations of the National Academies' review of the Administration's Space Technology roadmaps and priorities; and

(2) the applicable enabling aspects of the stepping stone approach to exploration under section 70504 of title 51, United States Code.

(c) REQUIREMENTS.—In conducting the Program, the Administrator shall—

(1) to the extent practicable, use a competitive process to select research and development projects;

(2) to the extent practicable and appropriate, use small satellites and the Administration's suborbital and ground-based platforms to demonstrate space technology concepts and developments; and

(3) as appropriate, partner with other Federal agencies, universities, private industry, and foreign countries.

(d) SMALL BUSINESS PROGRAMS.—The Administrator shall organize and manage the Administration's Small Business Innovation Research Program and Small Business Technology Transfer Program within the Program.

(e) NONDUPLICATION CERTIFICATION.—The Administrator shall submit a budget for each fiscal year, as transmitted to Congress under section 1105(a) of title 31, United States Code, that avoids duplication of projects, programs, or missions conducted by Program with other projects, programs, or missions conducted by another office or directorate of the Administration.

(f) COLLABORATION, COORDINATION, AND ALIGNMENT.—

(1) IN GENERAL.—The Administrator shall—

(A) ensure that the Administration's projects, programs, and activities in support of technology research and development of advanced space technologies are fully coordinated and aligned;

(B) ensure that the results the projects, programs, and activities under subparagraph (A) are shared and leveraged within the Administration; and

(C) ensure that the organizational responsibility for research and development activities in support of human space exploration

not initiated as of the date of enactment of this Act is established on the basis of a sound rationale.

(2) SENSE OF CONGRESS.—It is the sense of Congress that projects, programs, and missions being conducted by the Human Exploration and Operations Mission Directorate in support of research and development of advanced space technologies and systems focusing on human space exploration should continue in that Directorate.

(g) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall provide to the appropriate committees of Congress a report—

(1) comparing the Administration's space technology investments with the high-priority technology areas identified by the National Academies in the National Research Council's report on the Administration's Space Technology Roadmaps; and

(2) including—

(A) identification of how the Administration will address any gaps between the agency's investments and the recommended technology areas, including a projection of funding requirements; and

(B) identification of the rationale described in subsection (f)(1)(C).

(h) ANNUAL REPORT.—The Administrator shall include in the Administration's annual budget request for each fiscal year the rationale for assigning organizational responsibility for, in the year prior to the budget fiscal year, each initiated project, program, and mission focused on research and development of advanced technologies for human space exploration.

TITLE VIII—MAXIMIZING EFFICIENCY

Subtitle A—Agency Information Technology and Cybersecurity

SEC. 811. INFORMATION TECHNOLOGY GOVERNANCE.

(a) IN GENERAL.—The Administrator shall, in a manner that reflects the unique nature of NASA's mission and expertise—

(1) ensure the NASA Chief Information Officer, Mission Directorates, and Centers have appropriate roles in the management, governance, and oversight processes related to information technology operations and investments and information security programs for the protection of NASA systems;

(2) ensure the NASA Chief Information Officer has the appropriate resources and insight to oversee NASA information technology and information security operations and investments;

(3) provide an information technology program management framework to increase the efficiency and effectiveness of information technology investments, including relying on metrics for identifying and reducing potential duplication, waste, and cost;

(4) improve the operational linkage between the NASA Chief Information Officer and each NASA mission directorate, center, and mission support office to ensure both agency and mission needs are considered in agency-wide information technology and information security management and oversight;

(5) review the portfolio of information technology investments and spending, including information technology-related investments included as part of activities within NASA mission directorates that may not be considered information technology, to ensure investments are recognized and reported appropriately based on guidance from the Office of Management and Budget;

(6) consider appropriate revisions to the charters of information technology boards and councils that inform information technology investment and operation decisions; and

(7) consider whether the NASA Chief Information Officer should have a seat on any boards or councils described in paragraph (6).

(b) GAO STUDY.—

(1) STUDY.—The Comptroller General of the United States shall conduct a study of the effectiveness of the Administration's Information Technology Governance in ensuring information technology resources are aligned with agency missions and are cost effective and secure.

(2) CONTENTS.—The study shall include an assessment of—

(A) the resources available for overseeing Administration-wide information technology operations, investments, and security measures and the NASA Chief Information Officer's visibility and involvement into information technology oversight and access to those resources;

(B) the effectiveness and challenges of the Administration's information technology structure, decision making processes and authorities, including impacts on its ability to implement information security; and

(C) the impact of NASA Chief Information Officer approval authority over information technology investments that exceed a defined monetary threshold, including any potential impacts of such authority on the Administration's missions, flights programs and projects, research activities, and Center operations.

(3) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to the appropriate committees of Congress a report detailing the results of the study under paragraph (1), including any recommendations.

SEC. 812. INFORMATION TECHNOLOGY STRATEGIC PLAN.

(a) IN GENERAL.—Subject to subsection (b), the Administrator shall develop an information technology strategic plan to guide NASA information technology management and strategic objectives.

(b) REQUIREMENTS.—In developing the strategic plan, the Administrator shall ensure that the strategic plan addresses—

(1) the deadline under section 306(a) of title 5, United States Code; and

(2) the requirements under section 3506 of title 44, United States Code.

(c) CONTENTS.—The strategic plan shall address, in a manner that reflects the unique nature of NASA's mission and expertise—

(1) near and long-term goals and objectives for leveraging information technology;

(2) a plan for how NASA will submit to Congress of a list of information technology projects, including completion dates and risk level in accordance with guidance from the Office of Management and Budget;

(3) an implementation overview for an agency-wide approach to information technology investments and operations, including reducing barriers to cross-center collaboration;

(4) coordination by the NASA Chief Information Officer with centers and mission directorates to ensure that information technology policies are effectively and efficiently implemented across the agency;

(5) a plan to increase the efficiency and effectiveness of information technology investments, including a description of how unnecessarily duplicative, wasteful, legacy, or outdated information technology across NASA will be identified and eliminated, and a schedule for the identification and elimination of such information technology;

(6) a plan for improving the information security of agency information and agency information systems, including improving security control assessments and role-based security training of employees; and

(7) submission by NASA to Congress of information regarding high risk projects and cybersecurity risks.

(d) CONGRESSIONAL OVERSIGHT.—The Administrator shall submit to the appropriate committees of Congress the strategic plan under subsection (a) and any updates thereto.

SEC. 813. CYBERSECURITY.

(a) FINDING.—The security of NASA information and information systems is vital to the success of the mission of the agency.

(b) INFORMATION SECURITY PLAN.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall implement the information security plan developed under paragraph (2) and take such further actions as the Administrator considers necessary to improve the information security system in accordance with this section.

(2) INFORMATION SECURITY PLAN.—Subject to paragraphs (3) and (4), the Administrator shall develop an agency-wide information security plan to enhance information security for NASA information and information infrastructure.

(3) REQUIREMENTS.—In developing the plan under paragraph (2), the Administrator shall ensure that the plan—

(A) reflects the unique nature of NASA's mission and expertise;

(B) is informed by policies, standards, guidelines, and directives on information security required for Federal agencies;

(C) is consistent with the standards and guidelines under section 11331 of title 40, United States Code; and

(D) meets applicable National Institute of Standards and Technology information security standards and guidelines.

(4) CONTENTS.—The plan shall address—

(A) an overview of the requirements of the information security system;

(B) an agency-wide risk management framework for information security;

(C) a description of the information security system management controls and common controls that are necessary to ensure compliance with information security-related requirements;

(D) an identification and assignment of roles, responsibilities, and management commitment for information security at the agency;

(E) coordination among organizational entities, including between each center, facility, mission directorate, and mission support office, and among agency entities responsible for different aspects of information security;

(F) the need to protect the information security of mission-critical systems and activities and high-impact and moderate-impact information systems; and

(G) a schedule of frequent reviews and updates, as necessary, of the plan.

SEC. 814. SECURITY MANAGEMENT OF FOREIGN NATIONAL ACCESS.

The Administrator shall notify the appropriate committees of Congress when the agency has implemented the information technology security recommendations from the National Academy of Public Administration on foreign national access management, based on reports from January 2014 and March 2016.

SEC. 815. CYBERSECURITY OF WEB APPLICATIONS.

Not later than 180 days after the date of enactment of this Act, the Administrator shall, in a manner that reflects the unique nature of NASA's mission and expertise—

(1) develop a plan, including such actions and milestones as are necessary, to fully remediate security vulnerabilities of NASA web applications within a timely fashion after discovery; and

(2) provide an update on its plan to implement the recommendation from the NASA Inspector General in the audit report dated July 10, 2014, (IG-14-023) to remove from the Internet or otherwise secure all NASA web applications in development or testing mode.

Subtitle B—Collaboration Among Mission Directorates and Other Matters

SEC. 821. COLLABORATION AMONG MISSION DIRECTORATES.

The Administrator shall encourage an interdisciplinary approach among all NASA mission directorates and divisions, whenever appropriate, for projects or missions—

(1) to improve coordination, and encourage collaboration and early planning on scope;

(2) to determine areas of overlap or alignment;

(3) to find ways to leverage across divisional perspectives to maximize outcomes; and

(4) to be more efficient with resources and funds.

SEC. 822. NASA LAUNCH CAPABILITIES COLLABORATION.

(a) FINDINGS.—Congress makes the following findings:

(1) The Launch Services Program is responsible for the acquisition, management, and technical oversight of commercial launch services for NASA's science and robotic missions.

(2) The Commercial Crew Program is responsible for the acquisition, management, and technical oversight of commercial crew transportation systems.

(3) The Launch Services Program and Commercial Crew Program have worked together to gain exceptional technical insight into the contracted launch service providers that are common to both programs.

(4) The Launch Services Program has a long history of oversight of 12 different launch vehicles and over 80 launches.

(5) Co-location of the Launch Services Program and Commercial Crew Program has enabled the Commercial Crew Program to efficiently obtain the launch vehicle technical expertise of and provide engineering and analytical support to the Commercial Crew Program.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the Launch Services Program and Commercial Crew Program each benefit from communication and coordination of launch manifests, technical information, and common launch vehicle insight between the programs; and

(2) such communication and coordination is enabled by the co-location of the programs.

(c) IN GENERAL.—The Administrator shall pursue a strategy for acquisition of crewed transportation services and non-crewed launch services that continues to enhance communication, collaboration, and coordination between the Launch Services Program and the Commercial Crew Program.

SEC. 823. DETECTION AND AVOIDANCE OF COUNTERFEIT PARTS.

(a) FINDINGS.—Congress finds the following:

(1) A 2012 investigation by the Committee on Armed Services of the Senate of counterfeit electronic parts in the Department of Defense supply chain from 2009 through 2010 uncovered 1,800 cases and over 1,000,000 counterfeit parts and exposed the threat such counterfeit parts pose to service members and national security.

(2) Since 2010, the Comptroller General of the United States has identified in 3 separate reports the risks and challenges associated with counterfeit parts and counterfeit prevention at both the Department of Defense and NASA, including inconsistent definitions

of counterfeit parts, poorly targeted quality control practices, and potential barriers to improvements to these practices.

(b) SENSE OF CONGRESS.—It is the sense of Congress that the presence of counterfeit electronic parts in the NASA supply chain poses a danger to United States government astronauts, crew, and other personnel and a risk to the agency overall.

(c) REGULATIONS.—

(1) IN GENERAL.—Not later than 270 days after the date of enactment of this Act, the Administrator shall revise the NASA Supplement to the Federal Acquisition Regulation to improve the detection and avoidance of counterfeit electronic parts in the supply chain.

(2) CONTRACTOR RESPONSIBILITIES.—In revising the regulations under paragraph (1), the Administrator shall—

(A) require each covered contractor—

(i) to detect and avoid the use or inclusion of any counterfeit parts in electronic parts or products that contain electronic parts;

(ii) to take such corrective actions as the Administrator considers necessary to remedy the use or inclusion described in clause (i); and

(iii) including a subcontractor, to notify the applicable NASA contracting officer not later than 30 calendar days after the date the covered contractor becomes aware, or has reason to suspect, that any end item, component, part or material contained in supplies purchased by NASA, or purchased by a covered contractor or subcontractor for delivery to, or on behalf of, NASA, contains a counterfeit electronic part or suspect counterfeit electronic part; and

(B) prohibit the cost of counterfeit electronic parts, suspect counterfeit electronic parts, and any corrective action described under subparagraph (A)(ii) from being included as allowable costs under agency contracts, unless—

(i) the covered contractor has an operational system to detect and avoid counterfeit electronic parts and suspect counterfeit electronic parts that has been reviewed and approved by NASA or the Department of Defense; and

(ii) the covered contractor has provided the notice under subparagraph (A)(iii); or

(iii) the counterfeit electronic parts or suspect counterfeit electronic parts were provided to the covered contractor as Government property in accordance with part 45 of the Federal Acquisition Regulation.

(3) SUPPLIERS OF ELECTRONIC PARTS.—In revising the regulations under paragraph (1), the Administrator shall—

(A) require NASA and covered contractors, including subcontractors, at all tiers—

(i) to obtain electronic parts that are in production or currently available in stock from—

(I) the original manufacturers of the parts or their authorized dealers; or

(II) suppliers who obtain such parts exclusively from the original manufacturers of the parts or their authorized dealers; and

(ii) to obtain electronic parts that are not in production or currently available in stock from suppliers that meet qualification requirements established under subparagraph (C);

(B) establish documented requirements consistent with published industry standards or Government contract requirements for—

(i) notification of the agency; and

(ii) inspection, testing, and authentication of electronic parts that NASA or a covered contractor, including a subcontractor, obtains from any source other than a source described in subparagraph (A);

(C) establish qualification requirements, consistent with the requirements of section 2319 of title 10, United States Code, pursuant

to which NASA may identify suppliers that have appropriate policies and procedures in place to detect and avoid counterfeit electronic parts and suspect counterfeit electronic parts; and

(D) authorize a covered contractor, including a subcontractor, to identify and use additional suppliers beyond those identified under subparagraph (C) if—

(i) the standards and processes for identifying such suppliers comply with established industry standards;

(ii) the covered contractor assumes responsibility for the authenticity of parts provided by such suppliers under paragraph (2); and

(iii) the selection of such suppliers is subject to review and audit by NASA.

(d) DEFINITIONS.—In this section:

(1) COVERED CONTRACTOR.—The term “covered contractor” means a contractor that supplies an electronic part, or a product that contains an electronic part, to NASA.

(2) ELECTRONIC PART.—The term “electronic part” means a discrete electronic component, including a microcircuit, transistor, capacitor, resistor, or diode, that is intended for use in a safety or mission critical application.

SEC. 824. EDUCATION AND OUTREACH.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) United States competitiveness in the 21st century requires engaging the science, technology, engineering, and mathematics (referred to in this section as “STEM”) talent in all States;

(2) the Administration is uniquely positioned to educate and inspire students and the broader public on STEM subjects and careers;

(3) the Administration’s Education and Communication Offices, Mission Directorates, and Centers have been effective in delivering educational content because of the strong engagement of Administration scientists and engineers in the Administration’s education and outreach activities;

(4) the Administration’s education and outreach programs, including the Experimental Program to Stimulate Competitive Research (EPSCoR) and the Space Grant College and Fellowship Program, reflect the Administration’s successful commitment to growing and diversifying the national science and engineering workforce; and

(5) in order to grow and diversify the Nation’s engineering workforce, it is vital for the Administration to bolster programs, such as High Schools United with NASA to Create Hardware (HUNCH) program, that conduct outreach activities to underserved rural communities, vocational schools, and tribal colleges and universities and encourage new participation in the STEM workforce.

(b) CONTINUATION OF EDUCATION AND OUTREACH ACTIVITIES AND PROGRAMS.—

(1) IN GENERAL.—The Administrator shall continue engagement with the public and education opportunities for students via all the Administration’s mission directorates to the maximum extent practicable.

(2) REPORT.—Not later than 60 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report on the Administration’s near-term outreach plans for advancing space law education.

SEC. 825. LEVERAGING COMMERCIAL SATELLITE SERVICING CAPABILITIES ACROSS MISSION DIRECTORATES.

(a) FINDINGS.—Congress makes the following findings:

(1) Refueling and relocating aging satellites to extend their operational lifetimes is a capacity that NASA will substantially

benefit from and is important for lowering the costs of ongoing scientific, national security, and commercial satellite operations.

(2) The technologies involved in satellite servicing, such as dexterous robotic arms, propellant transfer systems, and solar electric propulsion, are all critical capabilities to support a human exploration mission to Mars.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) satellite servicing is a vital capability that will bolster the capacity and affordability of NASA’s ongoing scientific and human exploration operations while simultaneously enhancing the ability of domestic companies to compete in the global marketplace; and

(2) future NASA satellites and spacecraft across mission directorates should be constructed in a manner that allows for servicing in order to maximize operational longevity and affordability.

(c) LEVERAGING OF CAPABILITIES.—The Administrator shall identify orbital assets in both the Science Mission Directorate and the Human Exploration and Operations Mission Directorate that could benefit from satellite servicing-related technologies, and shall work across all NASA mission directorates to evaluate opportunities for the private sector to perform such services or advance technical capabilities by leveraging the technologies and techniques developed by NASA programs and other industry programs.

SEC. 826. FLIGHT OPPORTUNITIES.

(a) DEVELOPMENT OF PAYLOADS.—

(1) IN GENERAL.—In order to conduct necessary research, the Administrator shall continue and, as the Administrator considers appropriate, expand the development of technology payloads for—

(A) scientific research; and

(B) investigating new or improved capabilities.

(2) FUNDS.—For the purpose of carrying out paragraph (1), the Administrator shall make funds available for—

(A) flight testing;

(B) payload development; and

(C) hardware related to subparagraphs (A) and (B).

(b) REAFFIRMATION OF POLICY.—Congress reaffirms that the Administrator should provide flight opportunities for payloads to microgravity environments and suborbital altitudes as authorized by section 907 of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18405).

SEC. 827. SENSE OF CONGRESS ON SMALL CLASS LAUNCH MISSIONS.

It is the sense of Congress that—

(1) Venture Class Launch Services contracts awarded under the Launch Services Program will expand opportunities for future dedicated launches of CubeSats and other small satellites and small orbital science missions; and

(2) principal investigator-led small orbital science missions, including CubeSat class, Small Explorer (SMEX) class, and Venture class, offer valuable opportunities to advance science at low cost, train the next generation of scientists and engineers, and enable participants to acquire skills in systems engineering and systems integration that are critical to maintaining the Nation’s leadership in space and to enhancing United States innovation and competitiveness abroad.

SEC. 828. BASELINE AND COST CONTROLS.

Section 30104(a)(1) of title 51, United States Code, is amended by striking “Procedural Requirements 7120.5c, dated March 22, 2005” and inserting “Procedural Requirements 7120.5E, dated August 14, 2012”.

SEC. 829. COMMERCIAL TECHNOLOGY TRANSFER PROGRAM.

Section 50116(a) of title 51, United States Code, is amended by inserting “, while protecting national security” after “research community”.

SEC. 830. AVOIDING ORGANIZATIONAL CONFLICTS OF INTEREST IN MAJOR ADMINISTRATION ACQUISITION PROGRAMS.

(a) REVISED REGULATIONS REQUIRED.—Not later than 270 days after the date of enactment of this Act, the Administrator shall revise the Administration Supplement to the Federal Acquisition Regulation to provide uniform guidance and recommend revised requirements for organizational conflicts of interest by contractors in major acquisition programs in order to address the elements identified in subsection (b).

(b) ELEMENTS.—The revised regulations under subsection (a) shall, at a minimum—

(1) address organizational conflicts of interest that could potentially arise as a result of—

(A) lead system integrator contracts on major acquisition programs and contracts that follow lead system integrator contracts on such programs, particularly contracts for production;

(B) the ownership of business units performing systems engineering and technical assistance functions, professional services, or management support services in relation to major acquisition programs by contractors who simultaneously own business units competing to perform as either the prime contractor or the supplier of a major subsystem or component for such programs;

(C) the award of major subsystem contracts by a prime contractor for a major acquisition program to business units or other affiliates of the same parent corporate entity, and particularly the award of subcontracts for software integration or the development of a proprietary software system architecture; or

(D) the performance by, or assistance of, contractors in technical evaluations on major acquisition programs;

(2) require the Administration to request advice on systems architecture and systems engineering matters with respect to major acquisition programs from objective sources independent of the prime contractor;

(3) require that a contract for the performance of systems engineering and technical assistance functions for a major acquisition program contains a provision prohibiting the contractor or any affiliate of the contractor from participating as a prime contractor or a major subcontractor in the development of a system under the program; and

(4) establish such limited exceptions to the requirement in paragraphs (2) and (3) as the Administrator considers necessary to ensure that the Administration has continued access to advice on systems architecture and systems engineering matters from highly qualified contractors with domain experience and expertise, while ensuring that such advice comes from sources that are objective and unbiased.

SEC. 831. PROTECTION OF APOLLO LANDING SITES.

(a) ASSESSMENT.—The Director of the Office of Science and Technology Policy, in consultation with relevant Federal agencies and stakeholders, shall assess the issues relating to protecting and preserving historically important Apollo Program lunar landing sites and Apollo program artifacts residing on the lunar surface, including those pertaining to Apollo 11 and Apollo 17.

(b) CONTENTS.—In conducting the assessment, the Director shall include—

(1) a determination of what risks to the protection and preservation of those sites

and artifacts exist or may exist in the future;

(2) a determination of what measures are required to ensure such protection and preservation;

(3) a determination of the extent to which additional domestic legislation or international treaties or agreements will be required; and

(4) specific recommendations for protecting and preserving those lunar landing sites and artifacts.

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Director shall submit to the appropriate committees of Congress the results of the assessment.

SEC. 832. NASA LEASE OF NON-EXCESS PROPERTY.

Section 20145(g) of title 51, United States Code, is amended by striking “10 years after December 26, 2007” and inserting “December 31, 2018”.

SEC. 833. TERMINATION LIABILITY.

It is the sense of Congress that—

(1) the ISS, the Space Launch System, and the Orion will enable the Nation to continue operations in low-Earth orbit and to send its astronauts to deep space;

(2) the James Webb Space Telescope will revolutionize our understanding of star and planet formation and how galaxies evolved, and will advance the search for the origins of our universe;

(3) as a result of their unique capabilities and their critical contribution to the future of space exploration, these systems have been designated by Congress and the Administration as priority investments;

(4) contractors are currently holding program funding, estimated to be in the hundreds of millions of dollars, to cover the potential termination liability should the Government choose to terminate a program for convenience;

(5) as a result, hundreds of millions of taxpayer dollars are unavailable for meaningful work on these programs;

(6) according to the Government Accountability Office, the Administration procures most of its goods and services through contracts, and it terminates very few of them;

(7) in fiscal year 2010, the Administration terminated 28 of 16,343 active contracts and orders, a termination rate of about 0.17 percent; and

(8) the Administration should vigorously pursue a policy on termination liability that maximizes the utilization of its appropriated funds to make maximum progress in meeting established technical goals and schedule milestones on these high-priority programs.

SEC. 834. INDEPENDENT REVIEWS.

Not later than 270 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report describing—

(1) the Administration's procedures for conducting independent reviews of projects and programs at lifecycle milestones;

(2) how the Administration ensures the independence of the individuals who conduct those reviews prior to their assignment;

(3) the internal and external entities independent of project and program management that conduct reviews of projects and programs at life cycle milestones; and

(4) how the Administration ensures the independence of such entities and their members.

SEC. 835. NASA ADVISORY COUNCIL.

(a) ASSESSMENT.—The Administrator shall enter into an arrangement with the National Academy of Public Administration to assess the effectiveness of the NASA Advisory Council and to make recommendations to Congress for any change to—

(1) the functions of the Council;

(2) the appointment of members to the Council;

(3) the qualifications for members of the Council;

(4) the duration of terms of office for members of the Council;

(5) the frequency of meetings of the Council;

(6) the structure of leadership and Committees of the Council; and

(7) the levels of professional staffing for the Council.

(b) CONSIDERATIONS.—In carrying out the assessment under subsection (a), the National Academy of Public Administration shall—

(1) consider the impacts of broadening the Council's role to include providing consultation and advice to Congress under section 20113(g) of title 51, United States Code;

(2) consider the past activities of the NASA Advisory Council and the activities of other analogous Federal advisory bodies; and

(3) any other issues that the National Academy of Public Administration determines could potentially impact the effectiveness of the Council.

(c) REPORT.—The National Academy of Public Administration shall submit to the appropriate committees of Congress the results of the assessment, including any recommendations.

(d) CONSULTATION AND ADVICE.—

(1) IN GENERAL.—Section 20113(g) of title 51, United States Code, is amended by inserting “and Congress” after “advice to the Administration”.

(2) SUNSET.—Effective September 30, 2017, section 20113(g) of title 51, United States Code, is amended by striking “and Congress”.

SEC. 836. COST ESTIMATION.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) realistic cost estimating is critically important to the ultimate success of major space development projects; and

(2) the Administration has devoted significant efforts over the past 5 years to improving its cost estimating capabilities, but it is important that the Administration continue its efforts to develop and implement guidance in establishing realistic cost estimates.

(b) GUIDANCE AND CRITERIA.—The Administrator shall provide to its acquisition programs and projects, in a manner consistent with the Administration's Space Flight Program and Project Management Requirements—

(1) guidance on when to use an Independent Cost Estimate and Independent Cost Assessment; and

(2) criteria to use to make a determination under paragraph (1).

SEC. 837. FACILITIES AND INFRASTRUCTURE.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the Administration must address, mitigate, and reverse, where possible, the deterioration of its facilities and infrastructure, as their condition is hampering the effectiveness and efficiency of research performed by both the Administration and industry participants making use of Administration facilities, thus harming the competitiveness of the United States aerospace industry;

(2) the Administration has a role in providing laboratory capabilities to industry participants that are not economically viable as commercial entities and thus are not available elsewhere;

(3) to ensure continued access to reliable and efficient world-class facilities by researchers, the Administration should establish strategic partnerships with other Federal agencies, institutions of higher education, and industry, as appropriate; and

(4) decisions on whether to dispose of, maintain, or modernize existing facilities must be made in the context of meeting Administration and other needs, including those required to meet the activities supporting the Human Exploration Roadmap under section 432 of this Act, consider other national laboratory needs as the Administrator deems appropriate.

(b) **POLICY.**—It is the policy of the United States that the Administration maintain reliable and efficient facilities and infrastructure and that decisions on whether to dispose of, maintain, or modernize existing facilities or infrastructure be made in the context of meeting future Administration needs.

(c) **PLAN.**—

(1) **IN GENERAL.**—The Administrator shall develop a facilities and infrastructure plan.

(2) **GOAL.**—The goal of the plan is to position the Administration to have the facilities and infrastructure, including laboratories, tools, and approaches, necessary to meet future Administration and other Federal agencies' laboratory needs.

(3) **CONTENTS.**—The plan shall identify—

(A) current Administration and other Federal agency laboratory needs;

(B) future Administration research and development and testing needs;

(C) a strategy for identifying facilities and infrastructure that are candidates for disposal, that is consistent with the national strategic direction set forth in—

(i) the National Space Policy;

(ii) the National Aeronautics Research, Development, Test, and Evaluation Infrastructure Plan;

(iii) the National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109-155; 119 Stat. 2895), National Aeronautics and Space Administration Authorization Act of 2008 (Public Law 110-422; 122 Stat. 4779), and National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18301 et seq.); and

(iv) the Human Exploration Roadmap under section 432 of this Act;

(D) a strategy for the maintenance, repair, upgrading, and modernization of Administration facilities and infrastructure, including laboratories and equipment; and

(E) criteria for—

(i) prioritizing deferred maintenance tasks;

(ii) maintaining, repairing, upgrading, or modernizing Administration facilities and infrastructure; and

(iii) implementing processes, plans, and policies for guiding the Administration's Centers on whether to maintain, repair, upgrade, or modernize a facility or infrastructure and for determining the type of instrument to be used.

SEC. 838. HUMAN SPACE FLIGHT ACCIDENT INVESTIGATIONS.

Section 70702 of title 51, United States Code, is amended—

(1) by amending subsection (a)(3) to read as follows:

“(3) any other orbital or suborbital space vehicle carrying humans that is—

“(A) owned by the Federal Government; or

“(B) being used pursuant to a contract or Space Act Agreement with the Federal Government for carrying a government astronaut or a researcher funded by the Federal Government; or”;

(2) by adding at the end the following:

“(c) **DEFINITIONS.**—In this section:

“(1) **GOVERNMENT ASTRONAUT.**—The term ‘government astronaut’ has the meaning given the term in section 50902.

“(2) **SPACE ACT AGREEMENT.**—The term ‘Space Act Agreement’ means an agreement entered into by the Administration pursuant to its other transactions authority under section 20113(e).”.

SEC. 839. ORBITAL DEBRIS.

(a) **FINDINGS.**—Congress finds that—

(1) orbital debris poses serious risks to the operational space capabilities of the United States;

(2) an international commitment and integrated strategic plan are needed to mitigate the growth of orbital debris wherever possible; and

(3) the delay in the Office of Science and Technology Policy's submission of a report on the status of international coordination and development of orbital debris mitigation strategies to be inconsistent with such risks.

(b) **REPORTS.**—

(1) **COORDINATION.**—Not later than 90 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a report on the status of efforts to coordinate with foreign countries within the Inter-Agency Space Debris Coordination Committee to mitigate the effects and growth of orbital debris under section 1202(b)(1) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18441(b)(1)).

(2) **MITIGATION STRATEGY.**—Not later than 90 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy shall submit to the appropriate committees of Congress a report on the status of the orbital debris mitigation strategy required under section 1202(b)(2) of the National Aeronautics and Space Administration Authorization Act of 2010 (42 U.S.C. 18441(b)(2)).

SEC. 840. REVIEW OF ORBITAL DEBRIS REMOVAL CONCEPTS.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) orbital debris in low-Earth orbit poses significant risks to spacecraft;

(2) such orbital debris may increase due to collisions between existing debris objects; and

(3) understanding options to address and remove orbital debris is important for ensuring safe and effective spacecraft operations in low-Earth orbit.

(b) **REVIEW.**—

(1) **IN GENERAL.**—Not later than 270 days after the date of enactment of this Act, the Administrator—

(A) in collaboration with the heads of other relevant Federal agencies, shall solicit and review concepts and options for removing orbital debris from low-Earth orbit; and

(B) shall submit to the appropriate committees of Congress a report on the solicitation and review under subparagraph (A), including recommendations on the best options for decreasing the risks associated with orbital debris.

(2) **REQUIREMENTS.**—The solicitation and review under paragraph (1) shall address the requirements for and feasibility of developing and implementing each of the options.

SA 5181. Mr. PORTMAN (for Mr. KIRK) proposed an amendment to the bill S. 1168, to amend title XVIII of the Social Security Act to preserve access to rehabilitation innovation centers under the Medicare program; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Preserving Rehabilitation Innovation Centers Act of 2016”.

SEC. 2. FINDINGS.

Congress makes the following findings:

(1) In the United States, there are an estimated 1,181 inpatient rehabilitation facilities. Among these facilities is a small group

of inpatient rehabilitation institutions that are contributing to the future of rehabilitation care medicine, as well as to patient recovery, scientific innovation, and quality of life.

(2) This unique category of inpatient rehabilitation institutions treats the most complex patient conditions, such as traumatic brain injury, stroke, spinal cord injury, childhood disease, burns, and wartime injuries.

(3) These leading inpatient rehabilitation institutions are all not-for-profit or Government-owned institutions and serve a high volume of Medicare or Medicaid beneficiaries.

(4) These leading inpatient rehabilitation institutions have been recognized by the Federal Government for their contributions to cutting-edge research to develop solutions that enhance quality of care, improve patient outcomes, and reduce health care costs.

(5) These leading inpatient rehabilitation institutions help to improve the practice and standard of rehabilitation medicine across the Nation in urban, suburban, and rural communities by training physicians, medical students, and other clinicians, and providing care to patients from all 50 States.

(6) It is vital that these leading inpatient rehabilitation institutions are supported so they can continue to lead the Nation's efforts to—

(A) advance integrated, multidisciplinary rehabilitation research;

(B) provide cutting-edge medical care to the most complex rehabilitation patients;

(C) serve as education and training facilities for the physicians, nurses, and other health professionals who serve rehabilitation patients;

(D) ensure Medicare and Medicaid beneficiaries receive state-of-the-art, high-quality rehabilitation care by developing and disseminating best practices and advancing the quality of care utilized by post-acute providers in all 50 States; and

(E) support other inpatient rehabilitation institutions in rural areas to help ensure access to quality post-acute care for patients living in these communities.

SEC. 3. STUDY AND REPORT RELATING TO THE COSTS INCURRED BY, AND THE MEDICARE PAYMENTS MADE TO, REHABILITATION INNOVATION CENTERS.

(a) **IN GENERAL.**—Section 1886(j) of the Social Security Act (42 U.S.C. 1395ww(j)) is amended—

(1) by redesignating paragraph (8) as paragraph (9); and

(2) by inserting after paragraph (7) the following new paragraph:

“(8) **STUDY AND REPORT RELATING TO THE COSTS INCURRED BY, AND THE MEDICARE PAYMENTS MADE TO, REHABILITATION INNOVATION CENTERS.**—

“(A) **STUDY.**—The Secretary shall conduct a study to assess the costs incurred by rehabilitation innovation centers (as defined in subparagraph (C)) that are beyond the prospective rate for each of the following activities:

“(i) Furnishing items and services to individuals under this title.

“(ii) Conducting research.

“(iii) Providing medical training.

“(B) **REPORT.**—Not later than July 1, 2019, the Secretary shall submit to Congress a report containing the results of the study under subparagraph (A), together with recommendations for such legislation and administrative action as the Secretary determines appropriate.

“(C) **REHABILITATION INNOVATION CENTER DEFINED.**—

“(i) **IN GENERAL.**—In this paragraph, the term ‘rehabilitation innovation center’

means a rehabilitation facility that, determined as of the date of the enactment of this paragraph, is described in clause (ii) or clause (iii).

“(ii) NOT-FOR-PROFIT.—A rehabilitation facility described in this clause is a facility that—

“(I) is classified as a not-for-profit entity under the IRF Rate Setting File for the Correction Notice for the Inpatient Rehabilitation Facility Prospective Payment System for Federal Fiscal Year 2012 (78 Fed. Reg. 59256);

“(II) holds at least one Federal rehabilitation research and training designation for research projects on traumatic brain injury, spinal cord injury, or stroke rehabilitation research from the Rehabilitation Research and Training Centers or the Rehabilitation Engineering Research Center at the National Institute on Disability and Rehabilitation Research at the Department of Education, based on such data submitted to the Secretary by a facility, in a form, manner, and time frame specified by the Secretary;

“(III) has a minimum Medicare case mix index of 1.1144 for fiscal year 2012 according to the IRF Rate Setting File described in subclause (I); and

“(IV) had at least 300 Medicare discharges or at least 200 Medicaid discharges in a prior year as determined by the Secretary.

“(iii) GOVERNMENT-OWNED.—A rehabilitation facility described in this clause is a facility that—

“(I) is classified as a Government-owned institution under the IRF Rate Setting File described in clause (ii)(I);

“(II) holds at least one Federal rehabilitation research and training designation for research projects on traumatic brain injury, spinal cord injury, or stroke rehabilitation research from the Rehabilitation Research and Training Centers, the Rehabilitation Engineering Research Center, or the Model Spinal Cord Injury Systems at the National Institute on Disability and Rehabilitation Research at the Department of Education, based on such data submitted to the Secretary by a facility, in a form, manner, and time frame specified by the Secretary;

“(III) has a minimum Medicare case mix index of 1.1144 for 2012 according to the IRF Rate Setting File described in clause (ii)(I); and

“(IV) has a Medicare disproportionate share hospital (DSH) percentage of at least 0.6300 according to the IRF Rate Setting File described in clause (ii)(I).”.

SA 5182. Mr. PORTMAN (for Mr. INHOFE (for himself and Mr. BLUMENTHAL)) proposed an amendment to the bill S. 3021, to amend title 38, United States Code, to authorize the use of Post-9/11 Educational Assistance to pursue independent study programs at certain educational institutions that are not institutions of higher learning; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Veterans Education Improvement Act of 2016” or the “VEI Act of 2016”.

SEC. 2. AUTHORIZATION FOR USE OF POST-9/11 EDUCATIONAL ASSISTANCE TO PURSUE INDEPENDENT STUDY PROGRAMS AT CERTAIN EDUCATIONAL INSTITUTIONS THAT ARE NOT INSTITUTIONS OF HIGHER LEARNING.

Paragraph (4) of section 3680A(a) of title 38, United States Code, is amended to read as follows:

“(4) any independent study program except—

“(A) with respect to enrollments occurring during the period beginning on the date of the enactment of the Veterans Education Improvement Act of 2016 and ending on September 30, 2018, an independent study program (including open circuit television) that—

“(i) is accredited by a nationally recognized accrediting agency; and

“(ii) leads—

“(I) to a standard college degree;

“(II) to a certificate that reflects educational attainment offered by an institution of higher learning; or

“(III) to a certificate that reflects completion of a course of study offered by—

“(aa) an area career and technical education school (as defined in subparagraphs (C) and (D) of section 3(3) of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302(3))) that provides education at the postsecondary level; or

“(bb) a postsecondary vocational institution (as defined in section 102(c) of the Higher Education Act of 1965 (20 U.S.C. 1002(c))) that provides education at the postsecondary level; and

“(B) with respect to enrollments occurring during any period other than the period described in subparagraph (A), an accredited independent study program (including open circuit television) leading—

“(i) to a standard college degree; or

“(ii) to a certificate that reflects educational attainment offered by an institution of higher learning.”.

SEC. 3. APPROVAL OF COURSES OF EDUCATION AND TRAINING FOR PURPOSES OF THE VOCATIONAL REHABILITATION PROGRAM OF THE DEPARTMENT OF VETERANS AFFAIRS.

(a) IN GENERAL.—Section 3104(b) of title 38, United States Code, is amended—

(1) by inserting “(1)” before “A rehabilitation”; and

(2) by adding at the end the following new paragraph:

“(2)(A) Except as provided in subparagraph (B), to the maximum extent practicable, a course of education or training may be pursued by a veteran as part of a rehabilitation program under this chapter only if the course is approved for purposes of chapter 30 or 33 of this title.

“(B) The Secretary may waive the requirement under subparagraph (A) to the extent the Secretary determines appropriate.”.

(b) EFFECTIVE DATE.—The amendments made by subsection (a) shall apply with respect to a course of education or training pursued by a veteran who first begins a program of rehabilitation under chapter 31 of title 38, United States Code, on or after the date that is one year after the date of the enactment of this Act.

SEC. 4. AUTHORITY TO PRIORITIZE VOCATIONAL REHABILITATION SERVICES BASED ON NEED.

Section 3104 of title 38, United States Code, as amended by section 3, is further amended by adding at the end the following new subsection:

“(c)(1) The Secretary shall have the authority to administer this chapter by prioritizing the provision of services under this chapter based on need, as determined by the Secretary.

“(2) In evaluating need for purposes of this subsection, the Secretary shall consider disability ratings, the severity of employment handicaps, qualification for a program of independent living services and assistance, income, and such other factors as the Secretary considers appropriate.

“(3) Not later than 90 days before making any changes to the prioritization of the provision of services under this chapter as authorized under paragraph (1), the Secretary

shall submit to Congress a plan describing such changes.”.

SEC. 5. CODIFICATION AND IMPROVEMENT OF EDUCATION PROCESS FOR POST-9/11 EDUCATIONAL ASSISTANCE PROGRAM.

(a) IN GENERAL.—Subchapter III of chapter 33 of title 38, United States Code, is amended—

(1) by redesignating section 3325 as section 3326; and

(2) by inserting after section 3324 the following new section 3325:

“§ 3325. Election to receive educational assistance

“(a) INDIVIDUALS ELIGIBLE TO ELECT PARTICIPATION IN POST-9/11 EDUCATIONAL ASSISTANCE.—An individual may elect to receive educational assistance under this chapter if such individual—

“(1) as of August 1, 2009—

“(A) is entitled to basic educational assistance under chapter 30 of this title and has used, but retains unused, entitlement under that chapter;

“(B) is entitled to educational assistance under chapter 107, 1606, or 1607 of title 10 and has used, but retains unused, entitlement under the applicable chapter;

“(C) is entitled to basic educational assistance under chapter 30 of this title but has not used any entitlement under that chapter;

“(D) is entitled to educational assistance under chapter 107, 1606, or 1607 of title 10 but has not used any entitlement under such chapter;

“(E) is a member of the Armed Forces who is eligible for receipt of basic educational assistance under chapter 30 of this title and is making contributions toward such assistance under section 3011(b) or 3012(c) of this title; or

“(F) is a member of the Armed Forces who is not entitled to basic educational assistance under chapter 30 of this title by reason of an election under section 3011(c)(1) or 3012(d)(1) of this title; and

“(2) as of the date of the individual’s election under this paragraph, meets the requirements for entitlement to educational assistance under this chapter.

(b) CESSATION OF CONTRIBUTIONS TOWARD GI BILL.—Effective as of the first month beginning on or after the date of an election under subsection (a) of an individual described by paragraph (1)(E) of that subsection, the obligation of the individual to make contributions under section 3011(b) or 3012(c) of this title, as applicable, shall cease, and the requirements of such section shall be deemed to be no longer applicable to the individual.

(c) REVOCATION OF REMAINING TRANSFERRED ENTITLEMENT.—

(1) ELECTION TO REVOKE.—If, on the date an individual described in paragraph (1)(A) or (1)(C) of subsection (a) makes an election under that subsection, a transfer of the entitlement of the individual to basic educational assistance under section 3020 of this title is in effect and a number of months of the entitlement so transferred remain unutilized, the individual may elect to revoke all or a portion of the entitlement so transferred that remains unutilized.

(2) AVAILABILITY OF REVOKED ENTITLEMENT.—Any entitlement revoked by an individual under this paragraph shall no longer be available to the dependent to whom transferred, but shall be available to the individual instead for educational assistance under chapter 33 of this title in accordance with the provisions of this section.

(3) AVAILABILITY OF UNREVOKED ENTITLEMENT.—Any entitlement described in paragraph (1) that is not revoked by an individual in accordance with that paragraph

shall remain available to the dependent or dependents concerned in accordance with the current transfer of such entitlement under section 3020 of this title.

“(d) POST-9/11 EDUCATIONAL ASSISTANCE.—

“(1) IN GENERAL.—Subject to paragraph (2) and except as provided in subsection (e), an individual making an election under subsection (a) shall be entitled to educational assistance under this chapter in accordance with the provisions of this chapter, instead of basic educational assistance under chapter 30 of this title, or educational assistance under chapter 107, 1606, or 1607 of title 10, as applicable.

“(2) LIMITATION ON ENTITLEMENT FOR CERTAIN INDIVIDUALS.—In the case of an individual making an election under subsection (a) who is described by paragraph (1)(A) of that subsection, the number of months of entitlement of the individual to educational assistance under this chapter shall be the number of months equal to—

“(A) the number of months of unused entitlement of the individual under chapter 30 of this title, as of the date of the election, plus

“(B) the number of months, if any, of entitlement revoked by the individual under subsection (c)(1).

“(e) CONTINUING ENTITLEMENT TO EDUCATIONAL ASSISTANCE NOT AVAILABLE UNDER 9/11 ASSISTANCE PROGRAM.—

“(1) IN GENERAL.—In the event educational assistance to which an individual making an election under subsection (a) would be entitled under chapter 30 of this title, or chapter 107, 1606, or 1607 of title 10, as applicable, is not authorized to be available to the individual under the provisions of this chapter the individual shall remain entitled to such educational assistance in accordance with the provisions of the applicable chapter.

“(2) CHARGE FOR USE OF ENTITLEMENT.—The utilization by an individual of entitlement under paragraph (1) shall be chargeable against the entitlement of the individual to educational assistance under this chapter at the rate of one month of entitlement under this chapter for each month of entitlement utilized by the individual under paragraph (1) (as determined as if such entitlement were utilized under the provisions of chapter 30 of this title, or chapter 107, 1606, or 1607 of title 10, as applicable).

“(f) ADDITIONAL POST-9/11 ASSISTANCE FOR MEMBERS HAVING MADE CONTRIBUTIONS TOWARD GI BILL.—

“(1) ADDITIONAL ASSISTANCE.—In the case of an individual making an election under subsection (a) who is described by subparagraph (A), (C), or (E) of paragraph (1) of that subsection, the amount of educational assistance payable to the individual under this chapter as a monthly stipend payable under paragraph (1)(B) of section 3313(c) of this title, or under paragraphs (2) through (7) of that section (as applicable), shall be the amount otherwise payable as a monthly stipend under the applicable paragraph increased by the amount equal to—

“(A) the total amount of contributions toward basic educational assistance made by the individual under section 3011(b) or 3012(c) of this title, as of the date of the election, multiplied by

“(B) the fraction—

“(i) the numerator of which is—

“(I) the number of months of entitlement to basic educational assistance under chapter 30 of this title remaining to the individual at the time of the election; plus

“(II) the number of months, if any, of entitlement under chapter 30 revoked by the individual under subsection (c)(1); and

“(ii) the denominator of which is 36 months.

“(2) MONTHS OF REMAINING ENTITLEMENT FOR CERTAIN INDIVIDUALS.—In the case of an

individual covered by paragraph (1) who is described by subsection (a)(1)(E), the number of months of entitlement to basic educational assistance remaining to the individual for purposes of paragraph (1)(B)(i)(II) shall be 36 months.

“(3) TIMING OF PAYMENT.—The amount payable with respect to an individual under paragraph (1) shall be paid to the individual together with the last payment of the monthly stipend payable to the individual under paragraph (1)(B) of section 3313(c) of this title, or under paragraphs (2) through (7) of that section (as applicable), before the exhaustion of the individual's entitlement to educational assistance under this chapter.

“(g) CONTINUING ENTITLEMENT TO ADDITIONAL ASSISTANCE FOR CRITICAL SKILLS OR SPECIALTY AND ADDITIONAL SERVICE.—An individual making an election under subsection (a)(1) who, at the time of the election, is entitled to increased educational assistance under section 3015(d) of this title, or section 16131(i) of title 10, or supplemental educational assistance under subchapter III of chapter 30 of this title, shall remain entitled to such increased educational assistance or supplemental educational assistance in the utilization of entitlement to educational assistance under this chapter, in an amount equal to the quarter, semester, or term, as applicable, equivalent of the monthly amount of such increased educational assistance or supplemental educational assistance payable with respect to the individual at the time of the election.

“(h) ALTERNATIVE ELECTION BY SECRETARY.—

“(1) IN GENERAL.—In the case of an individual who, on or after January 1, 2016, submits to the Secretary an election under this section that the Secretary determines is clearly against the interests of the individual, or who fails to make an election under this section, the Secretary may make an alternative election on behalf of the individual that the Secretary determines is in the best interests of the individual.

“(2) NOTICE.—If the Secretary makes an election on behalf of an individual under this subsection, the Secretary shall notify the individual by not later than seven days after making such election and shall provide the individual with a 30-day period, beginning on the date of the individual's receipt of such notice, during which the individual may modify or revoke the election made by the Secretary on the individual's behalf. The Secretary shall include, as part of such notice, a clear statement of why the alternative election made by the Secretary is in the best interests of the individual as compared to the election submitted by the individual. The Secretary shall provide the notice required under this paragraph by electronic means whenever possible.

“(i) IRREVOCABILITY OF ELECTIONS.—An election under subsection (a) or (c)(1) is irrevocable.”

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of such chapter is amended by striking the item relating to section 3325 and inserting the following new items:

“3325. Election to receive educational assistance.

“3326. Reporting requirement.”

(c) CONFORMING REPEAL.—Subsection (c) of section 5003 of the Post-9/11 Veterans Educational Assistance Act of 2008 (Public Law 110-252; 38 U.S.C. 3301 note) is hereby repealed.

SEC. 6. WORK-STUDY ALLOWANCE.

Section 3485(a)(4) of title 38, United States Code, is amended by striking “June 30, 2013” each place it appears and inserting “June 30, 2013, or the period beginning on June 30, 2017, and ending on June 30, 2022”.

SEC. 7. RETENTION OF ENTITLEMENT TO EDUCATIONAL ASSISTANCE DURING CERTAIN ADDITIONAL PERIODS OF ACTIVE DUTY.

(a) EDUCATIONAL ASSISTANCE ALLOWANCE.—Section 16131(c)(3)(B)(i) of title 10, United States Code, is amended by striking “or 12304” and inserting “12304, 12304a, or 12304b”.

(b) EXPIRATION DATE.—Section 16133(b)(4) of such title is amended by striking “or 12304” and inserting “12304, 12304a, or 12304b”.

SEC. 8. REPORTS ON PROGRESS OF STUDENTS RECEIVING POST-9/11 EDUCATIONAL ASSISTANCE.

(a) IN GENERAL.—Chapter 33 of title 38, United States Code, as amended by section 5, is further amended—

(1) in subsection 3326(c), as redesignated—

(A) in paragraph (2), by striking “and” after the semicolon;

(B) by redesignating paragraph (3) as paragraph (4); and

(C) by inserting after paragraph (2) the following new paragraph (3):

“(3) the information received by the Secretary under section 3327 of this title; and”;

and

(2) by adding at the end the following new section:

“§ 3327. Report on student progress

“As a condition on approval under chapter 36 of this title of a course offered by an educational institution (as defined in section 3452 of this title), each year, each educational institution (as so defined) that received a payment in that year on behalf of an individual entitled to educational assistance under this chapter shall submit to the Secretary such information regarding the academic progress of the individual as the Secretary may require.”

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of such chapter, as amended by section 5, is further amended by adding at the end the following new item:

“3327. Report on student progress.”

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on the date that is one year after the date of the enactment of this Act.

SEC. 9. CENTRALIZED REPORTING OF VETERAN ENROLLMENT BY CERTAIN GROUPS, DISTRICTS, AND CONSORTIUMS OF EDUCATIONAL INSTITUTIONS.

(a) IN GENERAL.—Section 3684(a) of title 38, United States Code, is amended—

(1) in paragraph (1), by inserting “32, 33,” after “31.”; and

(2) by adding at the end the following new paragraph:

“(4) For purposes of this subsection, the term ‘educational institution’ may include a group, district, or consortium of separately accredited educational institutions located in the same State that are organized in a manner that facilitates the centralized reporting of the enrollments in such group, district, or consortium of institutions.”

(b) EFFECTIVE DATE.—The amendments made by subsection (a) shall apply with respect to reports submitted on or after the date of the enactment of this Act.

SEC. 10. ROLE OF STATE APPROVING AGENCIES.

(a) APPROVAL OF CERTAIN COURSES.—Section 3672(b)(2)(A) of title 38, United States Code, is amended by striking “the following” and all that follows through the colon and inserting the following: “a program of education is deemed to be approved for purposes of this chapter if a State approving agency, or the Secretary when acting in the role of a State approving agency, determines that the program is one of the following programs:”

(b) APPROVAL OF OTHER COURSES.—Section 3675 of such title is amended—

(1) in subsection (a)(1)—

(A) by striking “The Secretary or a State approving agency” and inserting “A State approving agency, or the Secretary when acting in the role of a State approving agency.”; and

(B) by striking “offered by proprietary for-profit educational institutions” and inserting “not covered by section 3672 of this title”; and

(2) in subsection (b)—

(A) in the matter before paragraph (1), by striking “the Secretary or the State approving agency” and inserting “the State approving agency, or the Secretary when acting in the role of a State approving agency.”; and

(B) in paragraph (1), by striking “the Secretary or the State approving agency” and inserting “the State approving agency, or the Secretary when acting in the role of a State approving agency”.

SEC. 11. MODIFICATION OF REQUIREMENTS FOR APPROVAL FOR PURPOSES OF EDUCATIONAL ASSISTANCE PROVIDED BY DEPARTMENT OF VETERANS AFFAIRS OF PROGRAMS DESIGNED TO PREPARE INDIVIDUALS FOR LICENSURE OR CERTIFICATION.

(a) **APPROVAL OF NONACCREDITED COURSES.**—Subsection (c) of section 3676 of title 38, United States Code, is amended—

(1) by redesignating paragraph (14) as paragraph (16); and

(2) by inserting after paragraph (13) the following new paragraphs:

“(14) In the case of a course designed to prepare an individual for licensure or certification in a State, the course—

“(A) meets all instructional curriculum licensure or certification requirements of such State; and

“(B) in the case of a course designed to prepare an individual for licensure to practice law in a State, is accredited by an accrediting agency or association recognized by the Secretary of Education under subpart 2 of part H of title IV of the Higher Education Act of 1965 (20 U.S.C. 1099b).

“(15) In the case of a course designed to prepare an individual for employment pursuant to standards developed by a board or agency of a State in an occupation that requires approval, licensure, or certification, the course—

“(A) meets such standards; and

“(B) in the case of a course designed to prepare an individual for licensure to practice law in a State, is accredited by an accrediting agency or association recognized by the Secretary of Education under subpart 2 of part H of title IV of the Higher Education Act of 1965 (20 U.S.C. 1099b).”.

(b) **EXCEPTIONS.**—Such section is further amended by adding at the end the following new subsection:

“(f)(1) The Secretary may waive the requirements of paragraph (14) or (15) of subsection (c) in the case of a course of education offered by an educational institution (either accredited or not accredited) if the Secretary determines all of the following:

“(A) The educational institution is not accredited by an agency or association recognized by the Secretary of Education.

“(B) The course did not meet the requirements of such paragraph at any time during the two-year period preceding the date of the waiver.

“(C) The waiver furthers the purposes of the educational assistance programs administered by the Secretary or would further the education interests of individuals eligible for assistance under such programs.

“(D) The educational institution does not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollments or financial aid to any persons or entities engaged in

any student recruiting or admission activities or in making decisions regarding the award of student financial assistance, except for the recruitment of foreign students residing in foreign countries who are not eligible to receive Federal student assistance.

“(2) Not later than 30 days after the date on which the Secretary issues a waiver under paragraph (1), the Secretary shall submit to Congress notice of such waiver and a justification for issuing such waiver.”.

(c) **APPROVAL OF ACCREDITED COURSES.**—Section 3675(b)(3) of such title, as amended by section 10, is further amended—

(1) by striking “and (3)” and inserting “(3), (14), (15), and (16)”;

(2) by inserting before the period at the end the following: “(or, with respect to such paragraphs (14) and (15), the requirements under such paragraphs are waived pursuant to subsection (f)(1) of section 3676 of this title”.

(d) **APPROVAL OF ACCREDITED STANDARD COLLEGE DEGREE PROGRAMS OFFERED AT PUBLIC OR NOT-FOR-PROFIT EDUCATIONAL INSTITUTIONS.**—Section 3672(b)(2) of such title is amended—

(1) in subparagraph (A)(i), by striking “An accredited” and inserting “Except as provided in subparagraph (C), an accredited”;

(2) by adding at the end the following new subparagraph:

“(C) A course that is described in both subparagraph (A)(i) of this paragraph and in paragraph (14) or (15) of section 3676(c) of this title shall not be deemed to be approved for purposes of this chapter unless—

“(i) a State approving agency, or the Secretary when acting in the role of a State approving agency, determines that the course meets the applicable criteria in such paragraphs; or

“(ii) the Secretary issues a waiver for such course under section 3676(f)(1) of this title.”.

(e) **DISAPPROVAL OF COURSES.**—Section 3679 of such title is amended by adding at the end the following new subsection:

“(d) Notwithstanding any other provision of this chapter, the Secretary or the applicable State approving agency shall disapprove a course of education described in paragraph (14) or (15) of section 3676(c) of this title unless the educational institution providing the course of education—

“(1) publicly discloses any conditions or additional requirements, including training, experience, or examinations, required to obtain the license, certification, or approval for which the course of education is designed to provide preparation; and

“(2) makes each disclosure required by paragraph (1) in a manner that the Secretary considers prominent (as specified by the Secretary in regulations prescribed for purposes of this subsection).”.

(f) **APPLICABILITY.**—If after enrollment in a course of education that is subject to disapproval by reason of an amendment made by this Act, an individual pursues one or more courses of education at the same educational institution while remaining continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at that institution, any course so pursued by the individual at that institution while so continuously enrolled shall not be subject to disapproval by reason of such amendment.

SEC. 12. COMPLIANCE SURVEYS.

(a) **IN GENERAL.**—Section 3693 of title 38, United States Code, is amended—

(1) by striking subsection (a) and inserting the following new subsection (a):

“(a)(1) Except as provided in subsection (b), the Secretary shall conduct an annual compliance survey of educational institu-

tions and training establishments offering one or more courses approved for the enrollment of eligible veterans or persons if at least 20 such veterans or persons are enrolled in any such course.

“(2) The Secretary shall—

“(A) design the compliance surveys required by paragraph (1) to ensure that such institutions or establishments described in such paragraph, as the case may be, and approved courses are in compliance with all applicable provisions of chapters 30 through 36 of this title;

“(B) survey each such educational institution and training establishment not less than once during every two-year period; and

“(C) assign not fewer than one education compliance specialist to work on compliance surveys in any year for each 40 compliance surveys required to be made under this section for such year.

“(3) The Secretary, in consultation with the State approving agencies, shall—

“(A) annually determine the parameters of the surveys required under paragraph (1); and

“(B) not later than September 1 of each year, make available to the State approving agencies a list of the educational institutions and training establishments that will be surveyed during the fiscal year following the date of making such list available.”; and

(2) by adding at the end the following new subsection:

“(c) In this section, the terms ‘educational institution’ and ‘training establishment’ have the meanings given such terms in section 3452 of this title.”.

(b) **CONFORMING AMENDMENTS.**—Subsection (b) of such section is amended—

(1) by striking “subsection (a) of this section for an annual compliance survey” and inserting “subsection (a)(1) for a compliance survey”;

(2) by striking “institution” and inserting “educational institution or training establishment”;

(3) by striking “institution’s demonstrated record of compliance” and inserting “record of compliance of such institution or establishment”.

SEC. 13. TECHNICAL AMENDMENT RELATING TO IN-STATE TUITION RATE FOR INDIVIDUALS TO WHOM ENTITLEMENT IS TRANSFERRED UNDER ALL-VOLUNTEER FORCE EDUCATIONAL ASSISTANCE PROGRAM AND POST-9/11 EDUCATIONAL ASSISTANCE.

(a) **TECHNICAL AMENDMENT.**—Subparagraph (B) of section 3679(c)(2) of title 38, United States Code, is amended to read as follows:

“(B) An individual who is entitled to assistance under—

“(i) section 3311(b)(9) of this title; or

“(ii) section 3319 of this title by virtue of the individual’s relationship to—

“(I) a veteran described in subparagraph (A); or

“(II) a member of the uniformed services described in section 3319(b) of this title who is serving on active duty.”.

(b) **APPLICABILITY.**—The amendment made by subsection (a) shall apply with respect to a course, semester, or term that begins after July 1, 2017.

SEC. 14. AUTHORITY OF DIRECTORS OF VETERANS INTEGRATED SERVICE NETWORKS TO INVESTIGATE MEDICAL CENTERS OF THE DEPARTMENT OF VETERANS AFFAIRS.

(a) **IN GENERAL.**—The Director of a Veterans Integrated Service Network of the Department of Veterans Affairs may contract with an appropriate entity specializing in civilian accreditation or health care evaluation to investigate any medical center within such Network to assess and report deficiencies of the facilities at such medical center.

(b) **COORDINATION.**—Before entering into any contract under subsection (a), the Director of a Veterans Integrated Service Network shall notify the Secretary of Veterans Affairs, the Inspector General of the Department of Veterans Affairs, and the Comptroller General of the United States for purposes of coordinating any investigation conducted pursuant to such contract with any other investigations or accreditations that may be ongoing.

(c) **RULE OF CONSTRUCTION.**—Nothing in this section may be construed—

(1) to prevent the Office of the Inspector General of the Department of Veterans Affairs from conducting any review, audit, evaluation, or inspection regarding a topic for which a review is conducted under subsection (a); or

(2) to modify the requirement that employees of the Department assist with any review, audit, evaluation, or inspection conducted by the Office of the Inspector General of the Department.

SA 5183. Mr. PORTMAN (for Mr. THUNE) proposed an amendment to the bill H.R. 710, to require the Secretary of Homeland Security to prepare a comprehensive security assessment of the transportation security card program, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. TRANSPORTATION WORKER IDENTIFICATION CREDENTIAL SECURITY CARD PROGRAM IMPROVEMENTS AND ASSESSMENT.

(a) **CREDENTIAL IMPROVEMENTS.**—

(1) **IN GENERAL.**—Not later than 60 days after the date of enactment of this Act, the Administrator of the Transportation Security Administration shall commence actions, consistent with section 70105 of title 46, United States Code, to improve the Transportation Security Administration's process for vetting individuals with access to secure areas of vessels and maritime facilities.

(2) **REQUIRED ACTIONS.**—The actions described under paragraph (1) shall include—

(A) conducting a comprehensive risk analysis of security threat assessment procedures, including—

(i) identifying those procedures that need additional internal controls; and

(ii) identifying best practices for quality assurance at every stage of the security threat assessment;

(B) implementing the additional internal controls and best practices identified under subparagraph (A);

(C) improving fraud detection techniques, such as—

(i) by establishing benchmarks and a process for electronic document validation;

(ii) by requiring annual training for Trusted Agents; and

(iii) by reviewing any security threat assessment-related information provided by Trusted Agents and incorporating any new threat information into updated guidance under subparagraph (D);

(D) updating the guidance provided to Trusted Agents regarding the vetting process and related regulations;

(E) finalizing a manual for Trusted Agents and adjudicators on the vetting process; and

(F) establishing quality controls to ensure consistent procedures to review adjudication decisions and terrorism vetting decisions.

(3) **REPORT.**—Not later than 2 years after the date of enactment of this Act, the Inspector General of the Department of Homeland Security shall submit a report to Congress that evaluates the implementation of the actions described in paragraph (1).

(b) **COMPREHENSIVE SECURITY ASSESSMENT OF THE TRANSPORTATION SECURITY CARD PROGRAM.**—

(1) **IN GENERAL.**—Not later than 60 days after the date of enactment of this Act, the Secretary of Homeland Security shall commission an assessment of the effectiveness of the transportation security card program (referred to in this section as “Program”) required under section 70105 of title 46, United States Code, at enhancing security and reducing security risks for facilities and vessels regulated under chapter 701 of that title.

(2) **LOCATION.**—The assessment commissioned under paragraph (1) shall be conducted by a research organization with significant experience in port or maritime security, such as—

(A) a national laboratory;

(B) a university-based center within the Science and Technology Directorate's centers of excellence network; or

(C) a qualified federally-funded research and development center.

(3) **CONTENTS.**—The assessment commissioned under paragraph (1) shall—

(A) review the credentialing process by determining—

(i) the appropriateness of vetting standards;

(ii) whether the fee structure adequately reflects the current costs of vetting;

(iii) whether there is unnecessary redundancy or duplication with other Federal- or State-issued transportation security credentials; and

(iv) the appropriateness of having varied Federal and State threat assessments and access controls;

(B) review the process for renewing applications for Transportation Worker Identification Credentials, including the number of days it takes to review application, appeal, and waiver requests for additional information; and

(C) review the security value of the Program by—

(i) evaluating the extent to which the Program, as implemented, addresses known or likely security risks in the maritime and port environments;

(ii) evaluating the potential for a non-biometric credential alternative;

(iii) identifying the technology, business process, and operational impacts of the use of the transportation security card and transportation security card readers in the maritime and port environments;

(iv) assessing the costs and benefits of the Program, as implemented; and

(v) evaluating the extent to which the Secretary of Homeland Security has addressed the deficiencies in the Program identified by the Government Accountability Office and the Inspector General of the Department of Homeland Security before the date of enactment of this Act.

(4) **DEADLINES.**—The assessment commissioned under paragraph (1) shall be completed not later than 1 year after the date on which the assessment is commissioned.

(5) **SUBMISSION TO CONGRESS.**—Not later than 60 days after the date that the assessment is completed, the Secretary of Homeland Security shall submit to the Committee on Commerce, Science, and Transportation and the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Homeland Security and the Committee on Transportation and Infrastructure of the House of Representatives the results of the assessment commissioned under this subsection.

(c) **CORRECTIVE ACTION PLAN; PROGRAM REFORMS.**—If the assessment commissioned under subsection (b) identifies a deficiency in the effectiveness of the Program, the Secretary of Homeland Security, not later than

60 days after the date on which the assessment is completed, shall submit a corrective action plan to the Committee on Commerce, Science, and Transportation and the Committee on Homeland Security and Governmental Affairs of the Senate, the Committee on Homeland Security and the Committee on Transportation and Infrastructure of the House of Representatives that—

(1) responds to findings of the assessment;

(2) includes an implementation plan with benchmarks;

(3) may include programmatic reforms, revisions to regulations, or proposals for legislation; and

(4) shall be considered in any rulemaking by the Department of Homeland Security relating to the Program.

(d) **INSPECTOR GENERAL REVIEW.**—If a corrective action plan is submitted under subsection (c), the Inspector General of the Department of Homeland Security shall—

(1) not later than 120 days after the date of such submission, review the extent to which such plan implements the requirements under subsection (c); and

(2) not later than 18 months after the date of such submission, and annually thereafter for 3 years, submit a report to the congressional committees set forth in subsection (c) that describes the progress of the implementation of such plan.

SA 5184. Mr. PORTMAN (for Mr. BARASSO) proposed an amendment to the bill S. 1776, to enhance tribal road safety, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Tribal Infrastructure and Roads Enhancement and Safety Act” or the “TIRES Act”.

SEC. 2. DEFINITION OF SECRETARY.

In this Act, the term “Secretary” means the Secretary of the Interior.

SEC. 3. APPLICATION OF CATEGORICAL EXCLUSIONS TO CERTAIN TRIBAL TRANSPORTATION FACILITIES.

(a) **DEFINITION OF TRIBAL TRANSPORTATION SAFETY PROJECT.**—

(1) **IN GENERAL.**—In this section, the term “tribal transportation safety project” means a project described in paragraph (2) that is eligible for funding under section 202 of title 23, United States Code, and that—

(A) corrects or improves a hazardous road location or feature; or

(B) addresses a highway safety problem.

(2) **PROJECTS DESCRIBED.**—A project described in this paragraph is a project for 1 or more of the following:

(A) An intersection safety improvement.

(B) Pavement and shoulder widening (including the addition of a passing lane to remedy an unsafe condition).

(C) Installation of rumble strips or another warning device, if the rumble strips or other warning devices do not adversely affect the safety or mobility of bicyclists and pedestrians, including persons with disabilities.

(D) Installation of a skid-resistant surface at an intersection or other location with a high frequency of crashes.

(E) An improvement for pedestrian or bicyclist safety or the safety of persons with disabilities.

(F) Construction and improvement of a railway-highway grade crossing safety feature, including the installation of protective devices.

(G) The conduct of a model traffic enforcement activity at a railway-highway crossing.

(H) Construction of a traffic calming feature.

(I) Elimination of a roadside hazard.

(J) Installation, replacement, and other improvements of highway signage and pavement markings or a project to maintain minimum levels of retroreflectivity that addresses a highway safety problem consistent with a State strategic highway safety plan.

(K) Installation of a priority control system for emergency vehicles at signalized intersections.

(L) Installation of a traffic control or other warning device at a location with high crash potential.

(M) Transportation safety planning.

(N) Collection, analysis, and improvement of safety data.

(O) Planning integrated interoperable emergency communications equipment, operational activities, or traffic enforcement activities (including police assistance) relating to work zone safety.

(P) Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road users and workers), and crash attenuators.

(Q) The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife.

(R) Installation of yellow-green signs and signals at pedestrian and bicycle crossings and in school zones.

(S) Construction and operational improvements on a high risk rural road (as defined in section 148(a) of title 23, United States Code).

(T) Geometric improvements to a road for the purposes of safety improvement.

(U) A road safety audit.

(V) Roadway safety infrastructure improvements consistent with the recommendations included in the publication of the Federal Highway Administration entitled "Handbook for Designing Roadways for the Aging Population" (FHWA-SA-14-015), dated June 2014 (or a revised or updated publication).

(W) Truck parking facilities eligible for funding under section 1401 of MAP-21 (23 U.S.C. 137 note; Public Law 112-141).

(X) Systemic safety improvements.

(Y) Installation of vehicle-to-infrastructure communication equipment.

(Z) Pedestrian hybrid beacons.

(AA) Roadway improvements that provide separation between pedestrians and motor vehicles, including medians and pedestrian crossing islands.

(BB) A physical infrastructure safety project not described in subparagraphs (A) through (AA).

(b) NEW CATEGORICAL EXCLUSIONS.—

(1) REVIEW OF EXISTING CATEGORICAL EXCLUSIONS.—The Secretary shall review the categorical exclusions under section 771.117 of title 23, Code of Federal Regulations (or successor regulations), to determine which, if any, are applicable for use by the Secretary in review of projects eligible for assistance under section 202 of title 23, United States Code.

(2) REVIEW OF TRIBAL TRANSPORTATION SAFETY PROJECTS.—The Secretary shall identify tribal transportation safety projects that meet the requirements for categorical exclusions under sections 1507.3 and 1508.4 of title 40, Code of Federal Regulations.

(3) PROPOSAL.—The Secretary shall issue a proposed rule, in accordance with sections 1507.3 and 1508.4 of title 40, Code of Federal Regulations, to propose any categorical exclusions identified under paragraphs (1) and (2).

(4) DEADLINE.—Not later than 180 days after the date of enactment of this Act, and after considering any comments on the proposed rule issued under paragraph (3), the Secretary shall promulgate a final rule for the categorical exclusions, in accordance with sections 1507.3 and 1508.4 of title 40, Code of Federal Regulations.

(5) TECHNICAL ASSISTANCE.—The Secretary of Transportation shall provide technical assistance to the Secretary in carrying out this subsection.

(c) REVIEWS OF TRIBAL TRANSPORTATION SAFETY PROJECTS.—

(1) IN GENERAL.—The Secretary or the head of another Federal agency responsible for a decision related to a tribal transportation safety project shall complete any approval or decision for the review of the tribal transportation safety project required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) or any other applicable Federal law on an expeditious basis using the shortest existing applicable process.

(2) REVIEW OF APPLICATIONS.—Not later than 45 days after the date of receipt of a complete application by an Indian tribe for approval of a tribal transportation safety project, the Secretary shall—

(A) take final action on the application; or

(B) provide the Indian tribe a schedule for completion of the review described in paragraph (1), including the identification of any other Federal agency that has jurisdiction with respect to the project.

(3) DECISIONS UNDER OTHER FEDERAL LAWS.—In any case in which a decision under any other Federal law relating to a tribal transportation safety project (including the issuance or denial of a permit or license) is required, not later than 45 days after the Secretary has made all decisions of the lead agency under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the project, the head of the Federal agency responsible for the decision shall—

(A) make the applicable decision; or

(B) provide the Indian tribe a schedule for making the decision.

(4) EXTENSIONS.—The Secretary or the head of an applicable Federal agency may extend the period under paragraph (2) or (3), as applicable, by an additional 30 days by providing the Indian tribe notice of the extension, including a statement of the need for the extension.

(5) NOTIFICATION AND EXPLANATION.—In any case in which a required action is not completed by the deadline under paragraph (2), (3), or (4), as applicable, the Secretary or the head of a Federal agency, as applicable, shall—

(A) notify the Committee on Indian Affairs of the Senate and the Committee on Natural Resources of the House of Representatives of the failure to comply with the deadline; and

(B) provide to the Committees described in subparagraph (A) a detailed explanation of the reasons for the failure to comply with the deadline.

SEC. 4. PROGRAMMATIC AGREEMENTS FOR CATEGORICAL EXCLUSIONS.

(a) IN GENERAL.—The Secretary shall enter into programmatic agreements with Indian tribes that establish efficient administrative procedures for carrying out environmental reviews for projects eligible for assistance under section 202 of title 23, United States Code.

(b) INCLUSIONS.—A programmatic agreement under subsection (a)—

(1) may include an agreement that allows an Indian tribe to determine, on behalf of the Secretary, whether a project is categorically excluded from the preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

(2) shall—

(A) require that the Indian tribe maintain adequate capacity in terms of personnel and other resources to carry out applicable agency responsibilities pursuant to section 1507.2

of title 40, Code of Federal Regulations (or successor regulations);

(B) set forth the responsibilities of the Indian tribe for making categorical exclusion determinations, documenting the determinations, and achieving acceptable quality control and quality assurance;

(C) allow—

(i) the Secretary to monitor compliance of the Indian tribe with the terms of the agreement; and

(ii) the Indian tribe to execute any needed corrective action;

(D) contain stipulations for amendments, termination, and public availability of the agreement once the agreement has been executed; and

(E) have a term of not more than 5 years, with an option for renewal based on a review by the Secretary of the performance of the Indian tribe.

SA 5185. Mr. PORTMAN (for Mr. KING) proposed an amendment to the bill H.R. 4245, to exempt exportation of certain echinoderms and mollusks from licensing requirements under the Endangered Species Act of 1973; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. EXPEDITED EXPORTATION OF CERTAIN SPECIES.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Director of the United States Fish and Wildlife Service (referred to in this section as the "Director") shall issue a proposed rule to amend section 14.92 of title 50, Code of Federal Regulations, to establish expedited procedures relating to the export permission requirements of section 9(d)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1538(d)(1)) for fish or wildlife described in subsection (c).

(b) EXEMPTIONS.—

(1) IN GENERAL.—As part of the rulemaking under subsection (a), subject to paragraph (2), the Director may provide an exemption from the requirement to procure—

(A) permission under section 9(d)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1538(d)(1)); or

(B) an export license under subpart I of part 14 of title 50, Code of Federal Regulations.

(2) LIMITATIONS.—The Director shall not provide an exemption under paragraph (1)—

(A) unless the Director determines that the exemption will not have a significant negative impact on the conservation of the species that is the subject of the exemption; or

(B) to an entity that has been convicted of a violation of a Federal law relating to the importation, transportation, or exportation of wildlife during a period of not less than 5 years ending on the date on which the entity applies for exemption under paragraph (1).

(c) COVERED FISH OR WILDLIFE.—The fish or wildlife described in this subsection are the species commonly known as sea urchins and sea cucumbers (including any product of a sea urchin or sea cucumber) that—

(1) do not require a permit under part 16, 17, or 23 of title 50, Code of Federal Regulations; and

(2) are exported for purposes of human or animal consumption.

SA 5186. Mr. PORTMAN (for Mr. GARDNER (for himself and Mr. PETERS)) proposed an amendment to the bill S. 3084, to invest in innovation through research and development, and to improve the competitiveness of the United States; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) **SHORT TITLE.**—This Act may be cited as the “American Innovation and Competitiveness Act”.

(b) **TABLE OF CONTENTS.**—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Definitions.

TITLE I—MAXIMIZING BASIC RESEARCH

Sec. 101. Reaffirmation of merit-based peer review.
Sec. 102. Transparency and accountability.
Sec. 103. EPSCoR reaffirmation and update.
Sec. 104. Cybersecurity research.
Sec. 105. Networking and Information Technology Research and Development Update.
Sec. 106. Physical sciences coordination.
Sec. 107. Laboratory program improvements.
Sec. 108. Standard Reference Data Act update.
Sec. 109. NSF mid-scale project investments.
Sec. 110. Oversight of NSF major multi-user research facility projects.
Sec. 111. Personnel oversight.
Sec. 112. Management of the U.S. Antarctic Program.
Sec. 113. NIST campus security.
Sec. 114. Coordination of sustainable chemistry research and development.
Sec. 115. Misrepresentation of research results.
Sec. 116. Research reproducibility and replication.
Sec. 117. Brain Research through Advancing Innovative Neurotechnologies Initiative.

TITLE II—ADMINISTRATIVE AND REGULATORY BURDEN REDUCTION

Sec. 201. Interagency working group on research regulation.
Sec. 202. Scientific and technical collaboration.
Sec. 203. NIST grants and cooperative agreements update.
Sec. 204. Repeal of certain obsolete reports.
Sec. 205. Repeal of certain provisions.
Sec. 206. Grant subrecipient transparency and oversight.
Sec. 207. Micro-purchase threshold for procurement solicitations by research institutions.
Sec. 208. Coordination of international science and technology partnerships.

TITLE III—SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH EDUCATION

Sec. 301. Robert Noyce Teacher Scholarship Program update.
Sec. 302. Space grants.
Sec. 303. STEM Education Advisory Panel.
Sec. 304. Committee on STEM Education.
Sec. 305. Programs to expand STEM opportunities.
Sec. 306. NIST education and outreach.
Sec. 307. Presidential awards for excellence in STEM mentoring.
Sec. 308. Working group on inclusion in STEM fields.
Sec. 309. Improving undergraduate STEM experiences.
Sec. 310. Computer science education research.
Sec. 311. Informal STEM education.
Sec. 312. Developing STEM apprenticeships.
Sec. 313. NSF report on broadening participation.
Sec. 314. NOAA science education programs.
Sec. 315. Hispanic-serving institutions undergraduate program update.

TITLE IV—LEVERAGING THE PRIVATE SECTOR

Sec. 401. Prize competition authority update.

Sec. 402. Crowdsourcing and citizen science.
Sec. 403. NIST director functions update.

Sec. 404. NIST Visiting Committee on Advanced Technology update.

TITLE V—MANUFACTURING

Sec. 501. Hollings manufacturing extension partnership improvements.

TITLE VI—INNOVATION AND TECHNOLOGY TRANSFER

Sec. 601. Innovation corps.
Sec. 602. Translational research grants.
Sec. 603. Optics and photonics technology innovations.
Sec. 604. United States chief technology officer.
Sec. 605. National research council study on technology for emergency notifications on campuses.

SEC. 2. DEFINITIONS.

In this Act, unless expressly provided otherwise:

(1) **APPROPRIATE COMMITTEES OF CONGRESS.**—The term “appropriate committees of Congress” means the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(2) **FEDERAL SCIENCE AGENCY.**—The term “Federal science agency” has the meaning given the term in section 103 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6623).

(3) **FOUNDATION.**—The term “Foundation” means the National Science Foundation.

(4) **INSTITUTION OF HIGHER EDUCATION.**—The term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(5) **NIST.**—The term “NIST” means the National Institute of Standards and Technology.

(6) **STEM.**—The term “STEM” has the meaning given the term in section 2 of the American COMPETES Reauthorization Act of 2010 (42 U.S.C. 6621 note).

(7) **STEM EDUCATION.**—The term “STEM education” has the meaning given the term in section 2 of the STEM Education Act of 2015 (42 U.S.C. 6621 note).

TITLE I—MAXIMIZING BASIC RESEARCH

SEC. 101. REAFFIRMATION OF MERIT-BASED PEER REVIEW.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) sustained, predictable Federal funding of basic research is essential to United States leadership in science and technology;

(2) the Foundation’s intellectual merit and broader impacts criteria are appropriate for evaluating grant proposals, as concluded by the 2011 National Science Board Task Force on Merit Review;

(3) evaluating proposals on the basis of the Foundation’s intellectual merit and broader impacts criteria should be used to assure that the Foundation’s activities are in the national interest as these reviews can affirm that—

(A) the proposals funded by the Foundation are of high quality and advance scientific knowledge; and

(B) the Foundation’s grants address societal needs through basic research findings or through related activities; and

(4) as evidenced by the Foundation’s contributions to scientific advancement, economic growth, human health, and national security, its peer review and merit review processes have identified and funded scientifically and societally relevant basic research and should be preserved.

(b) **MERIT REVIEW CRITERIA.**—The Foundation shall maintain the intellectual merit and broader impacts criteria, among other

specific criteria as appropriate, as the basis for evaluating grant proposals in the merit review process.

(c) **UPDATES.**—If after the date of enactment of this Act a change is made to the merit-review process, the Director shall submit a report to the appropriate committees of Congress not later than 30 days after the date of the change.

SEC. 102. TRANSPARENCY AND ACCOUNTABILITY.

(a) **FINDINGS.**—

(1) building the understanding of and confidence in investments in basic research is essential to public support for sustained, predictable Federal funding;

(2) the Foundation has improved transparency and accountability of the outcomes made through the merit review process, but additional transparency into individual grants is valuable in communicating and assuring the public value of federally funded research; and

(3) the Foundation should commit to transparency and accountability and to clear, consistent public communication regarding the national interest for each Foundation-awarded grant and cooperative agreement.

(b) **GUIDANCE.**—

(1) **IN GENERAL.**—The Director of the Foundation shall issue and periodically update, as appropriate, policy guidance for both Foundation staff and other Foundation merit review process participants on the importance of transparency and accountability to the outcomes made through the merit review process.

(2) **REQUIREMENTS.**—The guidance under paragraph (1) shall require that each public notice of a Foundation-funded research project justify the expenditure of Federal funds by—

(A) describing how the project—

(i) reflects the statutory mission of the Foundation, as established in the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.); and

(ii) addresses the Foundation’s intellectual merit and broader impacts criteria; and

(B) clearly identifying the research goals of the project in a manner that can be easily understood by both technical and non-technical audiences.

(c) **BROADER IMPACTS REVIEW CRITERION UPDATE.**—Section 526(a) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p-14(a)) is amended to read as follows:

“(a) **GOALS.**—The Foundation shall apply a broader impacts review criterion to identify and demonstrate project support of the following goals:

“(1) Increasing the economic competitiveness of the United States.

“(2) Advancing of the health and welfare of the American public.

“(5) Developing an American STEM workforce that is globally competitive through improved pre-kindergarten through grade 12 STEM education and teacher development, and improved undergraduate STEM education and instruction.

“(6) Improving public scientific literacy and engagement with science and technology in the United States.

“(4) Enhancing partnerships between academia and industry in the United States.

“(3) Supporting the national defense of the United States.

“(7) Expanding participation of women and individuals from underrepresented groups in STEM.”

SEC. 103. EPSCoR REAFFIRMATION AND UPDATE.

(a) **FINDINGS.**—Section 517(a) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p-9(a)) is amended—

(1) in paragraph (1)—

(A) by striking “The National” and inserting “the National”; and

(B) by striking “education,” and inserting “education”;

(2) in paragraph (2), by striking “with 27 States” and all that follows through the semicolon at the end and inserting “with 28 States and jurisdictions, taken together, receiving only about 12 percent of all National Science Foundation research funding”;

(3) by striking paragraph (3) and inserting the following:

“(3) each of the States described in paragraph (2) receives only a fraction of 1 percent of the Foundation’s research dollars each year”;

(4) by adding at the end the following:

“(4) first established at the National Science Foundation in 1979, the Experimental Program to Stimulate Competitive Research (referred to in this section as ‘EPSCoR’) assists States and jurisdictions historically underserved by Federal research and development funding in strengthening their research and innovation capabilities;

“(5) the EPSCoR structure requires each participating State to develop a science and technology plan suited to State and local research, education, and economic interests and objectives;

“(6) EPSCoR has been credited with advancing the research competitiveness of participating States, improving awareness of science, promoting policies that link scientific investment and economic growth, and encouraging partnerships between government, industry, and academia;

“(7) EPSCoR proposals are evaluated through a rigorous and competitive merit-review process to ensure that awarded research and development efforts meet high scientific standards; and

“(8) according to the National Academy of Sciences, EPSCoR has strengthened the national research infrastructure and enhanced the educational opportunities needed to develop the science and engineering workforce.”

(b) SENSE OF CONGRESS.—

(1) IN GENERAL.—It is the sense of Congress that—

(A) since maintaining the Nation’s scientific and economic leadership requires the participation of talented individuals nationwide, EPSCoR investments into State research and education capacities are in the Federal interest and should be sustained; and

(B) EPSCoR should maintain its experimental component by supporting innovative methods for improving research capacity and competitiveness.

(2) DEFINITION OF EPSCoR.—In this subsection, the term “EPSCoR” has the meaning given the term in section 502 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p note).

(c) AWARD STRUCTURE UPDATES.—Section 517 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p–9) is amended by adding at the end the following:

“(g) AWARD STRUCTURE UPDATES.—In implementing the mandate to maximize the impact of Federal EPSCoR support on building competitive research infrastructure, and based on the inputs and recommendations of previous EPSCoR reviews, the head of each Federal agency administering an EPSCoR program shall—

“(1) consider modifications to EPSCoR proposal solicitation, award type, and project evaluation—

“(A) to more closely align with current agency priorities and initiatives;

“(B) to focus EPSCoR funding on achieving critical scientific, infrastructure, and educational needs of that agency;

“(C) to encourage collaboration between EPSCoR-eligible institutions and researchers, including with institutions and researchers in other States and jurisdictions;

“(D) to improve communication between State and Federal agency proposal reviewers; and

“(E) to continue to reduce administrative burdens associated with EPSCoR;

“(2) consider modifications to EPSCoR award structures—

“(A) to emphasize long-term investments in building research capacity, potentially through the use of larger, renewable funding opportunities; and

“(B) to allow the agency, States, and jurisdictions to experiment with new research and development funding models; and

“(3) consider modifications to the mechanisms used to monitor and evaluate EPSCoR awards—

“(A) to increase collaboration between EPSCoR-funded researchers and agency staff, including by providing opportunities for mentoring young researchers and for the use of Federal facilities;

“(B) to identify and disseminate best practices; and

“(C) to harmonize metrics across participating Federal agencies, as appropriate.”

(d) REPORTS.—

(1) CONGRESSIONAL REPORTS.—Section 517 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p–9), as amended, is further amended—

(A) by striking subsection (c);

(B) by redesignating subsections (d) through (g) as subsections (c) through (f), respectively;

(C) in subsection (c), as redesignated—

(i) in paragraph (1), by striking “Experimental Programs to Stimulate Competitive Research” and inserting “EPSCoR”; and

(ii) in paragraph (2)—

(I) in subparagraphs (A) and (E), by striking “EPSCoR and Federal EPSCoR-like programs” and inserting “each EPSCoR”;

(II) in subparagraph (D), by striking “EPSCoR and other Federal EPSCoR-like programs” and inserting “each EPSCoR”;

(III) in subparagraph (E), by striking “EPSCoR or Federal EPSCoR-like programs” and inserting “each EPSCoR”; and

(IV) in subparagraph (G), by striking “EPSCoR programs” and inserting “each EPSCoR”; and

(D) by amending subsection (d), as redesignated, to read as follows:

“(d) FEDERAL AGENCY REPORTS.—Each Federal agency that administers an EPSCoR shall submit to Congress, as part of its Federal budget submission—

“(1) a description of the program strategy and objectives;

“(2) a description of the awards made in the previous fiscal year, including—

“(A) the total amount made available, by State, under EPSCoR;

“(B) the total amount of agency funding made available to all institutions and entities within each EPSCoR State;

“(C) the efforts and accomplishments to more fully integrate the EPSCoR States in major agency activities and initiatives;

“(D) the percentage of EPSCoR reviewers from EPSCoR States; and

“(E) the number of programs or large collaborator awards involving a partnership of organizations and institutions from EPSCoR and non-EPSCoR States; and

“(3) an analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program over the last 5 fiscal years.”; and

(E) in subsection (e)(1), as redesignated, by striking “Experimental Program to Stimulate Competitive Research or a program similar to the Experimental Program to Stimulate Competitive Research” and inserting “EPSCoR”.

(2) RESULTS OF AWARD STRUCTURE PLAN.—Not later than 1 year after the date of enactment of this Act, the EPSCoR Interagency Coordinating Committee shall brief the appropriate committees of Congress on the updates made to the award structure under 517(f) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p–9(f)), as amended by this subsection.

(e) DEFINITION OF EPSCoR.—

(1) IN GENERAL.—Section 502 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 1862p note) is amended by amending paragraph (2) to read as follows:

“(2) EPSCoR.—The term ‘EPSCoR’ means—

“(A) the Established Program to Stimulate Competitive Research established by the Foundation; or

“(B) a program similar to the Established Program to Stimulate Competitive Research at another Federal agency.”

(2) TECHNICAL AND CONFORMING AMENDMENTS.—Section 113 of the National Science Foundation Authorization Act of 1988 (42 U.S.C. 1862g) is amended—

(A) in the heading, by striking “EXPERIMENTAL” and inserting “ESTABLISHED”;

(B) in subsection (a), by striking “an Experimental Program to Stimulate Competitive Research” and inserting “a program to stimulate competitive research (known as the ‘Established Program to Stimulate Competitive Research’)”; and

(C) in subsection (b), by striking “the program” and inserting “the Program”.

SEC. 104. CYBERSECURITY RESEARCH.

(a) FOUNDATION CYBERSECURITY RESEARCH.—Section 4(a)(1) of the Cyber Security Research and Development Act, as amended (15 U.S.C. 7403(a)(1)) is amended—

(1) in subparagraph (O), by striking “and” at the end;

(2) in subparagraph (P), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(Q) security of election-dedicated voting system software and hardware; and

“(R) role of the human factor in cybersecurity and the interplay of computers and humans and the physical world.”

(b) NIST CYBERSECURITY PRIORITIES.—

(1) CRITICAL INFRASTRUCTURE AWARENESS.—The Director of NIST shall continue to raise public awareness of the voluntary, industry-led cybersecurity standards and best practices for critical infrastructure developed under section 2(c)(15) of the National Institute of Standards and Technology Act (15 U.S.C. 272(c)(15)).

(2) QUANTUM COMPUTING.—Under section 2(b) of the National Institute of Standards and Technology Act (15 U.S.C. 272(b)) and section 20 of that Act (15 U.S.C. 278g–3), the Director of NIST shall—

(A) research information systems for future cybersecurity needs; and

(B) coordinate with relevant stakeholders to develop a process—

(i) to research and identify or, if necessary, develop cryptography standards and guidelines for future cybersecurity needs, including quantum-resistant cryptography standards; and

(ii) to provide recommendations to Congress, Federal agencies, and industry consistent with the National Technology Transfer and Advancement Act of 1995 (Public Law 104–113; 110 Stat. 775), for a secure and smooth transition to the standards under clause (i).

(3) FEDERAL INFORMATION SYSTEMS RESEARCH AND DEVELOPMENT.—Section 20(d)(3) of the National Institute of Standards and Technology Act (15 U.S.C. 278g–3(d)(3)) is amended to read as follows:

“(3) conduct research and analysis—

“(A) to determine the nature and extent of information security vulnerabilities and techniques for providing cost-effective information security;

“(B) to review and determine prevalent information security challenges and deficiencies identified by agencies or the Institute, including any challenges or deficiencies described in any of the annual reports under section 3553 or 3554 of title 44, United States Code, and in any of the reports and the independent evaluations under section 3555 of that title, that may undermine the effectiveness of agency information security programs and practices; and

“(C) to evaluate the effectiveness and sufficiency of, and challenges to, Federal agencies’ implementation of standards and guidelines developed under this section and policies and standards promulgated under section 11331 of title 40, United States Code.”

(4) VOTING.—Section 2(c) of the National Institute of Standards and Technology Act (15 U.S.C. 272(c)) is amended—

(A) by redesignating paragraphs (16) through (23) as paragraphs (17) through (24), respectively; and

(B) by inserting after paragraph (15) the following:

“(16) perform research to support the development of voluntary, consensus-based, industry-led standards and recommendations on the security of computers, computer networks, and computer data storage used in election systems to ensure voters can vote securely and privately.”

SEC. 105. NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT UPDATE.

(a) SHORT TITLE.—This section may be cited as the “Networking and Information Technology Research and Development Modernization Act of 2016”.

(b) FINDINGS.—Section 2 of the High-Performance Computing Act of 1991 (15 U.S.C. 5501) is amended—

(1) in paragraphs (2) and (5), by striking “high-performance computing” and inserting “networking and information technology, including high-performance computing.”; and

(2) in paragraph (3), by striking “high-performance computing” and inserting “networking and information technology, including high-performance computing”;

(c) PURPOSES.—Section 3 of the High-Performance Computing Act of 1991 (15 U.S.C. 5502) is amended—

(1) in the matter preceding paragraph (1), by striking “high-performance computing” and inserting “networking and information technology”;

(2) in paragraph (1)—

(A) in the matter preceding subparagraph (A), by striking “expanding Federal support for research, development, and application of high-performance computing” and inserting “supporting Federal research, development, and application of networking and information technology”;

(B) in subparagraph (A), by striking “high-performance computing” both places it appears and inserting “networking and information technology”;

(C) by striking subparagraphs (C) and (D);

(D) by inserting after subparagraph (B) the following:

“(C) stimulate research on and promote more rapid development of high-end computing systems software and applications software.”;

(E) by redesignating subparagraphs (E) through (H) as subparagraphs (D) through (G), respectively;

(F) in subparagraph (D), as redesignated, by inserting “high-end” after “the development of”;

(G) in subparagraphs (E) and (F), as redesignated, by striking “high-performance computing” each place it appears and inserting “networking and information technology”; and

(H) in subparagraph (G), as redesignated, by striking “high-performance” and inserting “high-end”;

(3) in paragraph (2)—

(A) by striking “high-performance computing and” and inserting “networking and information technology and”; and

(B) by striking “high-performance computing network” and inserting “networking and information technology”.

(d) DEFINITIONS.—Section 4 of the High-Performance Computing Act of 1991 (15 U.S.C. 5503) is amended—

(1) by striking paragraphs (3) and (5);

(2) by redesignating paragraphs (1), (2), (4), (6), and (7) as paragraphs (2), (3), (5), (8), and (9), respectively;

(3) by inserting before paragraph (2), as redesignated, the following:

“(1) ‘cyber-physical systems’ means physical or engineered systems whose networking and information technology functions and physical elements are deeply integrated and are actively connected to the physical world through sensors, actuators, or other means to enable safe and effective, real-time performance in safety-critical and other applications.”;

(4) in paragraph (3), as redesignated, by striking “high-performance computing” and inserting “networking and information technology”;

(5) by inserting after paragraph (3), as redesignated, the following:

“(4) ‘high-end computing’ means the most advanced and capable computing systems, including their hardware, storage, networking and software, encompassing both massive computational capability and large-scale data analytics to solve computational problems of national importance that are beyond the capability of small- to medium-scale systems, including computing formerly known as high-performance computing.”;

(6) by inserting after paragraph (5), as redesignated, the following:

“(6) ‘networking and information technology’ means high-end computing, communications, and information technologies, high-capacity and high-speed networks, special purpose and experimental systems, high-end computing systems software and applications software, and the management of large data sets;

“(7) ‘participating agency’ means an agency described in section 101(a)(3)(C);”;

(7) in paragraph (8), as redesignated, by striking “National High-Performance Computing Program” and inserting “Networking and Information Technology Research and Development Program”.

(e) TITLE I HEADING.—The heading of title I of the High-Performance Computing Act of 1991 (15 U.S.C. 5511 et seq.) is amended by striking “HIGH-PERFORMANCE COMPUTING” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”.

(f) NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM.—Section 101 of the High-Performance Computing Act of 1991 (15 U.S.C. 5511) is amended—

(1) in the section heading, by striking “NATIONAL HIGH-PERFORMANCE COMPUTING PROGRAM” and inserting “NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM”;

(2) in subsection (a)—

(A) in the subsection heading, by striking “NATIONAL HIGH-PERFORMANCE COMPUTING PROGRAM” and inserting “NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT”;

(B) in paragraph (1)—

(i) in the matter preceding subparagraph (A), by striking “National High-Performance Computing Program” and inserting “Networking and Information Technology Research and Development Program”;

(ii) in subparagraph (A), by striking “high-performance computing, including networking” and inserting “networking and information technology”;

(iii) in subparagraphs (B) and (G), by striking “high-performance” each place it appears and inserting “high-end”;

(iv) in subparagraph (C), by striking “high-performance computing and networking” and inserting “high-end computing, distributed, and networking”;

(v) by amending subparagraph (D) to read as follows:

“(D) provide for efforts to increase software security and reliability.”;

(vi) in subparagraph (H)—

(I) by inserting “support and guidance” after “provide”;

(II) by striking “and” after the semicolon;

(vii) in subparagraph (I)—

(I) by striking “improving the security” and inserting “improving the security, reliability, and resilience”; and

(II) by striking the period at the end and inserting a semicolon; and

(viii) by adding at the end the following:

“(J) provide for increased understanding of the scientific principles of cyber-physical systems and improve the methods available for the design, development, and operation of cyber-physical systems that are characterized by high reliability, safety, and security;

“(K) provide for research and development on human-computer interactions, visualization, and big data;

“(L) provide for research and development on the enhancement of cybersecurity, including the human facets of cyber threats and secure cyber systems;

“(M) provide for the understanding of the science, engineering, policy, and privacy protection related to networking and information technology;

“(N) provide for the transition of high-end computing hardware, system software, development tools, and applications into development and operations; and

“(O) foster public-private collaboration among government, industry research laboratories, academia, and nonprofit organizations to maximize research and development efforts and the benefits of networking and information technology, including high-end computing.”;

(C) in paragraph (2)—

(i) by amending subparagraph (A) to read as follows:

“(A) establish the goals and priorities for Federal networking and information technology research, development, education, and other activities.”;

(ii) by amending subparagraph (C) to read as follows:

“(C) provide for interagency coordination of Federal networking and information technology research, development, education, and other activities undertaken pursuant to the Program—

“(i) among the participating agencies; and

“(ii) to the extent practicable, with other Federal agencies not described in paragraph (3)(C), other Federal and private research laboratories, industry, research entities, institutions of higher education, relevant nonprofit organizations, and international partners of the United States.”;

(iii) by amending subparagraph (E) to read as follows:

“(E) encourage and monitor the efforts of the agencies participating in the Program to allocate the level of resources and management attention necessary to ensure that the

strategic plans under subsection (e) are developed and executed effectively and that the objectives of the Program are met; and"; and

(iv) in subparagraph (F), by striking "high-performance" and inserting "high-end"; and (D) in paragraph (3)—

(i) by redesignating subparagraphs (B), (C), (D), and (E) as subparagraphs (C), (D), (E), and (G), respectively;

(ii) by inserting after subparagraph (A) the following:

"(B) provide a detailed description of the nature and scope of research infrastructure designated as such under the Program;";

(iii) in subparagraph (C), as redesignated— (I) by amending clause (i) to read as follows:

"(i) the Department of Justice;";

(II) by redesignating clauses (vii) through (xi) as clauses (viii) through (xii), respectively;

(III) by inserting after clause (vi) the following:

"(vii) the Department of Homeland Security;"; and

(IV) by amending clause (viii), as redesignated, to read as follows:

"(viii) the National Archives and Records Administration;";

(iv) in subparagraph (D), as redesignated— (I) by striking "is submitted," and inserting "is submitted, the levels for the previous fiscal year;"; and

(II) by striking "each Program Component Area;" and inserting "each Program Component Area and research area supported in accordance with section 102;";

(v) by amending subparagraph (E), as redesignated, to read as follows:

"(E) describe the levels of Federal funding for each participating agency, and for each Program Component Area, for the fiscal year during which such report is submitted, the levels for the previous fiscal year, and the levels proposed for the fiscal year with respect to which the budget submission applies;"; and

(vi) by inserting after subparagraph (E), as redesignated, the following:

"(F) include a description of how the objectives for each Program Component Area, and the objectives for activities that involve multiple Program Component Areas, relate to the objectives of the Program identified in the strategic plans required under subsection (e); and";

(3) in subsection (b)—

(A) in paragraph (1), in the matter preceding subparagraph (A)—

(i) by striking "high-performance computing" both places it appears and inserting "networking and information technology"; and

(ii) after the first sentence, by inserting the following: "Each chair of the advisory committee shall meet the qualifications of committee membership and may be a member of the President's Council of Advisors on Science and Technology.";

(B) in paragraph (1)(D), by striking "high-performance computing, networking technology, and related software" and inserting "networking and information technology"; and

(C) in paragraph (2)—

(i) in the second sentence, by striking "2" and inserting "3";

(ii) by striking "Committee on Science and Technology" and inserting "Committee on Science, Space, and Technology"; and

(iii) by striking "The first report shall be due within 1 year after the date of enactment of the America COMPETES Act.";

(4) in subsection (c)(1)(A), by striking "high-performance computing" and inserting "networking and information technology"; and

(5) by adding at the end the following:

"(d) PERIODIC REVIEWS.—The heads of the participating agencies, working through the National Science and Technology Council and the Program, shall—

"(1) periodically assess and update, as appropriate, the structure of the Program, including the Program Component Areas and associated contents, scope, and funding levels, taking into consideration any relevant recommendations of the advisory committee established under subsection (b); and

"(2) ensure that such agency's implementation of the Program includes foundational, large-scale, long-term, and interdisciplinary information technology research and development activities, including activities described in section 102.

"(e) STRATEGIC PLANS.—

"(1) IN GENERAL.—The heads of the participating agencies, working through the National Science and Technology Council and the Program, shall develop and implement strategic plans to guide—

"(A) emerging activities of Federal networking and information technology research and development; and

"(B) the activities described in subsection (a)(1).

"(2) UPDATES.—The heads of the participating agencies shall update the strategic plans as appropriate.

"(3) CONTENTS.—Each strategic plan shall—

"(A) specify near-term and long-term objectives for the portions of the Program relevant to the strategic plan, the anticipated schedule for achieving the near-term and long-term objectives, and the metrics to be used for assessing progress toward the near-term and long-term objectives;

"(B) specify how the near-term and long-term objectives complement research and development areas in which academia and the private sector are actively engaged;

"(C) describe how the heads of the participating agencies will support mechanisms for foundational, large-scale, long-term, and interdisciplinary information technology research and development and for Grand Challenges, including through collaborations—

"(i) across Federal agencies;

"(ii) across Program Component Areas; and

"(iii) with industry, Federal and private research laboratories, research entities, institutions of higher education, relevant nonprofit organizations, and international partners of the United States;

"(D) describe how the heads of the participating agencies will foster the rapid transfer of research and development results into new technologies and applications in the national interest, including through cooperation and collaborations with networking and information technology research, development, and technology transition initiatives supported by the States; and

"(E) describe how the portions of the Program relevant to the strategic plan will address long-term challenges for which solutions require foundational, large-scale, long-term, and interdisciplinary information technology research and development.

"(4) PRIVATE SECTOR EFFORTS.—In developing, implementing, and updating strategic plans, the heads of the participating agencies, working through the National Science and Technology Council and the Program, shall coordinate with industry, academia, and other interested stakeholders to ensure, to the extent practicable, that the Federal networking and information technology research and development activities carried out under this section do not duplicate the efforts of the private sector.

"(5) RECOMMENDATIONS.—In developing and updating strategic plans, the heads of the

participating agencies shall solicit recommendations and advice from—

"(A) the advisory committee under subsection (b);

"(B) the Committee on Science and relevant subcommittees of the National Science and Technology Council; and

"(C) a wide range of stakeholders, including industry, academia, National Laboratories, and other relevant organizations and institutions.

"(f) REPORTS.—The heads of the participating agencies, working through the National Science and Technology Council and the Program, shall submit to the advisory committee, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives—

"(1) the strategic plans developed under subsection (e)(1); and

"(2) each update under subsection (e)(2)."

(g) NATIONAL RESEARCH AND EDUCATION NETWORK.—Section 102 of the High-Performance Computing Act of 1991 (15 U.S.C. 5512) is repealed.

(h) NEXT GENERATION INTERNET.—Section 103 of the High-Performance Computing Act of 1991 (15 U.S.C. 5513) is repealed.

(i) GRAND CHALLENGES IN AREAS OF NATIONAL IMPORTANCE.—Title I of the High-Performance Computing Act of 1991 (15 U.S.C. 5511 et seq.) is amended by adding at the end the following:

"SEC. 102. GRAND CHALLENGES IN AREAS OF NATIONAL IMPORTANCE.

"(a) IN GENERAL.—The Program shall encourage the participating agencies to support foundational, large-scale, long-term, interdisciplinary, and interagency information technology research and development activities in networking and information technology directed toward agency mission areas that have the potential for significant contributions to national economic competitiveness and for other significant societal benefits. Such activities, ranging from basic research to the demonstration of technical solutions, shall be designed to advance the development of fundamental discoveries. The advisory committee established under section 101(b) shall make recommendations to the Program for candidate research and development areas for support under this section.

"(b) CHARACTERISTICS.—

"(1) IN GENERAL.—Research and development activities under this section shall—

"(A) include projects selected on the basis of applications for support through a competitive, merit-based process;

"(B) to the extent practicable, involve collaborations among researchers in institutions of higher education and industry, and may involve nonprofit research institutions and Federal laboratories, as appropriate;

"(C) to the extent practicable, leverage Federal investments through collaboration with related State and private sector initiatives; and

"(D) include a plan for fostering the transfer of research discoveries and the results of technology demonstration activities, including from institutions of higher education and Federal laboratories, to industry for commercial development.

"(2) COST-SHARING.—In selecting applications for support, the agencies may give special consideration to projects that include cost sharing from non-Federal sources."

(j) NATIONAL SCIENCE FOUNDATION ACTIVITIES.—Section 201 of the High-Performance Computing Act of 1991 (15 U.S.C. 5521) is amended—

(1) in subsection (a)—

(A) by striking "(a) GENERAL RESPONSIBILITIES.—";

(B) in paragraph (1)—

(i) by inserting “high-end” after “National Science Foundation shall provide”; and

(ii) by striking “high-performance computing” and all that follows through “networking;” and inserting “networking and information technology; and”;

(C) by striking paragraphs (2) through (4); and

(D) by inserting after paragraph (1) the following:

“(2) the National Science Foundation shall use its existing programs, in collaboration with other agencies, as appropriate, to improve the teaching and learning of networking and information technology at all levels of education and to increase participation in networking and information technology fields, including by individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a and 1885b).”;

(2) by striking subsection (b).

(k) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ACTIVITIES.—Section 202 of the High-Performance Computing Act of 1991 (15 U.S.C. 5522) is amended—

(1) by striking “(a) GENERAL RESPONSIBILITIES.—”;

(2) by striking “high-performance computing” and inserting “networking and information technology”;

(3) by striking subsection (b).

(l) DEPARTMENT OF ENERGY ACTIVITIES.—Section 203 of the High-Performance Computing Act of 1991 (15 U.S.C. 5523) is amended—

(1) by striking “(a) GENERAL RESPONSIBILITIES.—”;

(2) in paragraph (1), by striking “high-performance computing and networking” and inserting “networking and information technology”;

(3) in paragraph (2)(A), by striking “high-performance” and inserting “high-end”;

(4) by striking subsection (b).

(m) DEPARTMENT OF COMMERCE ACTIVITIES.—Section 204 of the High-Performance Computing Act of 1991 (15 U.S.C. 5524) is amended—

(1) in subsection (a)(1)—

(A) in subparagraph (A), by striking “high-performance computing systems and networks” and inserting “networking and information technology systems and capabilities”;

(B) in subparagraph (B), by striking “interoperability of high-performance computing systems in networks and for common user interfaces to systems” and inserting “interoperability and usability of networking and information technology systems”;

(C) in subparagraph (C), by striking “high-performance computing” and inserting “networking and information technology”;

(2) in subsection (b)—

(A) in the heading, by striking “HIGH-PERFORMANCE COMPUTING AND NETWORK” and inserting “NETWORKING AND INFORMATION TECHNOLOGY”;

(B) by striking “Pursuant to the Computer Security Act of 1987 (Public Law 100-235; 101 Stat. 1724), the” and inserting “The”; and

(C) by striking “sensitive information in Federal computer systems” and inserting “Federal agency information and information systems”;

(3) by striking subsections (c) and (d).

(n) ENVIRONMENTAL PROTECTION AGENCY ACTIVITIES.—Section 205 of the High-Performance Computing Act of 1991 (15 U.S.C. 5525) is repealed.

(o) ROLE OF THE DEPARTMENT OF EDUCATION.—Section 206 of the High-Performance Computing Act of 1991 (15 U.S.C. 5526) is repealed.

(p) MISCELLANEOUS PROVISIONS.—Section 207 of the High-Performance Computing Act of 1991 (15 U.S.C. 5527) is amended—

(1) in subsection (a)(2), by striking “paragraphs (1) through (5) of section 2315(a) of title 10” and inserting “section 3552(b)(6)(A)(i) of title 44”;

(2) in subsection (b), by striking “high-performance computing” and inserting “networking and information technology”.

(q) REPEAL.—Section 208 of the High-Performance Computing Act of 1991 (15 U.S.C. 5528) is repealed.

(r) NATIONAL SCIENCE FOUNDATION RESEARCH.—Section 4(b)(5)(K) of the Cyber Security Research and Development Act (15 U.S.C. 7403(b)(5)(K)) is amended by striking “high-performance computing” and inserting “networking and information technology”.

(s) NATIONAL INFORMATION TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM.—Section 13202(b) of the America Recovery and Reinvestment Act of 2009 (42 U.S.C. 17912(b)) is amended by striking “National High-Performance Computing Program” and inserting “Networking and Information Technology Research and Development Program”.

(t) FEDERAL CYBERSECURITY RESEARCH AND DEVELOPMENT.—Section 201(a)(4) of the Cybersecurity Enhancement Act of 2014 (15 U.S.C. 7431(a)(4)) is amended—

(1) by striking “clauses (i) through (x)” and inserting “clauses (i) through (xi)”;

(2) by striking “under clause (xi)” and inserting “under clause (xii)”.

(u) ADDITIONAL REPEAL.—Section 4 of the Department of Energy High-End Computing Revitalization Act of 2004 (15 U.S.C. 5543) is repealed.

SEC. 106. PHYSICAL SCIENCES COORDINATION.

(a) HIGH-ENERGY PHYSICS.—

(1) IN GENERAL.—The Physical Science Subcommittee of the National Science and Technology Council (referred to in this section as “Subcommittee”) shall continue to coordinate Federal efforts related to high-energy physics research to maximize the efficiency and effectiveness of United States investment in high-energy physics.

(2) PURPOSES.—The purposes of the Subcommittee include—

(A) to advise and assist the Committee on Science and the National Science and Technology Council on United States policies, procedures, and plans in the physical sciences, including high-energy physics; and

(B) to identify emerging opportunities, stimulate international cooperation, and foster the development of the physical sciences in the United States, including—

(i) in high-energy physics research, including related underground science and engineering research;

(ii) in physical infrastructure and facilities;

(iii) in information and analysis; and

(iv) in coordination activities.

(3) RESPONSIBILITIES.—In regard to coordinating Federal efforts related to high-energy physics research, the Subcommittee shall, taking into account the findings and recommendations of relevant advisory committees—

(A) provide recommendations on planning for construction and stewardship of large facilities participating in high-energy physics;

(B) provide recommendations on research coordination and collaboration among the programs and activities of Federal agencies related to underground science, neutrino research, dark energy, and dark matter research;

(C) establish goals and priorities for high-energy physics, related underground science, and research and development that will strengthen United States competitiveness in high-energy physics;

(D) propose methods for engagement with international, Federal, and State agencies

and Federal laboratories not represented on the National Science and Technology Council to identify and reduce regulatory, logistical, and fiscal barriers that inhibit United States leadership in high-energy physics and related underground science; and

(E) develop, and update as necessary, a strategic plan to guide Federal programs and activities in support of high-energy physics research, including—

(i) the efforts taken in support of paragraph (2) since the last strategic plan;

(ii) an evaluation of the current research needs for maintaining United States leadership in high-energy physics; and

(iii) an identification of future priorities in the area of high-energy physics.

(b) RADIATION BIOLOGY.—

(1) IN GENERAL.—The Subcommittee shall continue to coordinate Federal efforts related to radiation biology research to maximize the efficiency and effectiveness of United States investment in radiation biology.

(2) RESPONSIBILITIES FOR RADIATION BIOLOGY.—In regard to coordinating Federal efforts related to radiation biology research, the Subcommittee shall—

(A) advise and assist the National Science and Technology Council on policies and initiatives in radiation biology, including enhancing scientific knowledge of the effects of low dose radiation on biological systems to improve radiation risk management methods;

(B) identify opportunities to stimulate international cooperation and leverage research and knowledge from sources outside of the United States;

(C) ensure coordination between the Department of Energy Office of Science, Foundation, National Aeronautics and Space Administration, National Institutes of Health, Environmental Protection Agency, Department of Defense, Nuclear Regulatory Commission, and Department of Homeland Security;

(D) identify ongoing scientific challenges for understanding the long-term effects of ionizing radiation on biological systems; and

(E) formulate overall scientific goals for the future of low-dose radiation research in the United States.

(c) FUSION ENERGY SCIENCES.—

(1) IN GENERAL.—The Subcommittee shall continue to coordinate Federal efforts related to fusion energy research to maximize the efficiency and effectiveness of United States investment in fusion energy sciences.

(2) RESPONSIBILITIES FOR FUSION ENERGY SCIENCES.—In regard to coordinating Federal efforts related to fusion energy sciences, the Subcommittee shall—

(A) advise and assist the National Science and Technology Council on policies and initiatives in fusion energy sciences, including enhancing scientific knowledge of fusion energy science, plasma physics, and related materials sciences;

(B) identify opportunities to stimulate international cooperation and leverage research and knowledge from sources outside of the United States, including the ITER project;

(C) ensure coordination between the Department of Energy Office of Science, National Nuclear Security Administration, Advanced Research Projects Agency-Energy, National Aeronautics and Space Administration, Foundation, and Department of Defense regarding fusion energy sciences and plasma physics; and

(D) formulate overall scientific goals for the future of fusion energy sciences and plasma physics.

SEC. 107. LABORATORY PROGRAM IMPROVEMENTS.

(a) **IN GENERAL.**—The Director of NIST, acting through the Associate Director for Laboratory Programs, shall develop and implement a comprehensive strategic plan for laboratory programs that expands—

(1) interactions with academia, international researchers, and industry; and

(2) commercial and industrial applications.

(b) **OPTIMIZING COMMERCIAL AND INDUSTRIAL APPLICATIONS.**—In accordance with the purpose under section 1(b)(3) of the National Institute of Standards and Technology Act (15 U.S.C. 271(b)(3)), the comprehensive strategic plan shall—

(1) include performance metrics for the dissemination of fundamental research results, measurements, and standards research results to industry, including manufacturing, and other interested parties;

(2) document any positive benefits of research on the competitiveness of the interested parties described in paragraph (1);

(3) clarify the current approach to the technology transfer activities of NIST; and

(4) consider recommendations from the National Academy of Sciences.

SEC. 108. STANDARD REFERENCE DATA ACT UPDATE.

Section 2 of the Standard Reference Data Act (15 U.S.C. 290a) is amended to read as follows:

“SEC. 2. DEFINITIONS.

“For the purposes of this Act:

“(1) **STANDARD REFERENCE DATA.**—The term ‘standard reference data’ means data that is—

“(A) either—

“(i) quantitative information related to a measurable physical, or chemical, or biological property of a substance or system of substances of known composition and structure;

“(ii) measurable characteristics of a physical artifact or artifacts;

“(iii) engineering properties or performance characteristics of a system; or

“(iv) 1 or more digital data objects that serve—

“(I) to calibrate or characterize the performance of a detection or measurement system; or

“(II) to interpolate or extrapolate, or both, data described in subparagraph (A) through (C); and

“(B) that is critically evaluated as to its reliability under section 3 of this Act.

“(2) **SECRETARY.**—The term ‘Secretary’ means the Secretary of Commerce.”

SEC. 109. NSF MID-SCALE PROJECT INVESTMENTS.

(a) **FINDINGS.**—Congress makes the following findings:

(1) The Foundation funds major research facilities, infrastructure, and instrumentation that provide unique capabilities at the frontiers of science and engineering.

(2) Modern and effective research facilities, infrastructure, and instrumentation are critical to maintaining United States leadership in science and engineering.

(3) The costs of some proposed research instrumentation, equipment, and upgrades to major research facilities fall between programs currently funded by the Foundation, creating a gap between the established parameters of the Major Research Instrumentation and Major Research Equipment and Facilities Construction programs, including projects that have been identified as cost-effective additions of high priority to the advancement of scientific understanding.

(4) The 2010 Astronomy and Astrophysics Decadal Survey recommended a mid-scale innovations program.

(b) **MID-SCALE PROJECTS.**—

(1) **IN GENERAL.**—The Foundation shall evaluate the existing and future needs,

across all disciplines supported by the Foundation, for mid-scale projects.

(2) **STRATEGY.**—The Director of the Foundation shall develop a strategy to address the needs identified in paragraph (1).

(3) **BRIEFING.**—Not later than 180 days after the date of enactment of this Act, the Director of the Foundation shall provide a briefing to the appropriate committees of Congress on the evaluation under paragraph (1) and the strategy under paragraph (2).

(4) **DEFINITION OF MID-SCALE PROJECTS.**—In this subsection, the term “mid-scale projects” means research instrumentation, equipment, and upgrades to major research facilities or other research infrastructure investments that exceed the maximum award funded by the major research instrumentation program and are below the minimum award funded by the major research equipment and facilities construction program as described in section 507 of the AMERICA Competes Reauthorization Act of 2010 (Public Law 111–358; 124 Stat. 4008).

SEC. 110. OVERSIGHT OF NSF MAJOR MULTI-USER RESEARCH FACILITY PROJECTS.

(a) **FACILITIES OVERSIGHT.**—

(1) **IN GENERAL.**—The Director of the Foundation shall strengthen oversight and accountability over the full life-cycle of each major multi-user research facility project, including planning, development, procurement, construction, operations, and support, and shut-down of the facility, in order to maximize research investment.

(2) **REQUIREMENTS.**—In carrying out paragraph (1), the Director shall—

(A) prioritize the scientific outcomes of a major multi-user research facility project and the internal management and financial oversight of the major multi-user research facility project;

(B) clarify the roles and responsibilities of all organizations, including offices, panels, committees, and directorates, involved in supporting a major multi-user research facility project, including the role of the Major Research Equipment and Facilities Construction Panel;

(C) establish policies and procedures for the planning, management, and oversight of a major multi-user research facility project at each phase of the life-cycle of the major multi-user research facility project;

(D) ensure that policies for estimating and managing costs and schedules are consistent with the best practices described in the Government Accountability Office Cost Estimating and Assessment Guide, the Government Accountability Office Schedule Assessment Guide, and the Office of Management and Budget Uniform Guidance (2 C.F.R. Part 200);

(E) establish the appropriate project management and financial management expertise required for Foundation staff to oversee each major multi-user research facility project effectively, including by improving project management training and certification;

(F) coordinate the sharing of the best management practices and lessons learned from each major multi-user research facility project;

(G) continue to maintain a Large Facilities Office to support the research directorates in the development, implementation, and oversight of each major multi-user research facility project, including by—

(i) serving as the Foundation’s primary resource for all policy or process issues related to the development, implementation, and oversight of a major multi-user research facility project;

(ii) serving as a Foundation-wide resource on project management, including providing expert assistance on nonscientific and non-

technical aspects of project planning, budgeting, implementation, management, and oversight;

(iii) coordinating and collaborating with research directorates to share best management practices and lessons learned from prior major multi-user research facility projects; and

(iv) assessing each major multi-user research facility project for cost and schedule risk; and

(H) appoint a senior agency official whose responsibility is oversight of the development, construction, and operations of major multi-user research facilities across the Foundation.

(b) **FACILITIES FULL LIFE-CYCLE COSTS.**—

(1) **IN GENERAL.**—Subject to subsection (c)(1), the Director of the Foundation shall require that any pre-award analysis of a major multi-user research facility project includes the development and consideration of the full life-cycle cost (as defined in section 2 of the National Science Foundation Authorization Act of 1998 (42 U.S.C. 1862k note)) in accordance with section 14 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n–4).

(2) **IMPLEMENTATION.**—Based on the pre-award analysis described in paragraph (1), the Director of the Foundation shall include projected operational costs within the Foundation’s out-years as part of the President’s annual budget submission to Congress under section 1105 of title 31, United States Code.

(c) **COST OVERSIGHT.**—

(1) **PRE-AWARD ANALYSIS.**—

(A) **IN GENERAL.**—The Director of the Foundation and the National Science Board may not approve or execute any agreement to start construction on any proposed major multi-user research facility project unless—

(i) an external analysis of the proposed budget has been conducted to ensure the proposal is complete and reasonable;

(ii) the analysis under clause (i) follows the Government Accountability Office Cost Estimating and Assessment Guide;

(iii) except as provided under subparagraph (C), an analysis of the accounting systems has been conducted;

(iv) an independent cost estimate of the construction of the project has been conducted using the same detailed technical information as the project proposal estimate to determine whether the estimate is well-supported and realistic; and

(v) the Foundation and the National Science Board have considered the analyses under clauses (i) and (iii) and the independent cost estimate under clause (iv) and resolved any major issues identified therein.

(B) **AUDITS.**—An external analysis under subparagraph (A)(i) may include an audit.

(C) **EXCEPTION.**—The Director of the Foundation, at the Director’s discretion, may waive the requirement under subparagraph (A)(iii) if a similar analysis of the accounting systems was conducted in the prior years.

(2) **CONSTRUCTION OVERSIGHT.**—The Director of the Foundation shall require for each major multi-user research facility project—

(A) periodic external reviews on project management and performance;

(B) adequate internal controls, policies, and procedures, and reliable accounting systems in preparation for the incurred cost audits under subparagraph (D);

(C) annual incurred cost submissions of financial expenditures; and

(D) an incurred cost audit of the major multi-user research facility project in accordance with Government Accountability Office Government Auditing Standards—

(i) at least once during construction at a time determined based on risk analysis and length of the award, except that the length

of time between audits may not exceed 3 years; and

(i) at the completion of the construction phase.

(3) OPERATIONS COST ANALYSIS.—The Director of the Foundation shall require an independent cost analysis of the operational proposal for each major multi-user research facility project.

(d) CONTINGENCY.—

(1) IN GENERAL.—The Director of the Foundation shall strengthen internal controls to improve oversight of contingency on a major multi-user research facility project.

(2) REQUIREMENTS.—In carrying out paragraph (1), the Director of the Foundation shall—

(A) only include contingency amounts in an award in accordance with section 200.433 of title 2, Code of Federal Regulations (relating to contingency provisions), or any successor regulation;

(B) retain control over funds budgeted for contingency, except that the Director may disburse budgeted contingency funds incrementally to the awardee to ensure project stability and continuity;

(C) track contingency use; and

(D) ensure that contingency amounts allocated to the performance baseline are reasonable and allowable.

(e) USE OF FEES.—

(1) SENSE OF CONGRESS.—It is the sense of Congress that—

(A) the use of taxpayer-funded award fees should be transparent and explicable; and

(B) the Foundation should implement an award fee policy that ensures more transparency and accountability in the funding of necessary and appropriate expenses directly related to the construction and operation of major multi-user research facilities.

(2) REPORTING AND RECORDKEEPING.—The Director of the Foundation shall establish guidelines for awardees regarding inappropriate expenditures associated with all fee types used in cooperative agreements, including for alcoholic beverages, lobbying, meals or entertainment for non-business purposes, non-business travel, and any other purpose the Director determines is inappropriate.

(f) OVERSIGHT IMPLEMENTATION PROGRESS.—The Director of the Foundation shall—

(1) not later than 90 days after the date of enactment of this Act, and periodically thereafter until the completion date, provide a briefing to the appropriate committees of Congress on the response to or progress made toward implementation of—

(A) this section;

(B) all of the issues and recommendations identified in cooperative agreement audit reports and memoranda issued by the Inspector General of the Foundation in the last 5 years; and

(C) all of the issues and recommendations identified by a panel of the National Academy of Public Administration in the December 2015 report entitled “National Science Foundation: Use of Cooperative Agreements to Support Large Scale Investment in Research”; and

(2) not later than 1 year after the date of enactment of this Act, notify the appropriate committees of Congress when the Foundation has implemented the recommendations identified in a panel of the National Academy of Public Administration report issued December 2015.

(g) DEFINITIONS.—In this section:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means the Committee on Commerce, Science, and Transportation and the Committee on Appropriations of the Senate and the Committee on Science, Space, and

Technology and the Committee on Appropriations of the House of Representatives.

(2) MAJOR MULTI-USER RESEARCH FACILITY PROJECT.—The term “major multi-user research facility project” means a science and engineering facility project that—

(A) exceeds the lesser of—

(i) 10 percent of a Directorate’s annual budget; or

(ii) \$100,000,000 in total project costs; or

(B) is funded by the major research equipment and facilities construction account, or any successor account.

SEC. 111. PERSONNEL OVERSIGHT.

(a) CONFLICTS OF INTEREST.—The Director of the Foundation shall update the policy and procedure of the Foundation relating to conflicts of interest to improve documentation and management of any known conflict of interest of an individual on temporary assignment at the Foundation, including an individual on assignment under the Intergovernmental Personnel Act of 1970 (42 U.S.C. 4701 et seq.).

(b) JUSTIFICATIONS.—The Deputy Director of the Foundation shall submit annually to the appropriate committees of Congress written justification for each rotator employed under the Intergovernmental Personnel Act of 1970 (42 U.S.C. 4701 et seq.), or other rotator employed, by the Foundation that year that is paid at a rate that exceeds the maximum rate of pay for the Senior Executive Service, including, if applicable, the level of adjustment for the certified Senior Executive Service Performance Appraisal System.

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Director of the Foundation shall submit to the appropriate committees of Congress a report on the Foundation’s efforts to control costs associated with employing rotators, including the results of and participation in the Foundation’s cost-sharing pilot program and the Foundation’s progress in responding to the findings and implementing the recommendations of the Office of Inspector General of the Foundation related to the employment of rotators.

SEC. 112. MANAGEMENT OF THE U.S. ANTARCTIC PROGRAM.

(a) REVIEW.—

(1) IN GENERAL.—The Director of the Foundation shall continue to review the efforts by the Foundation to sustain and strengthen scientific efforts in the face of logistical challenges for the United States Antarctic Program.

(2) ISSUES TO BE EXAMINED.—In conducting the review, the Director shall examine, at a minimum, the following:

(A) Implementation by the Foundation of issues and recommendations identified by—

(i) the Inspector General of the National Science Foundation in audit reports and memoranda on the United States Antarctic Program in the last 4 years;

(ii) the U.S. Antarctic Program Blue Ribbon Panel report, More and Better Science in Antarctica through Increased Logistical Effectiveness, issued July 23, 2012; and

(iii) the National Research Council report, Future Science Opportunities in Antarctica and the Southern Ocean, issued September 2011.

(B) Efforts by the Foundation to track its progress in addressing the issues and recommendations under subparagraph (A).

(C) Efforts by the Foundation to address other opportunities and challenges, including efforts on scientific research, coordination with other Federal agencies and international partners, logistics and transportation, health and safety of participants, oversight and financial management of awardees and contractors, and resources and policy challenges.

(b) BRIEFING.—Not later than 180 days after the date of enactment of this Act, the Director shall brief the appropriate committees of Congress on the ongoing review, including findings and any recommendations.

SEC. 113. NIST CAMPUS SECURITY.

(a) SUPERVISORY AUTHORITY.—The Department of Commerce Office of Security shall directly manage the law enforcement and site security programs of NIST through an assigned Director of Security for NIST without increasing the number of full-time equivalent employees of the Department of Commerce, including NIST.

(b) REPORTS.—The Director of Security for NIST shall provide an activities and security report on a quarterly basis for the first year after the date of enactment of this Act, and on an annual basis thereafter, to the Under Secretary for Standards and Technology and the appropriate committees of Congress.

SEC. 114. COORDINATION OF SUSTAINABLE CHEMISTRY RESEARCH AND DEVELOPMENT.

(a) IMPORTANCE OF SUSTAINABLE CHEMISTRY.—It is the sense of Congress that—

(1) the science of chemistry is vital to improving the quality of human life and plays an important role in addressing critical global challenges, including water quality, energy, health care, and agriculture;

(2) sustainable chemistry can reduce risks to human health and the environment, reduce waste, improve pollution prevention, promote safe and efficient manufacturing, and promote efficient use of resources in developing new materials, processes, and technologies that support viable long-term solutions to a significant number of challenges;

(3) sustainable chemistry can stimulate innovation, encourage new and creative approaches to problems, create jobs, and save money; and

(4) a coordinated effort on sustainable chemistry will allow for a greater return on research investment in this area.

(b) SUSTAINABLE CHEMISTRY BASIC RESEARCH.—Subject to the availability of appropriated funds, the Director of the Foundation may continue to carry out the Sustainable Chemistry Basic Research program authorized under section 509 of the National Science Foundation Authorization Act of 2010 (42 U.S.C. 1862p-3).

SEC. 115. MISREPRESENTATION OF RESEARCH RESULTS.

(a) PROHIBITION.—The Director of the Foundation may revise the regulations under part 689 of title 45, Code of Federal Regulations (relating to research misconduct) to ensure that the findings and conclusions of any article authored by a principal investigator, using the results of research conducted under a Foundation grant, that is published in a peer-reviewed publication, made publicly available, or incorporated in an application for a research grant or grant extension from the Foundation, does not contain any falsification, fabrication, or plagiarism.

(b) INTERAGENCY COMMUNICATION.—Upon a finding that research misconduct has occurred, the Foundation shall, in addition to any possible final action under section 689.3 of title 45, Code of Federal Regulations, notify other Federal science agencies of the finding.

SEC. 116. RESEARCH REPRODUCIBILITY AND REPLICATION.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the gold standard of good science is the ability of a researcher or research laboratory to reproduce a published research finding, including methods;

(2) there is growing concern that some published research findings cannot be reproduced or replicated, which can negatively affect the public’s trust in science;

(3) there are a complex set of factors affecting reproducibility and replication; and

(4) the increasing interdisciplinary nature and complexity of scientific research may be a contributing factor to issues with research reproducibility and replication.

(b) REPORT.—

(1) IN GENERAL.—Not later than 45 days after the date of enactment of this Act, the Director of the Foundation shall enter into an agreement with the National Research Council—

(A) to assess research and data reproducibility and replicability issues in interdisciplinary research;

(B) to make recommendations for improving rigor and transparency in scientific research; and

(C) to submit to the Director of the Foundation a report on the assessment, including its findings and recommendations, not later than 1 year after the date of enactment of this Act.

(2) SUBMISSION TO CONGRESS.—Not later than 60 days after the date the Director of the Foundation receives the report under paragraph (1)(C), the Director shall submit the report to the appropriate committees of Congress, including a response from the Director of the Foundation and the Chair of the National Science Board as to whether they agree with each of the findings and recommendations in the report.

SEC. 117. BRAIN RESEARCH THROUGH ADVANCING INNOVATIVE NEUROTECHNOLOGIES INITIATIVE.

(a) IN GENERAL.—The Foundation shall support research activities related to the interagency Brain Research through Advancing Innovative Neurotechnologies Initiative.

(b) SENSE OF CONGRESS.—It is the sense of Congress that the Foundation should work in conjunction with the Interagency Working Group on Neuroscience established by the National Science and Technology Council, Committee on Science to determine how to use the data infrastructure of the Foundation and other applicable Federal science agencies to help neuroscientists collect, standardize, manage, and analyze the large amounts of data that result from research attempting to understand how the brain functions.

TITLE II—ADMINISTRATIVE AND REGULATORY BURDEN REDUCTION

SEC. 201. INTERAGENCY WORKING GROUP ON RESEARCH REGULATION.

(a) SHORT TITLE.—This section may be cited as the “Research and Development Efficiency Act”.

(b) FINDINGS.—Congress makes the following findings:

(1) Scientific and technological advancement have been the largest drivers of economic growth in the last 50 years, with the Federal Government being the largest investor in basic research.

(2) Substantial and increasing administrative burdens and costs in Federal research administration, particularly in the higher education sector where most federally funded research is performed, are eroding funds available to carry out basic scientific research.

(3) Federally funded grants are increasingly competitive, with the Foundation funding only approximately 1 in every 5 grant proposals.

(4) Progress has been made over the last decade in streamlining the pre-award grant application process through the Federal Government’s Grants.gov website.

(5) Post-award administrative costs have increased as Federal research agencies have continued to impose agency-unique compliance and reporting requirements on researchers and research institutions.

(6) Researchers spend as much as 42 percent of their time complying with Federal regulations, including administrative tasks such as applying for grants or meeting reporting requirements.

(c) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) administrative burdens faced by researchers may be reducing the return on investment of federally funded research and development; and

(2) it is a matter of critical importance to United States competitiveness that administrative costs of federally funded research be streamlined so that a higher proportion of federal funding is applied to direct research activities.

(d) ESTABLISHMENT.—The Director of the Office of Management and Budget, in coordination with the Office of Science and Technology Policy, shall establish an interagency working group (referred to in this section as the “Working Group”) for the purpose of reducing administrative burdens on federally funded researchers while protecting the public interest through the transparency of and accountability for federally funded activities.

(e) RESPONSIBILITIES.—

(1) IN GENERAL.—The Working Group shall—

(A) regularly review relevant, administration-related regulations imposed on federally funded researchers;

(B) recommend those regulations or processes that may be eliminated, streamlined, or otherwise improved for the purpose described in subsection (d);

(C) recommend ways to minimize the regulatory burden on United States institutions of higher education performing federally funded research while maintaining accountability for federal funding; and

(D) recommend ways to identify and update specific regulations to refocus on performance-based goals rather than on process while achieving the outcome described in subparagraph (C).

(2) GRANT REVIEW.—

(A) IN GENERAL.—The Working Group shall—

(i) conduct a comprehensive review of Federal science agency grant proposal documents; and

(ii) develop, to the extent practicable, a simplified, uniform grant format to be used by all Federal science agencies.

(B) CONSIDERATIONS.—In developing the uniform grant format, the Working Group shall consider whether to implement—

(i) procedures for preliminary project proposals in advance of peer-review selection;

(ii) increased use of “Just-In-Time” procedures for documentation that does not bear directly on the scientific merit of a proposal;

(iii) simplified initial budget proposals in advance of peer review selection; and

(iv) detailed budget proposals for applicants that peer review selection identifies as likely to be funded.

(3) CENTRALIZED RESEARCHER PROFILE DATABASE.—

(A) ESTABLISHMENT.—The Working Group shall establish, to the extent practicable, a secure, centralized database for investigator biosketches, curriculum vitae, licenses, lists of publications, and other documents considered relevant by the Working Group.

(B) CONSIDERATIONS.—In establishing the centralized profile database under subparagraph (A), the Working Group shall consider incorporating existing investigator databases.

(C) GRANT PROPOSALS.—To the extent practicable, all grant proposals shall utilize the centralized investigator profile database established under subparagraph (A).

(D) REQUIREMENTS.—Each investigator shall—

(i) be responsible for ensuring the investigator’s profile is current and accurate; and

(ii) be assigned a unique identifier linked to the database and accessible to all Federal funding agencies.

(4) CENTRALIZED ASSURANCES REPOSITORY.—The Working Group shall—

(A) establish a central repository for all of the assurances required for Federal research grants; and

(B) provide guidance to institutions of higher education and Federal science agencies on the use of the centralized assurances repository.

(5) COMPREHENSIVE REVIEW.—

(A) IN GENERAL.—The Working Group shall—

(i) conduct a comprehensive review of the mandated progress reports for federally funded research; and

(ii) develop a strategy to simplify investigator progress reports.

(B) CONSIDERATIONS.—In developing the strategy, the Working Group shall consider limiting progress reports to performance outcomes.

(f) CONSULTATION.—In carrying out its responsibilities under subsection (e)(1), the Working Group shall consult with academic researchers outside the Federal Government, including—

(1) federally funded researchers;

(2) non-federally funded researchers;

(3) institutions of higher education and their representative associations;

(4) scientific and engineering disciplinary societies and associations;

(5) nonprofit research institutions;

(6) industry, including small businesses;

(7) federally funded research and development centers; and

(8) members of the public with a stake in ensuring effectiveness, efficiency, and accountability in the performance of scientific research.

(g) REPORTS.—Not later than 1 year after the date of enactment of this Act, and annually thereafter for 3 years, the Working Group shall submit to the appropriate committees of Congress a report on its responsibilities under this section, including a discussion of the considerations described in paragraphs (2)(B), (3)(B), and (5)(B) of subsection (e) and recommendations made under subsection (e)(1).

SEC. 202. SCIENTIFIC AND TECHNICAL COLLABORATION.

(a) DEFINITION OF SCIENTIFIC AND TECHNICAL WORKSHOP.—In this section, the term “scientific and technical workshop” means a symposium, seminar, or any other organized, formal gathering where scientists or engineers working in STEM research and development fields assemble to coordinate, exchange and disseminate information or to explore or clarify a defined subject, problem or area of knowledge in the STEM fields.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the United States should encourage broad dissemination of Federal research findings and engagement of Federal researchers with the scientific and technical community; and

(2) laboratory, test center, and field center directors and other similar heads of offices should approve scientific and technical workshop attendance if—

(A) that attendance would meet the mission of the laboratory or test center; and

(B) sufficient laboratory or test center funds are available for that purpose.

(c) ATTENDANCE POLICIES.—Not later than 180 days after the date of enactment of this Act, the heads of the Federal science agencies shall each develop an action plan for the

implementation of revisions and updates to their policies on attendance at scientific and technical workshops.

(d) NIST WORKSHOPS.—Section 2(c) of the National Institute of Standards and Technology Act (15 U.S.C. 272(c)), as amended by section 104 of this Act, is further amended—

(1) by redesignating paragraphs (19) through (24) as paragraphs (22) through (27), respectively; and

(2) by inserting after paragraph (18) the following:

“(19) host, participate in, and support scientific and technical workshops (as defined in section 202 of the American Innovation and Competitiveness Act);

“(20) collect and retain any fees charged by the Secretary for hosting a scientific and technical workshop described in paragraph (19);

“(21) notwithstanding title 31 of the United States Code, use the fees described in paragraph (20) to pay for any related expenses, including subsistence expenses for participants;”.

SEC. 203. NIST GRANTS AND COOPERATIVE AGREEMENTS UPDATE.

Section 8(a) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3706(a)) is amended by striking “The total amount of any such grant or cooperative agreement may not exceed 75 percent of the total cost of the program.”.

SEC. 204. REPEAL OF CERTAIN OBSOLETE REPORTS.

(a) REPEAL OF CERTAIN OBSOLETE REPORTS.—

(1) NIST REPORTS.—

(A) REPORT ON DONATION OF EDUCATIONALLY USEFUL FEDERAL EQUIPMENT TO SCHOOLS.—Section 6(b) of the Technology Administration Act of 1998 (15 U.S.C. 272 note) is amended—

(i) in paragraph (1), by striking “(1) IN GENERAL.—” and indenting appropriately; and

(ii) by striking paragraph (2).

(B) THREE-YEAR PROGRAMMATIC PLANNING DOCUMENT.—

(1) IN GENERAL.—Section 23 of the National Institute of Standards and Technology Act (15 U.S.C. 278i) is amended by striking subsections (c) and (d).

(ii) CONFORMING AMENDMENT.—Section 10(h)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278(h)(1)) is amended by striking the last sentence.

(2) MULTIAGENCY REPORT ON INNOVATION ACCELERATION RESEARCH.—Section 1008 of the America COMPETES Act (42 U.S.C. 6603) is amended—

(A) by striking subsection (c); and

(B) by redesignating subsection (d) as subsection (c).

(3) NSF REPORTS.—

(A) FUNDING FOR SUCCESSFUL STEM EDUCATION PROGRAMS; REPORT TO CONGRESS.—Section 7012 of the America COMPETES Act (42 U.S.C. 1862o-4) is amended by striking subsection (c).

(B) ENCOURAGING PARTICIPATION; EVALUATION AND REPORT.—Section 7031 of the America COMPETES Act (42 U.S.C. 1862o-11) is amended by striking subsection (b).

(C) MATH AND SCIENCE PARTNERSHIPS PROGRAM COORDINATION REPORT.—Section 9(c) of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n(c)) is amended—

(i) by striking paragraph (4); and

(ii) by redesignating paragraph (5) as paragraph (4).

(b) NATIONAL NANOTECHNOLOGY INITIATIVE REPORTS.—The 21st Century Nanotechnology Research and Development Act (15 U.S.C. 7501 et seq.) is amended—

(1) by amending section 2(c)(4) (15 U.S.C. 7501(c)(4)) to read as follows:

“(4) develop, not later than 5 years after the date of the release of the most-recent strategic plan, and update every 5 years thereafter, a strategic plan to guide the activities described under subsection (b) that describes—

“(A) the near-term and long-term objectives for the Program;

“(B) the anticipated schedule for achieving the near-term objectives; and

“(C) the metrics that will be used to assess progress toward the near-term and long-term objectives;

“(D) how the Program will move results out of the laboratory and into application for the benefit of society;

“(E) the Program’s support for long-term funding for interdisciplinary research and development in nanotechnology; and

“(F) the allocation of funding for inter-agency nanotechnology projects;”;

(2) by amending section 4(d) (15 U.S.C. 7503(d)) to read as follows:

“(d) REPORTS.—Not later than 4 years after the date of the most recent assessment under subsection (c), and quadrennially thereafter, the Advisory Panel shall submit to the President, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science, Space, and Technology of the House of Representatives a report its assessments under subsection (c) and its recommendations for ways to improve the Program.”; and

(3) in section 5 (15 U.S.C. 7504)—

(A) in the heading, by striking “TRIENNIAL” and inserting “QUADRENNIAL”;

(B) in subsection (a), in the matter preceding paragraph (1), by striking “triennial” and inserting “quadrennial”;

(C) in subsection (b), by striking “triennial” and inserting “quadrennial”;

(D) in subsection (c), by striking “triennial” and inserting “quadrennial”; and

(E) by amending subsection (d) to read as follows:

“(d) REPORT.—

“(1) IN GENERAL.—Not later than 30 days after the date the first evaluation under subsection (a) is received, and quadrennially thereafter, the Director of the National Nanotechnology Coordination Office shall report to the President its assessments under subsection (c) and its recommendations for ways to improve the Program.

“(2) CONGRESS.—Not later than 30 days after the date the President receives the report under paragraph (1), the Director of the Office of Science and Technology Policy shall transmit a copy of the report to Congress.”.

(c) MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION.—Section 14 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n-4) is amended—

(1) by amending subsection (a) to read as follows:

“(a) PRIORITIZATION OF PROPOSED MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION.—

“(1) DEVELOPMENT OF PRIORITIES.—The Director shall—

“(A) develop a list indicating by number the relative priority for funding under the major research equipment and facilities construction account that the Director assigns to each project the Board has approved for inclusion in a future budget request; and

“(B) submit the list described in subparagraph (A) to the Board for approval.

“(2) CRITERIA.—The Director shall include in the criteria for developing the list under paragraph (1) the readiness of plans for construction and operation, including confidence in the estimates of the full life-cycle cost (as defined in section 2 of the National Science Foundation Authorization Act of

1998 (42 U.S.C. 1862k note)) and the proposed schedule of completion.

“(3) UPDATES.—The Director shall update the list prepared under paragraph (1) each time the Board approves a new project that would receive funding under the major research equipment and facilities construction account and periodically submit any updated list to the Board for approval.”;

(2) by striking subsection (e);

(3) by redesignating subsections (c) and (d) as subsections (b) and (c), respectively; and

(4) by amending subsection (c), as redesignated, to read as follows:

“(c) BOARD APPROVAL OF MAJOR RESEARCH EQUIPMENT AND FACILITIES PROJECTS.—The Board shall explicitly approve any project to be funded out of the major research equipment and facilities construction account before any funds may be obligated from such account for such project.”.

SEC. 205. REPEAL OF CERTAIN PROVISIONS.

(a) TECHNOLOGY INNOVATION PROGRAM.—

(1) IN GENERAL.—Section 28 of the National Institute of Standards and Technology Act (15 U.S.C. 278n) is repealed.

(2) CONFORMING AMENDMENTS.—

(A) ADDITIONAL AWARD CRITERIA.—Section 4226(b) of the Small Business Jobs Act of 2010 (15 U.S.C. 278n note) is repealed.

(B) MANAGEMENT COSTS.—Section 2(d) of the National Institute of Standards and Technology Act (15 U.S.C. 272(d)) is amended by striking “sections 25, 26, and 28” and inserting “sections 25 and 26”.

(C) ANNUAL AND OTHER REPORTS TO SECRETARY AND CONGRESS.—Section 10(h)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278(h)(1)) is amended by striking “, including the Program established under section 28.”.

(b) TEACHERS FOR A COMPETITIVE TOMORROW.—Sections 6111 through 6116 of the America COMPETES Act (20 U.S.C. 9811, 9812, 9813, 9814, 9815, 9816) and the items relating to those sections in the table of contents under section 2 of that Act (Public Law 110-69; 121 Stat. 572) are repealed.

SEC. 206. GRANT SUBRECIPIENT TRANSPARENCY AND OVERSIGHT.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Inspector General of the Foundation shall prepare and submit to the appropriate committees of Congress an audit of the Foundation’s policies and procedures governing the monitoring of pass-through entities with respect to subrecipients.

(b) CONTENTS.—The audit shall include the following:

(1) Information regarding the Foundation’s process to oversee—

(A) the compliance of pass-through entities under section 200.331 and subpart F of part 200 of chapter II of subtitle A of title 2, Code of Federal Regulations, and the other requirements of that title for subrecipients;

(B) whether pass-through entities have processes and controls in place regarding financial compliance of subrecipients, where appropriate; and

(C) whether pass-through entities have processes and controls in place to maintain approved grant objectives for subrecipients, where appropriate.

(2) Recommendations, if necessary, to increase transparency and oversight while balancing administrative burdens.

SEC. 207. MICRO-PURCHASE THRESHOLD FOR PROCUREMENT SOLICITATIONS BY RESEARCH INSTITUTIONS.

(a) MICRO-PURCHASE THRESHOLD.—The micro-purchase threshold for procurement activities administered under sections 6303 through 6305 of title 31, United States Code, awarded by the Foundation, the National Aeronautics and Space Administration, or

the National Institute of Standards and Technology to institutions of higher education, or related or affiliated nonprofit entities, or to nonprofit research organizations or independent research institutes is—

(1) \$10,000 (as adjusted periodically to account for inflation); or

(2) such higher threshold as determined appropriate by the head of the relevant executive agency and consistent with audit findings under chapter 75 of title 31, United States Code, internal institutional risk assessment, or State law.

(b) **UNIFORM GUIDANCE.**—The Uniform Guidance shall be revised to conform with the requirements of this section. For purposes of the preceding sentence, the term “Uniform Guidance” means the uniform administrative requirements, cost principles, and audit requirements for Federal awards contained in part 200 of title 2 of the Code of Federal Regulations.

SEC. 208. COORDINATION OF INTERNATIONAL SCIENCE AND TECHNOLOGY PARTNERSHIPS.

(a) **SHORT TITLE.**—This section may be cited as the “International Science and Technology Cooperation Act of 2016”.

(b) **ESTABLISHMENT.**—The Director of the Office of Science and Technology Policy shall establish a body under the National Science and Technology Council with the responsibility to identify and coordinate international science and technology cooperation that can strengthen the United States science and technology enterprise, improve economic and national security, and support United States foreign policy goals.

(c) **NSTC BODY LEADERSHIP.**—The body established under subsection (b) shall be co-chaired by senior level officials from the Office of Science and Technology Policy and the Department of State.

(d) **RESPONSIBILITIES.**—The body established under subsection (b) shall—

(1) plan and coordinate interagency international science and technology cooperative research and training activities and partnerships supported or managed by Federal agencies;

(2) work with other National Science and Technology Council committees to help plan and coordinate the international component of national science and technology priorities;

(3) establish Federal priorities and policies for aligning, as appropriate, international science and technology cooperative research and training activities and partnerships supported or managed by Federal agencies with the foreign policy goals of the United States;

(4) identify opportunities for new international science and technology cooperative research and training partnerships that advance both the science and technology and the foreign policy priorities of the United States;

(5) in carrying out paragraph (4), solicit input and recommendations from non-Federal science and technology stakeholders, including institutions of higher education, scientific and professional societies, industry, and other relevant organizations and institutions; and

(6) identify broad issues that influence the ability of United States scientists and engineers to collaborate with foreign counterparts, including barriers to collaboration and access to scientific information.

(e) **REPORT TO CONGRESS.**—The Director of the Office of Science and Technology Policy shall submit to the Committee on Commerce, Science, and Transportation and the Committee on Foreign Relations of the Senate and the Committee on Science, Space, and Technology and the Committee on Foreign Affairs of the House of Representatives a biennial report on the requirements of this section.

(f) **WEBSITE.**—The Director shall make each report available to the public on the Office of Science and Technology Policy website.

(g) **TERMINATION.**—The body established under subsection (b) shall terminate on the date that is 10 years after the date of enactment of this Act.

(h) **ADDITIONAL REPORTS TO CONGRESS.**—The Director of the Office of Science and Technology Policy shall submit, not later than 60 days after the date of enactment of this Act and annually thereafter, to the Committee on Commerce, Science, and Transportation and the Committee on Foreign Relations of the Senate and the Committee on Science, Space, and Technology and the Committee on Foreign Affairs of the House of Representatives a report that lists and describes the details of all foreign travel by Office of Science and Technology Policy staff and detailees.

TITLE III—SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH EDUCATION

SEC. 301. ROBERT NOYCE TEACHER SCHOLARSHIP PROGRAM UPDATE.

Section 10A of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n–1a) is amended by adding at the end the following:

“(k) **STEM TEACHER SERVICE AND RETENTION.**—

“(1) **IN GENERAL.**—The Director shall develop and implement practices for increasing the proportion of individuals receiving fellowships under this section who—

“(A) fulfill the service obligation required under subsection (h); and

“(B) remain in the teaching profession in a high need local educational agency beyond the service obligation.

“(2) **PRACTICES.**—The practices described under paragraph (1) may include—

“(A) partnering with nonprofit or professional associations or with other government entities to provide individuals receiving fellowships under this section with opportunities for professional development, including mentorship programs that pair those individuals with currently employed and recently retired science, technology, engineering, mathematics, or computer science professionals;

“(B) increasing recruitment from high need districts;

“(C) establishing a system to better collect, track, and respond to data on the career decisions of individuals receiving fellowships under this section;

“(D) conducting research to better understand factors relevant to teacher service and retention, including factors specifically impacting the retention of teachers who are individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b); and

“(E) conducting pilot programs to improve teacher service and retention.”

SEC. 302. SPACE GRANTS.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that the National Space Grant College and Fellowship Program has been an important program by which the Federal Government has partnered with universities, colleges, industry, and other organizations to provide hands-on STEM experiences, fostering of multidisciplinary space research, and supporting graduate fellowships in space-related fields, among other purposes.

(b) **ADMINISTRATIVE COSTS.**—Section 40303 of title 51, United States Code, is amended by adding at the end the following:

“(d) **PROGRAM ADMINISTRATION COSTS.**—In carrying out the provisions of this chapter, the Administrator—

“(1) shall maximize appropriated funds for grants and contracts made under section 40304 in each fiscal year; and

“(2) in each fiscal year, the Administrator shall limit its program administration costs to no more than 5 percent of funds appropriated for this program for that fiscal year.

“(e) **REPORTS.**—For any fiscal year in which the Administrator cannot meet the administration cost target under subsection (d)(2), if the Administration is unable to limit program costs under subsection (b), the Administrator shall submit to the appropriate committees of Congress a report, including—

“(1) a description of why the Administrator did not meet the cost target under subsection (d); and

“(2) the measures the Administrator will take in the next fiscal year to meet the cost target under subsection (d) without drawing upon other Federal funding.”

SEC. 303. STEM EDUCATION ADVISORY PANEL.

(a) **ESTABLISHMENT.**—Not later than 180 days after the date of enactment this Act, the Director of the Foundation, Secretary of Education, Administrator of the National Aeronautics and Space Administration, and Administrator of the National Oceanic and Atmospheric Administration shall jointly establish an advisory panel (referred to in this section as the “STEM Education Advisory Panel”) to advise the Committee on STEM Education of the National Science and Technology Council (referred to in this section as “CoSTEM”) on matters relating to STEM education.

(b) **MEMBERS.**—

(1) **IN GENERAL.**—The STEM Education Advisory Panel shall be composed of not less than 11 members.

(2) **APPOINTMENT.**—

(A) **IN GENERAL.**—Subject to subparagraph (B), the Director of the Foundation, in consultation with the Secretary of Education and the heads of the Federal science agencies, shall appoint the members of the STEM Education Advisory Panel.

(B) **CONSIDERATION.**—In selecting individuals to appoint under subparagraph (A), the Director of the Foundation shall seek and give consideration to recommendations from Congress, industry, the scientific community, including the National Academy of Sciences, scientific professional societies, academia, State and local governments, organizations representing individuals identified in section 33 or section 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b), and such other organizations as the Director considers appropriate.

(C) **QUALIFICATIONS.**—Members shall—

(i) primarily be individuals from academic institutions, nonprofit organizations, and industry, including in-school, out-of-school, and informal education practitioners; and

(ii) be individuals who are qualified to provide advice and information on STEM education research, development, training, implementation, interventions, professional development, or workforce needs or concerns.

(c) **RESPONSIBILITIES.**—

(1) **IN GENERAL.**—The STEM Education Advisory Panel shall—

(A) advise CoSTEM;

(B) periodically assess CoSTEM’s progress in carrying out its responsibilities under section 101(b) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6621(b)); and

(C) help identify any need or opportunity to update the strategic plan under section 101(b) of that Act.

(2) **CONSIDERATIONS.**—In its advisory role, the STEM Education Advisory Panel shall consider—

(A) the management, coordination, and implementation of STEM education programs and activities across the Federal Government;

(B) the appropriateness of criteria used by Federal agencies to evaluate the effectiveness of Federal STEM education programs and activities;

(C) whether societal and workforce concerns are adequately addressed by current Federal STEM education programs and activities;

(D) how Federal agencies can incentivize institutions of higher education to improve retention of STEM students;

(E) ways to leverage private and nonprofit STEM investments and encourage public-private partnerships to strengthen STEM education and help build the STEM workforce pipeline;

(F) ways to incorporate workforce needs into Federal STEM education programs and activities, particularly for specific employment fields of national interest and employment fields experiencing high unemployment rates;

(G) ways to better vertically and horizontally integrate Federal STEM education programs and activities from pre-kindergarten through graduate study and the workforce, and from in-school to out-of-school in order to improve transitions for students moving through the STEM education and workforce pipelines;

(H) the extent to which Federal STEM education programs and activities are contributing to recruitment and retention of individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b) in the STEM education and workforce pipelines; and

(I) ways to encourage geographic diversity in the STEM education and the workforce pipelines.

(3) **RECOMMENDATIONS.**—The STEM Education Advisory Panel shall make recommendations to improve Federal STEM education programs and activities based on each assessment under paragraph (1)(B).

(d) **FUNDING.**—The Director of the Foundation, the Secretary of Education, the Administrator of the National Aeronautics and Space Administration, and the Administrator of the National Oceanic and Atmospheric Administration shall jointly make funds available on an annual basis to support the activities of the STEM Education Advisory Panel.

(e) **REPORTS.**—Not later than 1 year after the date of enactment of this Act, and after each assessment under subsection (c)(1)(B), the STEM Education Advisory Panel shall submit to the appropriate committees of Congress and CoSTEM a report on its assessment under that subsection and its recommendations under subsection (c)(3).

(f) **TRAVEL EXPENSES OF NON-FEDERAL MEMBERS.**—

(1) **IN GENERAL.**—Non-Federal members of the STEM Education Advisory Panel, while attending meetings of the panel or while otherwise serving at the request of a co-chairperson away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for individuals in the Government serving without pay.

(2) **RULE OF CONSTRUCTION.**—Nothing in this subsection shall be construed to prohibit members of the STEM Advisory Panel who are officers or employees of the United States from being allowed travel expenses, including per diem in lieu of subsistence, in accordance with existing law.

(g) **TERMINATION.**—The STEM Education Advisory Panel established under subsection (a) shall terminate on the date that is 5 years after the date that it is established.

SEC. 304. COMMITTEE ON STEM EDUCATION.

(a) **RESPONSIBILITIES.**—Section 101(b) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6621(b)) is amended—

(1) in paragraph 5(D), by striking “; and” and inserting a semicolon;

(2) in paragraph (6), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(7) collaborate with the STEM Education Advisory Panel established under section 303 of the American Innovation and Competitiveness Act and other outside stakeholders to ensure the engagement of the STEM education community;

“(8) review the measures used by a Federal agency to evaluate its STEM education activities and programs;

“(9) request and review feedback from States on how the States are utilizing Federal STEM education programs and activities; and

“(10) recommend the reform, termination, or consolidation of Federal STEM education activities and programs, taking into consideration the recommendations of the STEM Education Advisory Panel.”.

(b) **REPORTS.**—Section 101 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6621) is amended—

(1) by striking “(c) REPORT.—” and inserting “(d) REPORTS.—”;

(2) by striking “(b) RESPONSIBILITIES OF OSTP.—” and inserting “(c) RESPONSIBILITIES OF OSTP.—”; and

(3) in subsection (d), as redesignated—

(A) in paragraph (4), by striking “; and” and inserting a semicolon;

(B) in paragraph (5), by striking the period at the end and inserting a semicolon; and

(C) by adding at the end the following:

“(6) a description of all consolidations and terminations of Federal STEM education programs and activities implemented in the previous fiscal year, including an explanation for the consolidations and terminations;

“(7) recommendations for reforms, consolidations, and terminations of STEM education programs or activities in the upcoming fiscal year; and

“(8) a description of any significant new STEM education public-private partnerships.”.

SEC. 305. PROGRAMS TO EXPAND STEM OPPORTUNITIES.

(a) **FINDINGS.**—Congress makes the following findings:

(1) Economic projections by the Bureau of Labor Statistics indicate that by 2018, there could be 2,400,000 unfilled STEM jobs.

(2) Women represent slightly more than half the United States population, and projections indicate that 54 percent of the population will be a member of a racial or ethnic minority group by 2050.

(3) Despite representing half the population, women comprise only about 30 percent of STEM workers according to a 2015 report by the National Center for Science and Engineering Statistics.

(4) A 2014 National Center for Education Statistics study found that underrepresented populations leave the STEM fields at higher rates than their counterparts.

(5) The representation of women in STEM drops significantly at the faculty level. Overall, women hold only 25 percent of all tenured and tenure-track positions and 17 percent of full professor positions in STEM fields in our Nation’s universities and 4-year colleges.

(6) Black and Hispanic faculty together hold about 6.5 percent of all tenured and tenure-track positions and 5 percent of full professor positions.

(7) Many of the numbers in the American Indian or Alaskan Native and Native Hawai-

ian or Other Pacific Islander categories for different faculty ranks were too small for the Foundation to report publicly without potentially compromising confidential information about the individuals being surveyed.

(b) **SENSE OF CONGRESS.**—It is the sense of Congress that—

(1) it is critical to our Nation’s economic leadership and global competitiveness that the United States educate, train, and retain more scientists, engineers, and computer scientists;

(2) there is currently a disconnect between the availability of and growing demand for STEM-skilled workers;

(3) historically, underrepresented populations are the largest untapped STEM talent pools in the United States; and

(4) given the shifting demographic landscape, the United States should encourage full participation of individuals from underrepresented populations in STEM fields.

(c) **REAFFIRMATION.**—The Director of the Foundation shall continue to support programs designed to broaden participation of underrepresented populations in STEM fields.

(d) **GRANTS TO BROADEN PARTICIPATION.**—

(1) **IN GENERAL.**—The Director of the Foundation shall award grants on a competitive, merit-reviewed basis, to eligible entities to increase the participation of underrepresented populations in STEM fields, including individuals identified in section 33 or section 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b).

(2) **CENTER OF EXCELLENCE.**—

(A) **IN GENERAL.**—Grants awarded under this subsection may include grants for the establishment of a Center of Excellence to collect, maintain, and disseminate information to increase participation of underrepresented populations in STEM fields.

(B) **PURPOSE.**—The purpose of a Center of Excellence under this subsection is to promote diversity in STEM fields by building on the success of the INCLUDES programs, providing technical assistance, maintaining best practices, and providing related training at federally funded academic institutions.

(e) **ACCOUNTABILITY AND DISSEMINATION.**—

(1) **EVALUATION.**—

(A) **IN GENERAL.**—Not later than 5 years after the date of enactment of this Act, the Director of the Foundation shall evaluate the grants provided under this section.

(B) **REQUIREMENTS.**—In conducting the evaluation under subparagraph (A), the Director shall—

(i) use a common set of benchmarks and assessment tools to identify best practices and materials developed or demonstrated by the research; and

(ii) to the extent practicable, combine the research resulting from the grant activity under subsection (e) with the current research on serving underrepresented students in grades kindergarten through 8.

(2) **REPORT ON EVALUATIONS.**—Not later than 180 days after the completion of the evaluation under paragraph (1), the Director of the Foundation shall submit to the appropriate committees of Congress and make widely available to the public a report that includes—

(A) the results of the evaluation; and

(B) any recommendations for administrative and legislative action that could optimize the effectiveness of the program.

(f) **COORDINATION.**—In carrying out this section, the Director of the Foundation shall consult and cooperate with the programs and policies of other relevant Federal agencies to avoid duplication with and enhance the effectiveness of the program under this section.

SEC. 306. NIST EDUCATION AND OUTREACH.

(a) REPEAL.—The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by striking section 18 (15 U.S.C. 278g-1).

(b) EDUCATION AND OUTREACH.—The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.), as amended, is further amended by inserting after section 17, the following:

“SEC. 18. EDUCATION AND OUTREACH.

“(a) IN GENERAL.—The Director is authorized to expend funds appropriated for activities of the Institute in any fiscal year, to support, promote, and coordinate activities and efforts to enhance public awareness and understanding of measurement sciences, standards and technology at the national measurement laboratories and otherwise in fulfillment of the mission of the Institute. The Director may carry out activities under this subsection, including education and outreach activities to the general public, industry and academia in support of the Institute’s mission.

“(b) HIRING.—The Director, in coordination with the Director of the Office of Personnel Management, may revise the procedures the Director applies when making appointments to laboratory positions within the competitive service—

“(1) to ensure corporate memory of and expertise in the fundamental ongoing work, and on developing new capabilities in priority areas;

“(2) to maintain high overall technical competence;

“(3) to improve staff diversity;

“(4) to balance emphases on the noncore and core areas; or

“(5) to improve the ability of the Institute to compete in the marketplace for qualified personnel.

“(c) VOLUNTEERS.—

“(1) IN GENERAL.—The Director may establish a program to use volunteers in carrying out the programs of the Institute.

“(2) ACCEPTANCE OF PERSONNEL.—The Director may accept, subject to regulations issued by the Office of Personnel Management, voluntary service for the Institute for such purpose if the service—

“(A) is to be without compensation; and

“(B) will not be used to displace any current employee or act as a substitute for any future full-time employee of the Institute.

“(3) FEDERAL EMPLOYEE STATUS.—Any individual who provides voluntary service under this subsection shall not be considered a Federal employee, except for purposes of chapter 81 of title 5, United States Code (relating to compensation for injury), and sections 2671 through 2680 of title 28, United States Code (relating to tort claims).

“(d) RESEARCH FELLOWSHIPS.—

“(1) IN GENERAL.—The Director may expend funds appropriated for activities of the Institute in any fiscal year, as the Director considers appropriate, for awards of research fellowships and other forms of financial and logistical assistance, including direct stipend awards to—

“(A) students at institutions of higher learning within the United States who show promise as present or future contributors to the mission of the Institute; and

“(B) United States citizens for research and technical activities of the Institute, including programs.

“(2) SELECTION CRITERIA.—The selection of persons to receive such fellowships and assistance shall be made on the basis of ability and of the relevance of the proposed work to the mission and programs of the Institute.

“(3) FINANCIAL AND LOGISTICAL ASSISTANCE.—Notwithstanding section 1345 of title 31, United States Code, or any other law to

the contrary, the Director may include as a form of financial or logistical assistance under this subsection temporary housing and transportation to and from Institute facilities.

“(e) EDUCATIONAL OUTREACH ACTIVITIES.—The Director may—

“(1) facilitate education programs for undergraduate and graduate students, postdoctoral researchers, and academic and industry employees;

“(2) sponsor summer workshops for STEM kindergarten through grade 12 teachers as appropriate;

“(3) develop programs for graduate student internships and visiting faculty researchers;

“(4) document publications, presentations, and interactions with visiting researchers and sponsoring interns as performance metrics for improving and continuing interactions with those individuals; and

“(5) facilitate laboratory tours and provide presentations for educational, industry, and community groups.”.

(c) POST-DOCTORAL FELLOWSHIP PROGRAM.—Section 19 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-2) is amended to read as follows:

“SEC. 19. POST-DOCTORAL FELLOWSHIP PROGRAM.

“(a) IN GENERAL.—The Institute and the National Academy of Sciences, jointly, shall establish and conduct a post-doctoral fellowship program, subject to the availability of appropriations.

“(b) ORGANIZATION.—The post-doctoral fellowship program shall include not less than 20 new fellows per fiscal year.

“(c) EVALUATIONS.—In evaluating applications for post-doctoral fellowships under this section, the Director of the Institute and the President of the National Academy of Sciences shall give consideration to the goal of promoting the participation of individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b) in research areas supported by the Institute.”.

(d) SAVINGS CLAUSES.—

(1) RESEARCH FELLOWSHIPS AND OTHER FINANCIAL ASSISTANCE TO STUDENTS AT INSTITUTES OF HIGHER EDUCATION.—The repeal made by subsection (a) of this section shall not affect any award of a research fellowship or other form of financial assistance made under section 18 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-1) before the date of enactment of this Act. Such award shall continue to be subject to the requirements to which such funds were subject under that section before the date of enactment of this Act.

(2) POST-DOCTORAL FELLOWSHIP PROGRAM.—The amendment made by subsection (c) of this section shall not affect any award of a post-doctoral fellowship or other form of financial assistance made under section 19 of the National Institute of Standards and Technology Act (15 U.S.C. 278g-2) before the date of enactment of this Act. Such awards shall continue to be subject to the requirements to which such funds were subject under that section before the date of enactment of this Act.

SEC. 307. PRESIDENTIAL AWARDS FOR EXCELLENCE IN STEM MENTORING.

(a) IN GENERAL.—The Director of the Foundation shall continue to administer awards on behalf of the Office of Science and Technology Policy to recognize outstanding mentoring in STEM fields.

(b) ANNUAL AWARD RECIPIENTS.—The Director of the Foundation shall provide Congress with a list of award recipients, including the name, institution, and a brief synopsis of the impact of the mentoring efforts.

SEC. 308. WORKING GROUP ON INCLUSION IN STEM FIELDS.

(a) ESTABLISHMENT.—The Office of Science and Technology Policy, in collaboration with Federal departments and agencies, shall establish an interagency working group to compile and summarize available research and best practices on how to promote diversity and inclusions in STEM fields and examine whether barriers exist to promoting diversity and inclusion within Federal agencies employing scientists and engineers.

(b) RESPONSIBILITIES.—The working group shall be responsible for reviewing and assessing research, best practices, and policies across Federal science agencies related to the inclusion of individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b) in the Federal STEM workforce, including available research and best practices on how to promote diversity and inclusion in STEM fields, including—

(1) policies providing flexibility for scientists and engineers that are also caregivers, particularly on the timing of research grants;

(2) policies to address the proper handling of claims of sexual harassment;

(3) policies to minimize the effects of implicit bias and other systemic factors in hiring, promotion, evaluation and the workplace in general; and

(4) other evidence-based strategies that the working group considers effective for promoting diversity and inclusion in the STEM fields.

(c) STAKEHOLDER INPUT.—In carrying out the responsibilities under section (b), the working group shall solicit and consider input and recommendations from non-Federal stakeholders, including—

(1) the Council of Advisors on Science and Technology;

(2) federally funded and non-federally funded researchers, institutions of higher education, scientific disciplinary societies, and associations;

(3) nonprofit research institutions;

(4) industry, including small businesses;

(5) federally funded research and development centers;

(6) non-governmental organizations; and

(7) such other members of the public interested in promoting a diverse and inclusive Federal STEM workforce.

(d) PUBLIC REPORTS.—Not later than 1 year after the date of enactment of this Act, and periodically thereafter, the working group shall publish a report on the review and assessment under subsection (b), including a summary of available research and best practices, any recommendations for Federal actions to promote a diverse and inclusive Federal STEM workforce, and updates on the implementation of previous recommendations for Federal actions.

(e) TERMINATION.—The interagency working group established under subsection (a) shall terminate on the date that is 10 years after the date that it is established.

SEC. 309. IMPROVING UNDERGRADUATE STEM EXPERIENCES.

(a) SENSE OF CONGRESS.—It is the sense of Congress that each Federal science agency should invest in and expand research opportunities for undergraduate students attending institutions of higher education during the undergraduate students’ first 2 academic years of postsecondary education.

(b) IDENTIFICATION OF RESEARCH PROGRAMS.—Not later than 1 year after the date of enactment of this Act, the head of each Federal agency shall submit to the President recommendations regarding how the agency could best fulfill the goals described in subsection (a).

SEC. 310. COMPUTER SCIENCE EDUCATION RESEARCH.

(a) FINDINGS.—Congress finds that as the lead Federal agency for building the research knowledge base for computer science education, the Foundation is well positioned to make investments that will accelerate ongoing efforts to enable rigorous and engaging computer science throughout the Nation as an integral part of STEM education.

(b) GRANT PROGRAM.—

(1) IN GENERAL.—The Director of the Foundation shall award grants to eligible entities to research computer science education and computational thinking.

(2) RESEARCH.—The research described in paragraph (1) may include the development or adaptation, piloting or full implementation, and testing of—

(A) models of preservice preparation for teachers who will teach computer science and computational thinking;

(B) scalable and sustainable models of professional development and ongoing support for the teachers described in subparagraph (A);

(C) tools and models for teaching and learning aimed at supporting student success and inclusion in computing within and across diverse populations, particularly poor, rural, and tribal populations and other populations that have been historically underrepresented in computer science and STEM fields; and

(D) high-quality learning opportunities for teaching computer science and, especially in poor, rural, or tribal schools at the elementary school and middle school levels, for integrating computational thinking into STEM teaching and learning.

(c) COLLABORATIONS.—In carrying out the grants established in subsection (b), eligible entities may collaborate and partner with local or remote schools to support the integration of computing and computational thinking within pre-kindergarten through grade 12 STEM curricula and instruction.

(d) METRICS.—The Director of the Foundation shall develop metrics to measure the success of the grant program funded under this section in achieving program goals.

(e) REPORT.—The Director of the Foundation shall report, in the annual budget submission to Congress, on the success of the program as measured by the metrics in subsection (d).

(f) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term “eligible entity” means an institution of higher education or a nonprofit research organization.

SEC. 311. INFORMAL STEM EDUCATION.

(a) NATIONAL STEM PARTNERSHIP GRANTS.—Section 3(a) of the STEM Education Act of 2015 (42 U.S.C. 1862q(a)) is amended—

(1) in paragraph (1), by striking “; and” and inserting a semicolon;

(2) in paragraph (2), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following: “(3) a national partnership of institutions involved in informal STEM learning.”.

(b) USE OF FUNDS.—Section 3(b) of the STEM Education Act of 2015 (42 U.S.C. 1862q(b)) is amended—

(1) in paragraph (1), by striking “; and” and inserting a semicolon;

(2) in paragraph (2), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following:

“(3) fostering on-going partnerships between institutions involved in informal STEM learning, institutions of higher education, and education research centers; and

“(4) developing, and making available informal STEM education activities and educational materials.”.

SEC. 312. DEVELOPING STEM APPRENTICESHIPS.

(a) FINDINGS.—Congress makes the following findings:

(1) The lack of data on the return on investment for United States employers using registered apprenticeships makes it difficult—

(A) to communicate the value of these programs to businesses; and

(B) to expand registered apprenticeships.

(2) The lack of data on the value and impact of employer-provided worker training, which is likely substantial, hinders the ability of the Federal Government to formulate policy related to workforce training.

(3) The Secretary of Commerce has initiated—

(A) the first study on the return on investment for United States employers using registered apprenticeships through case studies of firms in various sectors, occupations, and geographic locations to provide the business community with data on employer benefits and costs; and

(B) discussions with officials at relevant Federal agencies about the need to collect comprehensive data on—

(i) employer-provided worker training; and

(ii) existing tools that could be used to collect such data.

(b) DEVELOPMENT OF APPRENTICESHIP INFORMATION.—The Secretary of Commerce shall continue to research the value to businesses of utilizing apprenticeship programs, including—

(1) evidence of return on investment of apprenticeships, including estimates for the average time it takes a business to recover the costs associated with training apprentices; and

(2) data from the United States Census Bureau and other statistical surveys on employer-provided training, including apprenticeships and other on-the-job training and industry-recognized certification programs.

(c) DISSEMINATION OF APPRENTICESHIP INFORMATION.—The Secretary of Commerce shall disseminate findings from research on apprenticeships to businesses and other relevant stakeholders, including—

(1) institutions of higher education;

(2) State and local chambers of commerce; and

(3) workforce training organizations.

(d) NEW APPRENTICESHIP PROGRAM STUDY.—The Secretary of Commerce may collaborate with the Secretary of Labor to study approaches for reducing the cost of creating new apprenticeship programs and hosting apprentices for businesses, particularly small businesses, including—

(1) training sharing agreements;

(2) group training models; and

(3) pooling resources and best practices.

(e) ECONOMIC DEVELOPMENT ADMINISTRATION GRANTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.) is amended by adding at the end the following:

“SEC. 28. STEM APPRENTICESHIP PROGRAMS.

“(a) IN GENERAL.—The Secretary of Commerce may carry out a grant program to identify the need for skilled science, technology, engineering, and mathematics (referred to in this section as ‘STEM’) workers and to expand STEM apprenticeship programs.

“(b) ELIGIBLE RECIPIENT DEFINED.—In this section, the term ‘eligible recipient’ means—

“(1) a State;

“(2) an Indian tribe;

“(3) a city or other political subdivision of a State;

“(4) an entity that—

“(A) is a nonprofit organization, an institution of higher education, a public-private partnership, a science or research park, a

Federal laboratory, or an economic development organization or similar entity; and

“(B) has an application that is supported by a State, a political subdivision of a State, or a native organization; or

“(5) a consortium of any of the entities described in paragraphs (1) through (5).

“(c) NEEDS ASSESSMENT GRANTS.—The Secretary of Commerce may provide a grant to an eligible recipient to conduct a needs assessment to identify—

“(1) the unmet need of a region’s employer base for skilled STEM workers;

“(2) the potential of STEM apprenticeships to address the unmet need described in paragraph (1); and

“(3) any barriers to addressing the unmet need described in paragraph (1).

“(d) APPRENTICESHIP EXPANSION GRANTS.—The Secretary of Commerce may provide a grant to an eligible recipient that has conducted a needs assessment as described in subsection (c)(1) to develop infrastructure to expand STEM apprenticeship programs.”.

SEC. 313. NSF REPORT ON BROADENING PARTICIPATION.

Section 204(e) of the National Science Foundation Authorization Act of 1988 (42 U.S.C. 1885c(e)) is amended to read as follows:

“(e) BIENNIAL REPORT.—Every 2 years, the Committee shall prepare and submit to the Director a report on its activities during the previous 2 years and proposed activities for the next 2 years. The Director shall submit to Congress the report, unaltered, together with such comments as the Director considers appropriate, including—

“(1) review data on the participation in Foundation activities of institutions serving populations that are underrepresented in STEM disciplines, including poor, rural, and tribal populations; and

“(2) recommendations regarding how the Foundation could improve outreach and inclusion of these populations in Foundation activities.”.

SEC. 314. NOAA SCIENCE EDUCATION PROGRAMS.

(a) IN GENERAL.—Section 4002(a) of the America COMPETES Act (33 U.S.C. 893a(a)) is amended by striking “agency, with consideration given to the goal of promoting the participation of individuals from underrepresented groups” and inserting “the agency, with consideration given to the goal of promoting the participation of individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b)”.

(b) EDUCATIONAL PROGRAM GOALS.—Section 4002(b)(4) of the America COMPETES Act (33 U.S.C. 893a(b)(4)) is amended—

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

(2) by redesignating subparagraph (C) and subparagraph (D);

(3) by inserting after subparagraph (B) the following:

“(C) are designed considering the unique needs of underrepresented groups, translating such materials and other resources;”;

(4) by adding at the end the following:

“(E) are promoted widely, especially among individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b); and”.

(c) METRICS.—Section 4002 of the America COMPETES Act (33 U.S.C. 893a) is amended—

(1) by redesignating subsections (d) and (e) as subsections (e) and (f), respectively; and

(2) by adding after section (c) the following:

“(d) METRICS.—In executing the National Oceanic and Atmospheric Administration science education plan under subsection (c),

the Administrator shall maintain a comprehensive system for evaluating the Administration's educational programs and activities. In so doing, the Administrator shall ensure that such education programs have measurable objectives and milestones as well as clear, documented metrics for evaluating programs. For each such education program or portfolio of similar programs, the Administrator shall—

“(1) encourage the collection of evidence as relevant to the measurable objectives and milestones; and

“(2) ensure that program or portfolio evaluations focus on educational outcomes and not just inputs, activities completed, or the number of participants.”.

SEC. 315. HISPANIC-SERVING INSTITUTIONS UNDERGRADUATE PROGRAM UPDATE.

(a) IN GENERAL.—Section 7033(a) of the America COMPETES Act (42 U.S.C. 18620-12(a)) is amended as follows:

“(a) IN GENERAL.—The Director shall award grants on a competitive, merit-reviewed basis to Hispanic-serving institutions (as defined in section 502 of the Higher Education Act of 1965 (20 U.S.C. 1101a)) to enhance the quality of undergraduate STEM education at such institutions and to increase the retention and graduation rates of students pursuing associate's or baccalaureate degrees in science, technology, engineering, and mathematics.”.

(b) SAVINGS PROVISION.—The amendment made by subsection (a) of this section shall not affect any award of a grant or other form of financial assistance made under section 7033 of the America COMPETES Act (42 U.S.C. 18620-12) before the date of enactment of this Act. Such awards shall continue to be subject to the requirements to which such funds were subject under that section before the date of enactment of this Act.

TITLE IV—LEVERAGING THE PRIVATE SECTOR

SEC. 401. PRIZE COMPETITION AUTHORITY UPDATE.

(a) SHORT TITLE.—This section may be cited as the “Science Prize Competition Act”.

(b) IN GENERAL.—Section 24 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719) is amended—

(1) in subsection (c)—

(A) in the subsection heading, by striking “PRIZES” and by inserting “PRIZE COMPETITIONS”;

(B) in the matter preceding paragraph (1), by striking “prize may be one or more of the following” and inserting “prize competition may be 1 or more of the following types of activities”;

(C) in paragraph (2), by inserting “competition” after “prize”; and

(D) in paragraphs (3) and (4), by striking “prizes” and inserting “prize competitions”;

(2) in subsection (f)—

(A) in the matter preceding paragraph (1), by striking “in the Federal Register” and inserting “on a publicly accessible Government website, such as www.challenge.gov.”;

(B) in paragraphs (1), (2), and (3), by inserting “prize” before “competition”; and

(C) in paragraph (4), by striking “prize” and inserting “cash prize purse or non-cash prize award”;

(3) in subsection (g)—

(A) in the matter preceding paragraph (1), by striking “prize” and inserting “cash prize purse”; and

(B) in paragraph (1), by inserting “prize” before “competition”;

(4) in subsection (h), by inserting “prize” before “competition” each place it appears;

(5) in subsection (i)—

(A) in paragraph (1)(B), by inserting “prize” before “competition”;

(B) in paragraph (2)(A), by inserting “prize” before “competition” each place it appears;

(C) by redesignating paragraph (3) as paragraph (4); and

(D) by inserting after paragraph (2) the following:

“(3) WAIVERS.—

“(A) IN GENERAL.—An agency may waive the requirement under paragraph (2).

“(B) LIST.—The Director shall include a list of all of the waivers granted under this paragraph during the preceding fiscal year, including a detailed explanation of the reason for granting the waiver.”;

(6) in subsection (j)—

(A) in paragraph (1), by inserting “prize” before “competition”; and

(B) by amending paragraph (2) to read as follows:

“(2) LICENSES.—As appropriate and to further the goals of a prize competition, the Federal Government may negotiate a license for the use of intellectual property developed by a registered participant in a prize competition.”;

(7) in subsection (k)—

(A) in paragraph (1), by striking “each competition” and inserting “each prize competition” each place it appears;

(B) in paragraph (2)(A), by inserting “prize” before “competition”; and

(C) in paragraph (3), by inserting “prize” before “competitions” each place it appears;

(8) in subsection (l), by striking “an agreement with” and all that follows through the period at the end and inserting “a grant, contract, cooperative agreement, or other agreement with a private sector for-profit or nonprofit entity or State or local government agency to administer the prize competition, subject to the provisions of this section.”;

(9) in subsection (m)—

(A) by amending paragraph (1) to read as follows:

“(1) IN GENERAL.—Support for a prize competition under this section, including financial support for the design and administration of a prize competition or funds for a cash prize purse, may consist of Federal appropriated funds and funds provided by private sector for-profit and nonprofit entities. The head of an agency may request and accept funds from other Federal agencies, State, United States territory, local, or tribal government agencies, private sector for-profit entities, and nonprofit entities, to be available to the extent provided by appropriations Acts, to support such prize competitions. The head of an agency may not give any special consideration to any agency or entity in return for a donation.”;

(B) in paragraph (2), by striking “prize awards” and inserting “cash prize purses or non-cash prize awards”;

(C) in paragraph (3)—

(i) by amending subparagraph (A) to read as follows:

“(A) ANNOUNCEMENT.—No prize competition may be announced under subsection (f) until all the funds needed to pay out the announced amount of the cash prize purse have been appropriated or committed in writing by a private or State, United States territory, local, or tribal government source.”;

(ii) in subparagraph (B)—

(I) in the matter preceding clause (i), by striking “a prize” and inserting “a cash prize purse or non-cash prize award”;

(II) in clause (i), by inserting “competition” after “prize”; and

(III) in clause (ii), by inserting “or State, United States territory, local, or tribal government” after “private”; and

(D) in paragraph (4)—

(i) in subparagraph (A)—

(I) by striking “a prize” and inserting “a cash prize purse or a non-cash prize award”; and

(II) by striking “Science and Technology” and inserting “Science, Space, and Technology”; and

(ii) in subparagraph (B), by striking “cash prizes” and inserting “cash prize purses or non-cash prize awards”;

(10) in subsection (n)—

(A) in the heading, by striking “SERVICE” and inserting “SERVICES”;

(B) by striking “the date of the enactment of the America COMPETES Reauthorization Act of 2010,” and inserting “the date of enactment of the American Innovation and Competitiveness Act.”; and

(C) by inserting “for both for-profit and nonprofit entities and State, United States territory, local, and tribal government entities,” after “contract vehicle”;

(11) in subsection (o)(1), by striking “or providing a prize” and inserting “a prize competition or providing a cash prize purse or non-cash prize award”; and

(12) in subsection (p)—

(A) in the heading, by striking “ANNUAL” and inserting “BIENNIAL”;

(B) in paragraph (1)—

(i) by striking “each year” and inserting “every other year”;

(ii) by striking “Science and Technology” and inserting “Science, Space, and Technology”; and

(iii) by striking “fiscal year” and inserting “2 fiscal years”; and

(C) in paragraph (2)—

(i) by striking “The report for a fiscal year” and inserting “A report”;

(ii) in subparagraph (C)—

(I) in the heading, by striking “PRIZES” and inserting “PRIZE PURSES OR NON-CASH PRIZE AWARDS”; and

(II) by striking “cash prizes” each place it appears and inserting “cash prize purses or non-cash prize awards”; and

(iii) by adding at the end the following:

“(G) PLAN.—A description of crosscutting topical areas and agency-specific mission needs that may be the strongest opportunities for prize competitions during the upcoming 2 fiscal years.”.

SEC. 402. CROWDSOURCING AND CITIZEN SCIENCE.

(a) SHORT TITLE.—This section may be cited as the “Crowdsourcing and Citizen Science Act”.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the authority granted to Federal agencies under the America COMPETES Reauthorization Act of 2010 (Public Law 111-358; 124 Stat. 3982) to pursue the use of incentive prizes and challenges has yielded numerous benefits;

(2) crowdsourcing and citizen science projects have a number of additional unique benefits, including accelerating scientific research, increasing cost effectiveness to maximize the return on taxpayer dollars, addressing societal needs, providing hands-on learning in STEM, and connecting members of the public directly to Federal science agency missions and to each other; and

(3) granting Federal science agencies the direct, explicit authority to use crowdsourcing and citizen science will encourage its appropriate use to advance Federal science agency missions and stimulate and facilitate broader public participation in the innovation process, yielding numerous benefits to the Federal Government and citizens who participate in such projects.

(c) DEFINITIONS.—In this section:

(1) CITIZEN SCIENCE.—The term “citizen science” means a form of open collaboration

in which individuals or organizations participate voluntarily in the scientific process in various ways, including—

- (A) enabling the formulation of research questions;
- (B) creating and refining project design;
- (C) conducting scientific experiments;
- (D) collecting and analyzing data;
- (E) interpreting the results of data;
- (F) developing technologies and applications;
- (G) making discoveries; and
- (H) solving problems.

(2) **CROWDSOURCING.**—The term “crowdsourcing” means a method to obtain needed services, ideas, or content by soliciting voluntary contributions from a group of individuals or organizations, especially from an online community.

(3) **PARTICIPANT.**—The term “participant” means any individual or other entity that has volunteered in a crowdsourcing or citizen science project under this section.

(d) **CROWDSOURCING AND CITIZEN SCIENCE.**—

(1) **IN GENERAL.**—The head of each Federal science agency, or the heads of multiple Federal science agencies working cooperatively, may utilize crowdsourcing and citizen science to conduct projects designed to advance the mission of the respective Federal science agency or the joint mission of Federal science agencies, as applicable.

(2) **VOLUNTARY SERVICES.**—Notwithstanding section 1342 of title 31, United States Code, the head of a Federal science agency may accept, subject to regulations issued by the Director of the Office of Personnel Management, in coordination with the Director of the Office of Science and Technology Policy, services from participants under this section if such services—

- (A) are performed voluntarily as a part of a crowdsourcing or citizen science project authorized under paragraph (1);
- (B) are not financially compensated for their time; and
- (C) will not be used to displace any employee of the Federal Government.

(3) **OUTREACH.**—The head of each Federal science agency engaged in a crowdsourcing or citizen science project under this section shall make public and promote such project to encourage broad participation.

(4) **CONSENT, REGISTRATION, AND TERMS OF USE.**—

(A) **IN GENERAL.**—Each Federal science agency shall determine the appropriate level of consent, registration, or acknowledgment of the terms of use that are required from participants in crowdsourcing or citizen science projects under this section on a per-project basis.

(B) **DISCLOSURES.**—In seeking consent, conducting registration, or developing terms of use for a project under this subsection, a Federal science agency shall disclose the privacy, intellectual property, data ownership, compensation, service, program, and other terms of use to the participant in a clear and reasonable manner.

(C) **MODE OF CONSENT.**—A Federal agency or Federal science agencies, as applicable, may obtain consent electronically or in written form from participants under this section.

(5) **PROTECTIONS FOR HUMAN SUBJECTS.**—Any crowdsourcing or citizen science project under this section that involves research involving human subjects shall be subject to part 46 of title 28, Code of Federal Regulations (or any successor regulation).

(6) **DATA.**—

(A) **IN GENERAL.**—A Federal science agency shall, where appropriate and to the extent practicable, make data collected through a crowdsourcing or citizen science project under this section available to the public, in

a machine readable format, unless prohibited by law.

(B) **NOTICE.**—As part of the consent process, the Federal science agency shall notify all participants—

- (i) of the expected uses of the data compiled through the project;
- (ii) if the Federal science agency will retain ownership of such data;
- (iii) if and how the data and results from the project would be made available for public or third party use; and
- (iv) if participants are authorized to publish such data.

(7) **TECHNOLOGIES AND APPLICATIONS.**—Federal science agencies shall endeavor to make technologies, applications, code, and derivations of such intellectual property developed through a crowdsourcing or citizen science project under this section available to the public.

(8) **LIABILITY.**—Each participant in a crowdsourcing or citizen science project under this section shall agree—

- (A) to assume any and all risks associated with such participation; and
- (B) to waive all claims against the Federal Government and its related entities, except for claims based on willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits (whether direct, indirect, or consequential) arising from participation in the project.

(9) **RESEARCH MISCONDUCT.**—Federal science agencies coordinating crowdsourcing or citizen science projects under this section shall make all practicable efforts to ensure that participants adhere to all relevant Federal research misconduct policies and other applicable ethics policies.

(10) **MULTI-SECTOR PARTNERSHIPS.**—The head of each Federal science agency engaged in crowdsourcing or citizen science under this section, or the heads of multiple Federal science agencies working cooperatively, may enter into a contract or other agreement to share administrative duties for such projects with—

- (A) a for profit or nonprofit private sector entity, including a private institution of higher education;
- (B) a State, tribal, local, or foreign government agency, including a public institution of higher education; or
- (C) a public-private partnership.

(11) **FUNDING.**—In carrying out crowdsourcing and citizen science projects under this section, the head of a Federal science agency, or the heads of multiple Federal science agencies working cooperatively—

- (A) may use funds appropriated by Congress;
- (B) may publicize projects and solicit and accept funds or in-kind support for such projects, to be available to the extent provided by appropriations Acts, from—
 - (i) other Federal agencies;
 - (ii) for profit or nonprofit private sector entities, including private institutions of higher education; or
 - (iii) State, tribal, local, or foreign government agencies, including public institutions of higher education; and
- (C) may not give any special consideration to any entity described in subparagraph (B) in return for such funds or in-kind support.

(12) **FACILITATION.**—

(A) **GENERAL SERVICES ADMINISTRATION ASSISTANCE.**—The Administrator of the General Services Administration, in coordination with the Director of the Office of Personnel Management and the Director of the Office of Science and Technology Policy, shall, at no cost to Federal science agencies, identify and develop relevant products, training, and services to facilitate the use of crowdsourcing and citizen science projects

under this section, including by specifying the appropriate contract vehicles and technology and organizational platforms to enhance the ability of Federal science agencies to carry out the projects under this section.

(B) **ADDITIONAL GUIDANCE.**—The head of each Federal science agency engaged in crowdsourcing or citizen science under this section may—

- (i) consult any guidance provided by the Director of the Office of Science and Technology Policy, including the Federal Crowdsourcing and Citizen Science Toolkit;
- (ii) designate a coordinator for that Federal science agency’s crowdsourcing and citizen science projects; and
- (iii) share best practices with other Federal agencies, including participation of staff in the Federal Community of Practice for Crowdsourcing and Citizen Science.

(e) **REPORT.**—

(1) **IN GENERAL.**—Not later than 2 years after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall include, as a component of an annual report required under section 24(p) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719(p)), a report on the projects and activities carried out under this section.

(2) **INFORMATION INCLUDED.**—The report required under paragraph (1) shall include—

- (A) a summary of each crowdsourcing and citizen science project conducted by a Federal science agency during the most recently completed 2 fiscal years, including a description of the proposed goals of each crowdsourcing and citizen science project;
- (B) an analysis of why the utilization of a crowdsourcing or citizen science project summarized in subparagraph (A) was the preferable method of achieving the goals described in subparagraph (A) as opposed to other authorities available to the Federal science agency, such as contracts, grants, cooperative agreements, and prize competitions;
- (C) the participation rates, submission levels, number of consents, and any other statistic that might be considered relevant in each crowdsourcing and citizen science project;
- (D) a detailed description of—
 - (i) the resources, including personnel and funding, that were used in the execution of each crowdsourcing and citizen science project;
 - (ii) the project activities for which such resources were used; and
 - (iii) how the obligations and expenditures relating to the project’s execution were allocated among the accounts of the Federal science agency, including a description of the amount and source of all funds, private, public, and in-kind, contributed to each crowdsourcing and citizen science project;
- (E) a summary of the use of crowdsourcing and citizen science by all Federal science agencies, including interagency and multi-sector partnerships;
- (F) a description of how each crowdsourcing and citizen science project advanced the mission of each participating Federal science agency;
- (G) an identification of each crowdsourcing or citizen science project where data collected through such project was not made available to the public, including the reasons for such action; and
- (H) any other information that the Director of the Office of Science and Technology Policy considers relevant.

(f) **SAVINGS PROVISION.**—Nothing in this section may be construed—

- (1) to affect the authority to conduct crowdsourcing and citizen science authorized by any other provision of law; or

(2) to displace Federal Government resources allocated to the Federal science agencies that use crowdsourcing or citizen science authorized under this section to carry out a project.

SEC. 403. NIST DIRECTOR FUNCTIONS UPDATE.

Section 2(b) of the National Institute of Standards and Technology Act (15 U.S.C. 272(b)), as amended by section 403 of this Act, is further amended—

(1) in the matter preceding paragraph (1), by striking “authorized to take” and inserting “authorized to serve as the President’s principal adviser on standards policy pertaining to the Nation’s technological competitiveness and innovation ability and to take”;

(2) in paragraph (3), by striking “compare standards” and all that follows through “Federal Government” and inserting “facilitate standards-related information sharing and cooperation between Federal agencies”; and

(3) in paragraph (13), by striking “Federal, State, and local” and all that follows through “private sector” and inserting “technical standards activities and conformity assessment activities of Federal, State, and local governments with private sector”.

SEC. 404. NIST VISITING COMMITTEE ON ADVANCED TECHNOLOGY UPDATE.

Section 10 of the National Institute of Standards and Technology Act (15 U.S.C. 278) is amended—

(1) in subsection (a)—

(A) in the second sentence, by striking “15 members appointed by the Director, at least 10 of whom” and inserting “not fewer than 9 members appointed by the Director, a majority of whom”; and

(B) in the third sentence, by striking “National Bureau of Standards” and inserting “National Institute of Standards and Technology”; and

(2) in subsection (h)(1), by striking “, including the Program established under section 28,”.

TITLE V—MANUFACTURING

SEC. 501. HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP IMPROVEMENTS.

(a) **SHORT TITLE.**—This section may be cited as the “Manufacturing Extension Partnership Improvement Act”.

(b) **IN GENERAL.**—Section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) is amended to read as follows:

“SEC. 25. HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP.

“(a) **DEFINITIONS.**—In this section:

“(1) **APPROPRIATE COMMITTEES OF CONGRESS.**—The term ‘appropriate committees of Congress’ means—

“(A) the Committee on Commerce, Science, and Transportation of the Senate; and

“(B) the Committee on Science, Space, and Technology of the House of Representatives.

“(2) **AREA CAREER AND TECHNICAL EDUCATION SCHOOL.**—The term ‘area career and technical education school’ has the meaning given the term in section 3 of the Vocational Education Act of 1963 (20 U.S.C. 2302).

“(3) **CENTER.**—The term ‘Center’ means a manufacturing extension center that—

“(A) is created under subsection (b); and

“(B) is affiliated with an eligible entity that applies for and is awarded financial support under subsection (e).

“(4) **COMMUNITY COLLEGE.**—The term ‘community college’ means an institution of higher education (as defined under section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))) at which the highest degree that is predominately awarded to students is an associate’s degree.

“(5) **ELIGIBLE ENTITY.**—The term ‘eligible entity’ means a United States-based non-profit institution, or consortium thereof, an institution of higher education, or a State, United States territory, local, or tribal government.

“(6) **HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP OR PROGRAM.**—The term ‘Hollings Manufacturing Extension Partnership’ or ‘Program’ means the program established under subsection (b).

“(7) **MEP ADVISORY BOARD.**—The term ‘MEP Advisory Board’ means the Manufacturing Extension Partnership Advisory Board established under subsection (n).

“(b) **ESTABLISHMENT AND PURPOSE.**—The Secretary, acting through the Director and, if appropriate, through other Federal officials, shall establish a program to provide assistance for the creation and support of manufacturing extension centers for the transfer of manufacturing technology and best business practices.

“(c) **OBJECTIVE.**—The objective of the Program shall be to enhance competitiveness, productivity, and technological performance in United States manufacturing through—

“(1) the transfer of manufacturing technology and techniques developed at the Institute to Centers and, through them, to manufacturing companies throughout the United States;

“(2) the participation of individuals from industry, institutions of higher education, State governments, other Federal agencies, and, when appropriate, the Institute in cooperative technology transfer activities;

“(3) efforts to make new manufacturing technology and processes usable by United States-based small and medium-sized companies;

“(4) the active dissemination of scientific, engineering, technical, and management information about manufacturing to industrial firms, including small and medium-sized manufacturing companies;

“(5) the utilization, when appropriate, of the expertise and capability that exists in Federal agencies, other than the Institute, and federally-sponsored laboratories;

“(6) the provision to community colleges and area career and technical education schools of information about the job skills needed in manufacturing companies, including small and medium-sized manufacturing businesses in the regions they serve;

“(7) the promotion and expansion of certification systems offered through industry, associations, and local colleges when appropriate, including efforts such as facilitating training, supporting new or existing apprenticeships, and providing access to information and experts, to address workforce needs and skills gaps in order to assist small- and medium-sized manufacturing businesses; and

“(8) the growth in employment and wages at United States-based small and medium-sized companies.

“(d) **ACTIVITIES.**—The activities of a Center shall include—

“(1) the establishment of automated manufacturing systems and other advanced production technologies, based on Institute-supported research, for the purpose of demonstrations and technology transfer;

“(2) the active transfer and dissemination of research findings and Center expertise to a wide range of companies and enterprises, particularly small and medium-sized manufacturers; and

“(3) the facilitation of collaborations and partnerships between small and medium-sized manufacturing companies, community colleges, and area career and technical education schools, to help those entities better understand the specific needs of manufacturers and to help manufacturers better understand the skill sets that students learn in

the programs offered by such colleges and schools.

“(e) **FINANCIAL ASSISTANCE.**—

“(1) **AUTHORIZATION.**—Except as provided in paragraph (2), the Secretary may provide financial assistance for the creation and support of a Center through a cooperative agreement with an eligible entity.

“(2) **COST SHARING.**—The Secretary may not provide more than 50 percent of the capital and annual operating and maintenance funds required to establish and support a Center.

“(3) **RULE OF CONSTRUCTION.**—For purposes of paragraph (2), any amount received by an eligible entity for a Center under a provision of law other than paragraph (1) shall not be considered an amount provided under paragraph (1).

“(4) **REGULATIONS.**—The Secretary may revise or promulgate such regulations as necessary to carry out this subsection.

“(f) **APPLICATIONS.**—

“(1) **IN GENERAL.**—An eligible entity shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may require.

“(2) **PROGRAM DESCRIPTION.**—The Secretary shall establish and update, as necessary—

“(A) a description of the Program;

“(B) the application procedures;

“(C) performance metrics;

“(D) criteria for determining qualified applicants; and

“(E) criteria for choosing recipients of financial assistance from among the qualified applicants.

“(F) procedures for determining allowable cost share contributions; and

“(G) such other program policy objectives and operational procedures as the Secretary considers necessary.

“(3) **COST SHARING.**—

“(A) **IN GENERAL.**—To be considered for financial assistance under this section, an applicant shall provide adequate assurances that the applicant and if applicable, the applicant’s partnering organizations, will obtain funding for not less than 50 percent of the capital and annual operating and maintenance funds required to establish and support the Center from sources other than the financial assistance provided under subsection (e).

“(B) **AGREEMENTS WITH OTHER ENTITIES.**—In meeting the cost-sharing requirement under subparagraph (A), an eligible entity may enter into an agreement with 1 or more other entities, such as a private industry, institutions of higher education, or a State, United States territory, local, or tribal government for the contribution by that other entity of funding if the Secretary determines the agreement—

“(i) is programmatically reasonable;

“(ii) will help accomplish programmatic objectives; and

“(iii) is allocable under Program procedures under subsection (f)(2).

“(4) **LEGAL RIGHTS.**—Each applicant shall include in the application a proposal for the allocation of the legal rights associated with any intellectual property which may result from the activities of the Center.

“(5) **MERIT REVIEW OF APPLICATIONS.**—

“(A) **IN GENERAL.**—The Secretary shall subject each application to merit review.

“(B) **CONSIDERATIONS.**—In making a decision whether to approve an application and provide financial assistance under subsection (e), the Secretary shall consider, at a minimum—

“(i) the merits of the application, particularly those portions of the application regarding technology transfer, training and education, and adaptation of manufacturing

technologies to the needs of particular industrial sectors;

“(ii) the quality of service to be provided;

“(iii) the geographical diversity and extent of the service area; and

“(iv) the type and percentage of funding and in-kind commitment from other sources under paragraph (3).

“(g) EVALUATIONS.—

“(1) THIRD AND EIGHTH YEAR EVALUATIONS BY PANEL.—

“(A) IN GENERAL.—The Secretary shall ensure that each Center is evaluated during its third and eighth years of operation by an evaluation panel appointed by the Secretary.

“(B) COMPOSITION.—The Secretary shall ensure that each evaluation panel appointed under subparagraph (A) is composed of—

“(i) private experts, none of whom are connected with the Center evaluated by the panel; and

“(ii) Federal officials.

“(C) CHAIRPERSON.—For each evaluation panel appointed under subparagraph (B), the Secretary shall appoint a chairperson who is an official of the Institute.

“(2) FIFTH YEAR EVALUATIONS BY SECRETARY.—In the fifth year of operation of a Center, the Secretary shall conduct a review of the Center.

“(3) PERFORMANCE MEASUREMENT.—In evaluating a Center an evaluation panel or the Secretary, as applicable, shall measure the performance of the Center against—

“(A) the objective specified in subsection (c);

“(B) the performance metrics under subsection (f)(2)(C); and

“(C) such other criterion as considered appropriate by the Secretary.

“(4) POSITIVE EVALUATIONS.—If an evaluation of a Center is positive, the Secretary may continue to provide financial assistance for the Center—

“(A) in the case of an evaluation occurring in the third year of a Center, through the fifth year of the Center;

“(B) in the case of an evaluation occurring in the fifth year of a Center, through the eighth year of the Center; and

“(C) in the case of an evaluation occurring in the eighth year of a Center, through the tenth year of the Center.

“(5) OTHER THAN POSITIVE EVALUATIONS.—

“(A) PROBATION.—If an evaluation of a Center is other than positive, the Secretary shall put the Center on probation during the period beginning on the date that the Center receives notice under subparagraph (B)(i) and ending on the date that the reevaluation is complete under subparagraph (B)(iii).

“(B) NOTICE AND REEVALUATION.—If a Center receives an evaluation that is other than positive, the evaluation panel or Secretary, as applicable, shall—

“(i) notify the Center of the reason, including any deficiencies in the performance of the Center identified during the evaluation;

“(ii) assist the Center in remedying the deficiencies by providing the Center, not less frequently than once every 3 months, an analysis of the Center, if considered appropriate by the panel or Secretary, as applicable; and

“(iii) reevaluate the Center not later than 1 year after the date of the notice under clause (i).

“(C) CONTINUED SUPPORT DURING PERIOD OF PROBATION.—

“(i) IN GENERAL.—The Secretary may continue to provide financial assistance under subsection (e) for a Center during the probation period.

“(ii) POST PROBATION.—After the period of probation, the Secretary shall not provide any financial assistance unless the Center has received a positive evaluation under subparagraph (B)(iii).

“(6) FAILURE TO REMEDY.—

“(A) IN GENERAL.—If a Center fails to remedy a deficiency or to show significant improvement in performance before the end of the probation period under paragraph (5), the Secretary shall conduct a competition to select an operator for the Center under subsection (h).

“(B) TREATMENT OF CENTERS SUBJECT TO NEW COMPETITION.—Upon the selection of an operator for a Center under subsection (h), the Center shall be considered a new Center and the calculation of the years of operation of that Center for purposes of paragraphs (1) through (5) of this subsection and subsection (h)(1) shall start anew.

“(h) REAPPLICATION COMPETITION FOR FINANCIAL ASSISTANCE AFTER 10 YEARS.—

“(1) IN GENERAL.—If an eligible entity has operated a Center under this section for a period of 10 consecutive years, the Secretary shall conduct a competition to select an eligible entity to operate the Center in accordance with the process plan under subsection (i).

“(2) INCUMBENT ELIGIBLE ENTITIES.—An eligible entity that has received financial assistance under this section for a period of 10 consecutive years and that the Secretary determines is in good standing shall be eligible to compete in the competition under paragraph (1).

“(3) TREATMENT OF CENTERS SUBJECT TO REAPPLICATION COMPETITION.—Upon the selection of an operator for a Center under paragraph (1), the Center shall be considered a new Center and the calculation of the years of operation of that Center for purposes of paragraphs (1) through (5) of subsection (g) shall start anew.

“(i) PROCESS PLAN.—Not later than 180 days after the date of the enactment of the American Innovation and Competitiveness Act, the Secretary shall implement and submit to Congress a plan for how the Institute will conduct an evaluation, competition, and reapplication competition under this section.

“(j) OPERATIONAL REQUIREMENTS.—

“(1) PROTECTION OF CONFIDENTIAL INFORMATION OF CENTER CLIENTS.—The following information, if obtained by the Federal Government in connection with an activity of a Center or the Program, shall be exempt from public disclosure under section 552 of title 5, United States Code:

“(A) Information on the business operation of any participant in the Program or of a client of a Center.

“(B) Trade secrets of any client of a Center.

“(k) OVERSIGHT BOARDS.—

“(1) IN GENERAL.—As a condition on receipt of financial assistance for a Center under subsection (e), an eligible entity shall establish a board to oversee the operations of the Center.

“(2) STANDARDS.—

“(A) IN GENERAL.—The Director shall establish appropriate standards for each board described under paragraph (1).

“(B) CONSIDERATIONS.—In establishing the standards, the Director shall take into account the type and organizational structure of an eligible entity.

“(C) REQUIREMENTS.—The standards shall address—

“(i) membership;

“(ii) composition;

“(iii) term limits;

“(iv) conflicts of interest; and

“(v) such other requirements as the Director considers necessary.

“(3) MEMBERSHIP.—

“(A) IN GENERAL.—Each board established under paragraph (1) shall be composed of members as follows:

“(i) The membership of each board shall be representative of stakeholders in the region in which the Center is located.

“(ii) A majority of the members of the board shall be selected from among individuals who own or are employed by small or medium-sized manufacturers.

“(B) LIMITATION.—A member of a board established under paragraph (1) may not serve on more than 1 board established under that paragraph.

“(4) BYLAWS.—

“(A) IN GENERAL.—Each board established under paragraph (1) shall adopt and submit to the Director bylaws to govern the operation of the board.

“(B) CONFLICTS OF INTEREST.—Bylaws adopted under subparagraph (A) shall include policies to minimize conflicts of interest, including such policies relating to disclosure of relationships and recusal as may be necessary to minimize conflicts of interest.

“(1) ACCEPTANCE OF FUNDS.—In addition to such sums as may be appropriated to the Secretary and Director to operate the Program, the Secretary and Director may also accept funds from other Federal departments and agencies and from the private sector under section 2(c)(7) of this Act (15 U.S.C. 272(c)(7)), to be available to the extent provided by appropriations Acts, for the purpose of strengthening United States manufacturing.

“(m) MEP ADVISORY BOARD.—

“(1) ESTABLISHMENT.—There is established within the Institute a Manufacturing Extension Partnership Advisory Board.

“(2) MEMBERSHIP.—

“(A) COMPOSITION.—

“(i) IN GENERAL.—The MEP Advisory Board shall consist of not fewer than 10 members appointed by the Director and broadly representative of stakeholders.

“(ii) REQUIREMENTS.—Of the members appointed under clause (i)—

“(I) at least 2 members shall be employed by or on an advisory board for a Center;

“(II) at least 5 members shall be from United States small businesses in the manufacturing sector; and

“(III) at least 1 member shall represent a community college.

“(iii) LIMITATION.—No member of the MEP Advisory Board shall be an employee of the Federal Government.

“(B) TERM.—Except as provided in subparagraph (C), the term of office of each member of the MEP Advisory Board shall be 3 years.

“(C) VACANCIES.—Any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term.

“(D) SERVING CONSECUTIVE TERMS.—Any person who has completed 2 consecutive full terms of service on the MEP Advisory Board shall thereafter be ineligible for appointment during the 1-year period following the expiration of the second such term.

“(3) MEETINGS.—The MEP Advisory Board shall—

“(A) meet not less than biannually; and

“(B) provide to the Director—

“(i) advice on the activities, plans, and policies of the Program;

“(ii) assessments of the soundness of the plans and strategies of the Program; and

“(iii) assessments of current performance against the plans of the Program.

“(4) FACAA APPLICABILITY.—

“(A) IN GENERAL.—In discharging its duties under this subsection, the MEP Advisory Board shall function solely in an advisory capacity, in accordance with the Federal Advisory Committee Act (5 U.S.C. App.).

“(B) EXCEPTION.—Section 14 of the Federal Advisory Committee Act shall not apply to the MEP Advisory Board.

“(5) ANNUAL REPORT.—

“(A) IN GENERAL.—At a minimum, the MEP Advisory Board shall transmit an annual report to the Secretary for transmittal to Congress not later than 30 days after the submission to Congress of the President’s annual budget under section 1105 of title 31, United States Code.

“(B) CONTENTS.—The report shall address the status of the Program and describe the relevant sections of the programmatic planning document and updates thereto transmitted to Congress by the Director under subsections (c) and (d) of section 23 (15 U.S.C. 278i).

“(n) SMALL MANUFACTURERS.—

“(1) EVALUATION OF OBSTACLES.—As part of the Program, the Director shall—

“(A) identify obstacles that prevent small manufacturers from effectively competing in the global market;

“(B) implement a comprehensive plan to train the Centers to address the obstacles identified in paragraph (2); and

“(C) facilitate improved communication between the Centers to assist such manufacturers in implementing appropriate, targeted solutions to the obstacles identified in paragraph (2).

“(2) DEVELOPMENT OF OPEN ACCESS RESOURCES.—As part of the Program, the Secretary shall develop open access resources that address best practices related to inventory sourcing, supply chain management, manufacturing techniques, available Federal resources, and other topics to further the competitiveness and profitability of small manufacturers.”.

(c) COMPETITIVE AWARDS PROGRAM.—The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by inserting after section 25 the following:

“SEC. 25A. COMPETITIVE AWARDS PROGRAM.

“(a) ESTABLISHMENT.—The Director shall establish within the Hollings Manufacturing Extension Partnership under section 25 (15 U.S.C. 278k) and section 26 (15 U.S.C. 278l) a program of competitive awards among participants described in subsection (b) of this section for the purposes described in subsection (c).

“(b) PARTICIPANTS.—Participants receiving awards under this section shall be Centers, or a consortium of Centers.

“(c) PURPOSE, THEMES, AND REIMBURSEMENT.—

“(1) PURPOSE.—The purpose of the program established under subsection (a) is to add capabilities to the Hollings Manufacturing Extension Partnership, including the development of projects to solve new or emerging manufacturing problems as determined by the Director, in consultation with the Director of the Hollings Manufacturing Extension Partnership, the MEP Advisory Board, other Federal agencies, and small and medium-sized manufacturers.

“(2) THEMES.—The Director may identify 1 or more themes for a competition carried out under this section, which may vary from year to year, as the Director considers appropriate after assessing the needs of manufacturers and the success of previous competitions.

“(3) REIMBURSEMENT.—Centers may be reimbursed for costs incurred by the Centers under this section.

“(d) APPLICATIONS.—Applications for awards under this section shall be submitted in such manner, at such time, and containing such information as the Director shall require in consultation with the MEP Advisory Board.

“(e) SELECTION.—

“(1) PEER REVIEW AND COMPETITIVELY AWARDED.—The Director shall ensure that awards under this section are peer reviewed and competitively awarded.

“(2) GEOGRAPHIC DIVERSITY.—The Director shall endeavor to have broad geographic diversity among selected proposals.

“(3) CRITERIA.—The Director shall select applications to receive awards that the Director determines will achieve 1 or more of the following:

“(A) Improve the competitiveness of industries in the region in which the Center or Centers are located.

“(B) Create jobs or train newly hired employees.

“(C) Promote the transfer and commercialization of research and technology from institutions of higher education, national laboratories or other federally funded research programs, and nonprofit research institutes.

“(D) Recruit a diverse manufacturing workforce, including through outreach to underrepresented populations, including individuals identified in section 33 or section 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b).

“(E) Such other result as the Director determines will advance the objective set forth in section 25(c) (15 U.S.C. 278k) or in section 26 (15 U.S.C. 278l).

“(f) PROGRAM CONTRIBUTION.—Recipients of awards under this section shall not be required to provide a matching contribution.

“(g) GLOBAL MARKETPLACE PROJECTS.—In making an award under this section, the Director, in consultation with the MEP Advisory Board and the Secretary, may take into consideration whether an application has significant potential for enhancing the competitiveness of small and medium-sized United States manufacturers in the global marketplace.

“(h) DURATION.—The duration of an award under this section shall be for not more than 3 years.

“(i) DEFINITIONS.—The terms used in this section have the meanings given the terms in section 25 (15 U.S.C. 278k).”.

(d) REPORTS.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Comptroller General of the United States, in consultation with the MEP Advisory Board (as defined in section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k)), shall submit to the appropriate committees of Congress a report analyzing—

(A) the effectiveness of the changes in the cost share to Centers under section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k);

(B) the engagement in services and the characteristics of services provided by 2 types of Centers, including volume and type of service; and

(C) whether the cost-sharing ratio has any effect on the services provided by either type of Center.

(2) INDEPENDENT ASSESSMENT.—

(A) IN GENERAL.—Not later than 3 years after the date of submission of the report under paragraph (1), the Director of NIST shall contract with an independent organization to perform an assessment of the implementation of the reapplication competition process.

(B) CONSULTATION.—The independent organization performing the assessment under subparagraph (A) may consult with the MEP Advisory Board (as defined in section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k)).

(3) COMPARISON OF CENTERS.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Director shall submit to the appropriate committees of Congress a report providing information on the first and second years of operations for Centers (as defined in section 25 of the National Institute of Standards and

Technology Act (15 U.S.C. 278k)) operating from new competitions or recompetition as compared to longstanding Centers.

(B) CONTENTS.—The report shall provide detail on the engagement in services provided by Centers and the characteristics of services provided, including volume and type of services, so that the appropriate committees of Congress can evaluate whether the cost-sharing ratio has an effect on the services provided at Centers.

(e) CONFORMING AMENDMENTS.—

(1) DEFINITIONS.—Section 2199(3) of title 10, United States Code, is amended—

(A) by striking “regional center” and inserting “manufacturing extension center”;

(B) by inserting “and best business practices” before “referred”; and

(C) by striking “25(a)” and inserting “25(b)”.

(2) ENTERPRISE INTEGRATION INITIATIVE.—Section 3(a) of the Enterprise Integration Act of 2002 (15 U.S.C. 278g-5(a)) is amended by inserting “Hollings” before “Manufacturing Extension Partnership”.

(3) ASSISTANCE TO STATE TECHNOLOGY PROGRAMS.—Section 26(a) of the National Institute of Standards and Technology Act (15 U.S.C. 278l(a)) is amended by striking “Centers program created” and inserting “Hollings Manufacturing Extension Partnership”.

(f) SAVINGS PROVISIONS.—Notwithstanding the amendments made by subsections (a) and (b) of this section, the Secretary of Commerce may carry out section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) as that section was in effect on the day before the date of enactment of this Act, with respect to existing grants, agreements, cooperative agreements, or contracts, and with respect to applications for such items that are received by the Secretary prior to the date of enactment of this Act.

(g) PATENT RIGHTS.—The provisions of chapter 18 of title 35, United States Code, shall apply, to the extent not inconsistent with section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) and section 25 of that Act, to the promotion of technology from research by Centers under those sections, except for contracts for such specific technology extension or transfer services as may be specified by the Director of NIST or under other law.

TITLE VI—INNOVATION AND TECHNOLOGY TRANSFER

SEC. 601. INNOVATION CORPS.

(a) FINDINGS.—Congress makes the following findings:

(1) The National Science Foundation Innovation Corps (referred to in this section as the “I-Corps”) was established to foster a national innovation ecosystem by encouraging institutions, scientists, engineers, and entrepreneurs to identify and explore the innovation and commercial potential of National Science Foundation-funded research well beyond the laboratory.

(2) Through I-Corps, the Foundation invests in entrepreneurship and commercialization education, training, and mentoring that can ultimately lead to the practical deployment of technologies, products, processes, and services that improve the Nation’s competitiveness, promote economic growth, and benefit society.

(3) By building networks of entrepreneurs, educators, mentors, institutions, and collaborations, and supporting specialized education and training, I-Corps is at the leading edge of a strong, lasting foundation for an American innovation ecosystem.

(4) By translating federally funded research to a commercial stage more quickly and efficiently, programs like the I-Corps

create new jobs and companies, help solve societal problems, and provide taxpayers with a greater return on their investment in research.

(5) The I-Corps program model has a strong record of success that should be replicated at all Federal science agencies.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) commercialization of federally funded research can improve the Nation's competitiveness, grow the economy, and benefit society;

(2) I-Corps is a useful tool in promoting the commercialization of federally funded research by training researchers funded by the Foundation in entrepreneurship and commercialization;

(3) I-Corps should continue to build a network of entrepreneurs, educators, mentors, and institutions and support specialized education and training;

(4) researchers other than those funded by the Foundation may also benefit from the education and training described in paragraph (3); and

(5) I-Corps should continue to promote a strong innovation system by investing in and supporting female entrepreneurs through mentorship, education, and training because they are historically underrepresented in entrepreneurial fields.

(c) I-CORPS PROGRAM.—

(1) IN GENERAL.—In order to promote a strong, lasting foundation for the national innovation ecosystem and increase the positive economic and social impact of federally funded research, the Director of the Foundation shall set forth eligibility requirements and carry out a program to award grants for entrepreneurship and commercialization education, training, and mentoring.

(2) EXPANSION OF I-CORPS.—

(A) IN GENERAL.—The Director—

(i) shall encourage the development and expansion of I-Corps and other training programs that focus on professional development, including education in entrepreneurship and commercialization; and

(ii) may establish an agreement with another Federal science agency—

(I) to make researchers, students, and institutions funded by that agency eligible to participate in the I-Corps program; or

(II) to assist that agency with the design and implementation of its own program that is similar to the I-Corps program.

(B) PARTNERSHIP FUNDING.—In negotiating an agreement with another Federal science agency under subparagraph (A)(ii), the Director shall require that Federal science agency to provide funding for—

(i) the training for researchers, students, and institutions selected for the I-Corps program; and

(ii) the locations that Federal science agency designates as regional and national infrastructure for science and engineering entrepreneurship.

(3) FOLLOW-ON GRANTS.—

(A) IN GENERAL.—Subject to subparagraph (B), the Director, in consultation with the Director of the Small Business Innovation Research Program, shall make funds available for competitive grants, including to I-Corps participants, to help support—

(i) prototype or proof-of-concept development; and

(ii) such activities as the Director considers necessary to build local, regional, and national infrastructure for science and engineering entrepreneurship.

(B) LIMITATION.—Grants under subparagraph (A) shall be limited to participants with innovations that because of the early stage of development are not eligible to participate in a Small Business Innovation Re-

search Program or a Small Business Technology Transfer Program.

(4) STATE AND LOCAL PARTNERSHIPS.—The Director may engage in partnerships with State and local governments, economic development organizations, and nonprofit organizations to provide access to the I-Corps program to support entrepreneurship education and training for researchers, students, and institutions under this subsection.

(5) REPORTS.—The Director shall submit to the appropriate committees of Congress a biennial report on I-Corps program efficacy, including metrics on the effectiveness of the program. Each Federal science agency participating in the I-Corps program or that implements a similar program under paragraph (2)(A) shall contribute to the report.

(6) DEFINITIONS.—In this subsection, the terms “Small Business Innovation Research Program” and “Small Business Technology Transfer Program” have the meanings given those terms in section 9 of the Small Business Act (15 U.S.C. 638).

SEC. 602. TRANSLATIONAL RESEARCH GRANTS.

(a) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) commercialization of federally funded research may benefit society and the economy; and

(2) not-for-profit organizations support the commercialization of federally funded research by providing useful business and technical expertise to researchers.

(b) COMMERCIALIZATION PROMOTION.—The Director of the Foundation shall continue to award grants on a competitive, merit-reviewed basis to eligible entities to promote the commercialization of federally funded research results.

(c) USE OF FUNDS.—Activities supported by grants under this section may include—

(1) identifying Foundation-sponsored research and technologies that have the potential for accelerated commercialization;

(2) supporting prior or current Foundation-sponsored investigators, institutions of higher education, and non-profit organizations that partner with an institution of higher education in undertaking proof-of-concept work, including development of prototypes of technologies that are derived from Foundation-sponsored research and have potential market value;

(3) promoting sustainable partnerships between Foundation-funded institutions, industry, and other organizations within academia and the private sector with the purpose of accelerating the transfer of technology;

(4) developing multi-disciplinary innovation ecosystems which involve and are responsive to specific needs of academia and industry; and

(5) providing professional development, mentoring, and advice in entrepreneurship, project management, and technology and business development to innovators.

(d) ELIGIBILITY.—

(1) IN GENERAL.—The following organizations may be eligible for grants under this section:

(A) Institutions of higher education.

(B) Public or nonprofit technology transfer organizations.

(C) A nonprofit organization that partners with an institution of higher education.

(D) A consortia of 2 or more of the organizations described under subparagraphs (A) through (C).

(2) LEAD ORGANIZATIONS.—Any eligible organization under paragraph (1) may apply as a lead organization.

(e) APPLICATIONS.—An eligible entity seeking a grant under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require.

SEC. 603. OPTICS AND PHOTONICS TECHNOLOGY INNOVATIONS.

(a) FINDINGS.—Congress makes the following findings:

(1) The 1998 National Research Council Report, “Harnessing Light” presented a comprehensive overview on the importance of optics and photonics to various sectors of the United States economy.

(2) In 2012, in response to increased coordination and investment by other nations, the National Research Council released a follow up study recommending a national photonics initiative to increase collaboration and coordination among United States industry, Federal and State government, and academia to identify and further advance areas of photonics critical to regaining United States competitiveness and maintaining national security.

(3) Publicly-traded companies focused on optics and photonics in the United States enable more than \$3 trillion in revenue annually.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) optics and photonics research and technologies promote United States global competitiveness in industry sectors, including telecommunications and information technology, energy, healthcare and medicine, manufacturing, and defense;

(2) Federal science agencies, industry, and academia should seek partnerships with each other to develop basic research in optics and photonics into more mature technologies and capabilities; and

(3) each Federal science agency, as appropriate, should—

(A) survey and identify optics and photonics-related programs within that Federal science agency and share results with other Federal science agencies for the purpose of generating multiple applications and uses;

(B) partner with the private sector and academia to leverage knowledge and resources to maximize opportunities for innovation in optics and photonics;

(C) explore research and development opportunities, including Federal and private sector-sponsored internships, to ensure a highly trained optics and photonics workforce in the United States;

(D) encourage partnerships between academia and industry to promote improvement in the education of optics and photonics technicians at the secondary school level, undergraduate level, and 2-year college level, including through the Foundation's Advanced Technological Education program; and

(E) assess existing programs and explore alternatives to modernize photonics laboratory equipment in undergraduate institutions in the United States to facilitate critical hands-on learning.

SEC. 604. UNITED STATES CHIEF TECHNOLOGY OFFICER.

(a) SHORT TITLE.—This section may be cited as the “United States Chief Technology Officer Act”.

(b) IN GENERAL.—Section 203 of the National Science and Technology Policy, Organization, and Priorities Act of 1976 (42 U.S.C. 6612) is amended—

(1) by inserting “(b) ASSOCIATE DIRECTORS.—” before “The President is authorized” and indenting appropriately;

(2) by inserting “(a) IN GENERAL.—” before “There shall be” and indenting appropriately; and

(3) by adding at the end the following:

“(c) CHIEF TECHNOLOGY OFFICER.—Subject to subsection (b), the President is authorized to designate 1 of the Associate Directors under that subsection as a United States Chief Technology Officer.”.

SEC. 605. NATIONAL RESEARCH COUNCIL STUDY ON TECHNOLOGY FOR EMERGENCY NOTIFICATIONS ON CAMPUSES.

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy shall enter into an arrangement with the National Research Council to conduct and complete a study to identify and review technologies employed at institutions of higher education to provide notifications to students, faculty, and other personnel during emergency situations in accordance with law.

(b) CONTENTS.—The study shall address—

(1) the timeliness of notifications provided by the technologies during emergency situations;

(2) the durability of the technologies in delivering the notifications to students, faculty, and other personnel; and

(3) the limitations exhibited by the technologies to successfully deliver the notifications not more than 30 seconds after the institution of higher education transmits the notifications.

(c) REPORT REQUIRED.—Not later than 1 year after the date that the National Research Council enters into the arrangement under subsection (a), the Director of the Office of Science and Technology Policy shall submit to Congress a report on the study, including recommendations for addressing any limitations identified under subsection (b)(3).

NOTICE OF INTENT TO OBJECT TO PROCEEDING

I, Senator RON WYDEN, intend to object to proceeding to H.R. 6438, an act to extend the waiver of limitations with respect to excluding from gross income amounts received by wrongfully incarcerated individuals; dated December 9, 2016.

NOMINATIONS DISCHARGED

Mr. McCONNELL. Mr. President, as in executive session, I ask unanimous consent that the Commerce Committee be discharged and the Senate proceed to the consideration of PN1894 through PN1899 and PN1831, that the nominations be confirmed en bloc, the motions to reconsider be considered made and laid upon the table with no intervening action or debate, that no further motions be in order, that any statements related to the nominations be printed in the RECORD, and the President be immediately notified of the Senate's action.

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

The nominations considered and confirmed en bloc are as follows:

IN THE COAST GUARD

The following named officers for appointment to the grade indicated in the United States Coast Guard under title 14, U.S.C., section 271(E):

To be lieutenant commander

Stephen J. Albert
Elroy S. Allen
Kirsten M. Ambors-Casey
Juan C. Avila
Kenji R. Awamura
Charles J. Bare
Dustin G. Barker
Todd C. Batten

Caroline B. Bell
Zachary C. Bender
James C. Bennett
Jonathan P. Benvenuto
Jason L. Berger
Nicole L. Blanchard
Simon G. Blanco
Jordan T. Boghosian
Christopher A. Bonner
Chad M. Brook
Christine S. Brown
Bryan P. Brownlee
Mark W. Burgner
William J. Burwell
Kristen M. Byers
Nelson W. Cable
Nolan V. Cain
Kristen B. Caldwell
Gregory S. Carr
Jason R. Carrillo
Kyle M. Carter
Kyra M. Chin-Dykeman
Erin H. Chlum
Bradley R. Clemons
Megan K. Clifford
Robert D. Cole, Jr.
Roberto C. Concepcion
Jason A. Condon
Kevin H. Connell
Rebecca M. Corson
James D. Couch
Brian A. Crimmel
Bryan S. Crook
Lane P. Cutler
Kathryn R. Cyr
Steven T. Davies
Rebecca W. Dearnkin
Michael A. Deal
Daniel J. Deangelo
Andrew B. Denny
Amanda W. Denning
Amanda M. Dipietro
Anna K. Dixon
Timothy W. Dolan
Kelli M. Dougherty
Leslie M. Downing
Stephen J. Drauszewski
Michael J. Dubinsky
Quinton L. Dubose
Andrew S. Dunlevy
Elisa F. Dykman
Ronald Easley
Erica L. Elfguinn
Patricia C. Elliston
Denny A. Ernster
Bryce G. Ettestad
Jason E. Evans
Daniel J. Every
Amanda L. Fahrig
Diana Ferguson
Jamison R. Ferriell
Traci-Ann Piammetta
Michael L. Flint
John M. Forster
Edward K. Forsy
Rebecca A. Fosha
Michelle M. Foster
James T. Freeman
Jeffrey A. Fry
Nicholas A. Galati
Victor J. Galgano
Rven T. Garcia
Micah N. Gentile
Zachery J. Geyer
Mario G. Gil
David M. Gilbert
David S. Gonzalez
Eliezer Gonzalez
Lee R. Gorlin
Robert D. Gorman
Andrew M. Grantham
Christopher F. Greenough
Patrick J. Grizzle
Sean T. Groark
Michael B. Groncki II
Ian C. Groom
Anthony J. Guido
Matthew C. Haddad

Brian M. Hall
Ian Hanna
Eric C. Hanson
Kevan P. Hanson
Brent L. Hardgrave
Stephen A. Hart
Lisa G. Hartley
Jason L. Hathaway
Kelly L. Haupt
Joseph S. Heal
Terrance L. Herdliiska
Matthew R. Herring
Jennifer L. Hertzler
John D. Hess
Jerod M. Hitzel
Stefanie J. Hodgdon
James M. Hodges
Jonathan W. Hofius
Zachary D. Huff
Steven W. Hulse
Matthew C. Hunt
Bryson C. Jacobs
Raymond M. Jamros
Sarah M. Janaro
David L. Janney
Andrew B. Jantzen
Chelsea A. Kalil
Abigail H. Kawada
Caroline D. Kearney
Gary G. Kim
Min H. Kim
Gretal G. Kinney
David B. Komar
Brittani J. Koroknay
Kevin K. Koski
Matthew M. Kroll
Sarah A. Krolman
Nicholas R. Kross
Brownie J. Kuk
Celina H. Ladyga
Jonathan W. Ladyga
Leo C. Lake
Jonathan M. Laraia
Dustin T. Lee
Karen M. Lee
Blake K. Leedy
Clinton D. Lemasters
Paul M. Leon
Benjamin S. Leuthold
Aaron B. Leyko
James P. Litzinger
John T. Livingston
Robert J. Lokar
Sean A. Lott
Rachael E. Love
Charles A. Lumpkin
Ryan W. Maca
Steven A. Macias
Robert M. Mackenzie
Issac D. Mahar
Sawyer M. Mann
Marc A. Mares
Christopher H. Martin
Scott A. McBride
Kenneth W. McCain
Christopher J. McCann
Scott J. McCann
Jayna G. McCarron
Adam J. McCarthy
Scott H. McGrew
Patrick M. McMahon
Anna C. McNeil
Steven T. Melvin
Hermie P. Mendoza
Megan K. Mervar
Julian M. Middleton
Jeffrey S. Milgate
Michael S. Miller
Frank P. Minopoli
Caitlin H. Mitchell-Wurster
Nathan P. Morello
Karl H. Mueller
Ian J. Mulcahy
Adam L. Mullins
John E. Mundale
Andrew J. Murphy
Joshua C. Murphy
Elizabeth G. Nakagawa