

Armored Division Association will be holding its 45th annual reunion on September 8, and with the anniversary of the end of World War II right around the corner.

In honor of this occasion, Madam Speaker, I ask all of my colleagues to join me today in honoring the liberators.

Mr. CONAWAY. Madam Speaker, I have no further requests for time, and I yield back the balance of my time.

Mr. CRITZ. Madam Speaker, I urge support of H. Res. 1483. I commend Dr. GINGREY for his leadership.

I have no further requests for time, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Pennsylvania (Mr. CRITZ) that the House suspend the rules and agree to the resolution, H. Res. 1483, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the resolution, as amended, was agreed to.

A motion to reconsider was laid on the table.

HOMELAND SECURITY SCIENCE AND TECHNOLOGY AUTHORIZATION ACT OF 2010

Ms. CLARKE. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4842) to authorize appropriations for the Directorate of Science and Technology of the Department of Homeland Security for fiscal years 2011 and 2012, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 4842

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

SECTION 1. SHORT TITLE.

This Act may be cited as the “Homeland Security Science and Technology Authorization Act of 2010”.

SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

- Sec. 1. Short title.
- Sec. 2. Table of contents.
- Sec. 3. Definitions.
- Sec. 4. References.

TITLE I—AUTHORIZATION OF APPROPRIATIONS

- Sec. 101. Authorization of appropriations.

TITLE II—MANAGEMENT AND ADMINISTRATION

- Sec. 201. Research prioritization and requirements; professional development; milestones and feedback.
- Sec. 202. Testing, evaluation, and standards.
- Sec. 203. External review.
- Sec. 204. Office of Public-Private Partnerships.

TITLE III—REPORTS

- Sec. 301. Directorate of Science and Technology strategic plan.
- Sec. 302. Report on technology requirements.
- Sec. 303. Report on venture capital organization.

TITLE IV—DIRECTORATE OF SCIENCE AND TECHNOLOGY PROGRAMS

- Sec. 401. Limitations on research.
- Sec. 402. University-based centers.
- Sec. 403. Review of university-based centers.
- Sec. 404. Cybersecurity research and development.
- Sec. 405. National Research Council study of cybersecurity incentives.
- Sec. 406. Research on cyber compromise of infrastructure.
- Sec. 407. Dual-use terrorist risks from synthetic genomics.
- Sec. 408. Underwater tunnel security demonstration project.
- Sec. 409. Threats research and development.
- Sec. 410. Maritime domain awareness and maritime security technology test, evaluation, and transition capabilities.
- Sec. 411. Rapid biological threat detection and identification.
- Sec. 412. Educating the public about radiological threats.
- Sec. 413. Rural resilience initiative.
- Sec. 414. Sense of Congress regarding the need for interoperability standards for Internet protocol video surveillance technology.
- Sec. 415. Homeland Security Science and Technology Fellows Program.
- Sec. 416. Biological threat agent assay equivalency.
- Sec. 417. Study of feasibility and benefit of expanding or establishing program to create a new cybersecurity capacity building track at certain institutions of higher education.
- Sec. 418. Sense of Congress regarding centers of excellence.
- Sec. 419. Assessment, research, testing, and evaluation of technologies to mitigate the threat of small vessel attack.
- Sec. 420. Research and development projects.
- Sec. 421. National Urban Security Technology Laboratory.
- Sec. 422. Homeland security science and technology advisory committee.

TITLE V—DOMESTIC NUCLEAR DETECTION OFFICE

- Sec. 501. Authorization of appropriations.
- Sec. 502. Domestic Nuclear Detection Office oversight.
- Sec. 503. Strategic plan and funding allocations for global nuclear detection architecture.
- Sec. 504. Radiation portal monitor alternatives.
- Sec. 505. Authorization of Securing the Cities Initiative.

TITLE VI—CLARIFYING AMENDMENTS

- Sec. 601. Federally funded research and development centers.
- Sec. 602. Elimination of Homeland Security Institute.
- Sec. 603. GAO study of the implementation of the statutory relationship between the Department and the Department of Energy national laboratories.
- Sec. 604. Technical changes.

TITLE VII—COMMISSION ON THE PROTECTION OF CRITICAL ELECTRIC AND ELECTRONIC INFRASTRUCTURES

- Sec. 701. Commission on the Protection of Critical Electric and Electronic Infrastructures.

TITLE VIII—BORDER SECURITY TECHNOLOGY INNOVATION

- Sec. 801. Ensuring research activities of the Department of Homeland Security include appropriate concepts of operation.

- Sec. 802. Report on basic research needs for border and maritime security.
- Sec. 803. Incorporating unmanned aerial vehicles into border and maritime airspace.
- Sec. 804. Establishing a research program in tunnel detection.
- Sec. 805. Research in document security and authentication technologies.
- Sec. 806. Study on global positioning system technologies.
- Sec. 807. Study of mobile biometric technologies at the border.
- Sec. 808. Authorization of appropriations.

SEC. 3. DEFINITIONS.

In this Act:

(1) **APPROPRIATE CONGRESSIONAL COMMITTEE.**—The term “appropriate congressional committee” means the Committee on Homeland Security and the Committee on Science and Technology of the House of Representatives and any committee of the House of Representatives or the Senate having legislative jurisdiction under the rules of the House of Representatives or Senate, respectively, over the matter concerned.

(2) **DEPARTMENT.**—The term “Department” means the Department of Homeland Security.

(3) **DIRECTORATE.**—The term “Directorate” means the Directorate of Science and Technology of the Department.

(4) **SECRETARY.**—The term “Secretary” means the Secretary of Homeland Security.

(5) **UNDER SECRETARY.**—The term “Under Secretary” means the Under Secretary for Science and Technology of the Department.

SEC. 4. REFERENCES.

Except as otherwise specifically provided, whenever in this Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a provision, the reference shall be considered to be made to a provision of the Homeland Security Act of 2002 (6 U.S.C. 101 et seq.).

TITLE I—AUTHORIZATION OF APPROPRIATIONS

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Under Secretary \$1,121,664,000 for fiscal year 2011 and \$1,155,313,920 for fiscal year 2012 for the necessary expenses of the Directorate.

TITLE II—MANAGEMENT AND ADMINISTRATION

SEC. 201. RESEARCH PRIORITIZATION AND REQUIREMENTS; PROFESSIONAL DEVELOPMENT; MILESTONES AND FEEDBACK.

(a) **IN GENERAL.**—Title III (6 U.S.C. 181 et seq.) is amended by adding at the end the following new sections:

“SEC. 318. RESEARCH PRIORITIZATION AND REQUIREMENTS.

“(a) **REQUIREMENTS.**—The Secretary shall—

“(1) by not later than 180 days after the date of enactment of this section, establish requirements for how basic and applied homeland security research shall be identified, prioritized, funded, tasked, and evaluated by the Directorate of Science and Technology, including the roles and responsibilities of the Under Secretary for Science and Technology, the Under Secretary for Policy, the Under Secretary for Management, the Director of the Office of Risk Management and Analysis, the Director of the Domestic Nuclear Detection Office, and the heads of operational components of the Department; and

“(2) to the greatest extent possible, seek to publicize the requirements for the purpose of informing the Federal, State, and local governments, first responders, and the private sector.

“(b) **CONTENTS.**—In the requirements, the Secretary shall—

“(1) identify the Directorate of Science and Technology’s customers within and outside of the Department;

“(2) describe the risk formula and risk assessment tools, including the risk assessment required under subsection (e)(1) that the Department considers to identify, prioritize, and fund homeland security research projects;

“(3) describe the considerations to be used by the Directorate to task projects to research entities, including the national laboratories, federally funded research and development centers, and university-based centers;

“(4) describe the protocols to be used to assess off-the-shelf technology to determine if an identified homeland security capability gap can be addressed through the acquisition process instead of commencing research and development of technology to address that capability gap;

“(5) describe the processes to be used by the Directorate to strengthen first responder participation in identifying and prioritizing homeland security technological gaps, including by—

“(A) soliciting feedback from appropriate national associations and advisory groups representing the first responder community and first responders within the components of the Department; and

“(B) establishing and promoting a publicly accessible portal to allow the first responder community to help the Directorate develop homeland security research and development goals;

“(6) describe a mechanism to publicize the Department’s funded and unfunded homeland security technology priorities; and

“(7) include such other requirements, policies, and practices as the Secretary considers necessary.

“(c) **ACTIVITIES IN SUPPORT OF THE RESEARCH PRIORITIZATION AND REQUIREMENTS.**—Not later than one year after the date of the issuance of the requirements, the Secretary shall—

“(1) carry out the requirements of subsection (a);

“(2) establish, through the Under Secretary for Science and Technology and Under Secretary for Management, a mandatory workforce program for the Directorate’s customers in the Department to better identify and prioritize homeland security capability gaps that may be addressed by a technological solution based on the assessment required under section 319(a)(2);

“(3) establish a system to collect feedback from customers of the Directorate on the performance of the Directorate; and

“(4) any other activities that the Secretary considers to be necessary to implement the requirements.

“(d) **BIANNUAL UPDATES ON IMPLEMENTATION.**—One hundred and eighty days after the date of enactment of this section, and on a biannually basis thereafter, the Inspector General of the Department shall submit a biannually update to the appropriate congressional committees on the status of implementation of the research prioritization and requirements and activities in support of such requirements.

“(e) **RISK ASSESSMENT.**—The Secretary shall—

“(1) submit to the appropriate congressional committees by not later than one year after the date of enactment of this subsection and annually thereafter—

“(A) a national-level risk assessment carried out by the Secretary, describing and prioritizing the greatest risks to the homeland, that includes vulnerability studies, asset values (including asset values for intangible assets), estimated rates of occurrence, countermeasures employed, loss ex-

pectancy, cost/benefit analyses, and other practices generally associated with producing a comprehensive risk assessment;

“(B) an analysis of the Directorate’s approach to mitigating the homeland security risks identified under subparagraph (A) through basic and applied research, development, demonstration, testing, and evaluation activities, as appropriate;

“(C) an analysis, based on statistics and metrics, of the effectiveness of the Directorate in reducing the homeland security risks identified under subparagraph (A) through the deployment of homeland security technologies researched or developed by the Directorate, as appropriate;

“(D) a description of how the analysis required under subparagraph (A) shall be used to inform, guide, and prioritize the Department’s homeland security research and development activities, including recommendations for how the Directorate should modify or amend its existing research and development activities, including for purposes of reducing the risks to the homeland identified under subparagraph (A); and

“(E) a description of input from other relevant Federal, State, or local agencies and relevant private sector entities in conducting the risk assessment required by subparagraph (A); and

“(2) conduct research and development on ways to most effectively communicate information regarding the risks identified under paragraph (1)(A) to the media as well as directly to the public, both on an ongoing basis and during a terrorist attack or other incident.

“(f) **REPORT ON HSARPA ACTIVITIES.**—

“(1) **IN GENERAL.**—Consistent with the Federal Acquisition Regulation and any other relevant Federal requirements, not later than 60 days after the date of enactment of this subsection and annually thereafter, the Secretary shall submit a report to the appropriate congressional committees containing the research, development, testing, evaluation, prototyping, and deployment activities undertaken by the Homeland Security Advanced Research Projects Agency during the previous fiscal year, including funds expended for such activities in the previous fiscal year.

“(2) **CONTENTS.**—For each activity undertaken, the report shall—

“(A) describe, as appropriate, the corresponding risk identified in subsection (e)(1)(A) that supports the decision to undertake that activity; and

“(B) describe any efforts made to transition that activity into a Federal, State, or local acquisition program.

“(3) **ADDITIONAL ACTIVITIES.**—The Secretary shall include in each report a description of each proposal that was reviewed in the period covered by the report by the Director of the Homeland Security Advanced Research Projects Agency under section 313(d)(3), including a statement of whether the proposal received a grant, cooperative agreement, or contract from the Director.

“(g) **SEC. 319. PROFESSIONAL DEVELOPMENT.**

“(a) **REPORTING REQUIREMENT.**—Sixty days before establishing the mandatory workforce program as required by section 318(c)(2), the Secretary shall report to the appropriate congressional committees on the following:

“(1) A description of how homeland security technological requirements are developed by the Directorate of Science and Technology’s customers within the Department.

“(2) A description of the training that should be provided to the Directorate’s customers in the Department under the mandatory workforce program to allow them to identify, express, and prioritize homeland security capability gaps.

“(3) A plan for how the Directorate, in coordination with the Domestic Nuclear Detection Office and other Department components, can enhance and improve technology requirements development and the technology acquisition process, to accelerate the delivery of effective, suitable technologies that meet performance requirements and appropriately address an identified homeland security capability gap.

“(4) An assessment of whether Congress should authorize, in addition to the program required under section 318(c)(2), a training program for Department employees to be trained in requirements writing and acquisition, that—

“(A) is prepared in consultation with the Department of Veterans Affairs Acquisition Academy and the Defense Acquisition University; and

“(B) if the Secretary determines that such additional training should be authorized by Congress, includes specification about—

“(i) the type, skill set, and job series of Department employees who would benefit from such training, including an estimate of the number of such employees;

“(ii) a suggested curriculum for the training;

“(iii) the type and skill set of educators who could most effectively teach those skills;

“(iv) the length and duration of the training;

“(v) the advantages and disadvantages of training employees in a live classroom, or virtual classroom, or both;

“(vi) cost estimates for the training; and

“(vii) the role of the Directorate in supporting the training.

“(b) **USE OF RESEARCH AND DEVELOPMENT CENTER.**—The Secretary is encouraged to use a federally funded research and development center to assist the Secretary in carrying out the requirements of this section.

“(c) **SEC. 320. CUSTOMER FEEDBACK.**

“(1) In establishing a system to collect feedback under section 318(c)(3), the Secretary shall—

“(i) create a formal process for collecting feedback from customers on the effectiveness of the technology or services delivered by Directorate of Science and Technology, including through randomized sampling, focus groups, and other methods as appropriate;

“(ii) develop metrics for measuring customer satisfaction and the usefulness of any technology or service provided by the Directorate; and

“(iii) establish standards and performance measures to be met by the Directorate in order to provide high-quality customer service.

“(d) **SEC. 321. RESEARCH PROGRESS.**

“(a) **IN GENERAL.**—The Secretary shall establish a system to monitor the progress of Directorate for Science and Technology research, development, testing, and evaluation activities, including the establishment of initial and subsequent research milestones.

“(b) **SYSTEM.**—The system established under subsection (a) shall—

“(1) identify and monitor the progress toward research milestones;

“(2) allow the Directorate to provide regular reports to its customers regarding the status and progress of research efforts of the Directorate;

“(3) allow the Secretary to evaluate how a technology or service produced as a result of the Directorate’s programs has affected homeland security capability gaps; and

“(4) allow the Secretary to report the number of products and services developed by the Directorate that have been transitioned into acquisition programs.

“(c) GUIDANCE.—The Under Secretary for Science and Technology shall publicize and implement guidance on setting valid initial and subsequent research milestones for homeland security research funded by the Directorate.

“SEC. 322. REPORT.

“(a) IN GENERAL.—The Under Secretary shall submit a report to the appropriate congressional committees—

“(1) by not later than one year after the date of enactment of sections 320 and 321 identifying what actions have been taken to carry out the requirements of these sections; and

“(2) annually thereafter describing—

“(A) research milestones for each large project with a Federal cost share greater than \$80,000,000 that have been successfully met and missed, including for each missed milestone, an explanation of why the milestone was missed; and

“(B) customer feedback collected and the success of the Directorate in meeting the customer service performance measures and standards, including an evaluation of the effectiveness of the technology or services delivered by the Directorate.”

(b) CLERICAL AMENDMENTS.—The table of contents in section 1(b) is amended in the items relating to subtitle D of title II—

(1) in the item relating to the heading for the subtitle, by striking “Office of”;

(2) in the item relating to section 231, by striking “office” and inserting “Office of Science and Technology”; and

(3) by adding at the end the following new items:

“Sec. 318. Research prioritization and requirements.

“Sec. 319. Professional development.

“Sec. 320. Customer feedback.

“Sec. 321. Research progress.

“Sec. 322. Report.

SEC. 202. TESTING, EVALUATION, AND STANDARDS.

Section 308 (6 U.S.C. 188) is amended by adding at the end of the following new subsection:

“(d) TEST, EVALUATION, AND STANDARDS DIVISION.—

“(1) ESTABLISHMENT.—There is established in the Directorate of Science and Technology a Test, Evaluation, and Standards Division.

“(2) DIRECTOR.—The Test, Evaluation, and Standards Division shall be headed by a Director of Test, Evaluation, and Standards, who shall be appointed by the Secretary and report to the Under Secretary for Science and Technology.

“(3) RESPONSIBILITIES, AUTHORITIES, AND FUNCTIONS.—The Director of Test, Evaluation, and Standards—

“(A) is the principal adviser to the Secretary, the Under Secretary of Management, and the Under Secretary for Science and Technology on all test and evaluation or standards activities in the Department; and

“(B) shall—

“(i) prescribe test and evaluation policies for the Department, which shall include policies to ensure that operational testing is done at facilities that already have relevant and appropriate safety and material certifications to the extent such facilities are available;

“(ii) oversee and ensure that adequate test and evaluation activities are planned and conducted by or on behalf of components of the Department in major acquisition programs of the Department, as designated by the Secretary, based on risk, acquisition level, novelty, complexity, and size of the acquisition program, or as otherwise established in statute;

“(iii) review major acquisition program test reports and test data to assess the ade-

quacy of test and evaluation activities conducted by or on behalf of components of the Department; and

“(iv) review available test and evaluation infrastructure to determine whether the Department has adequate resources to carry out its testing and evaluation responsibilities, as established under this title.

“(4) DEPUTY DIRECTOR OF OPERATIONAL TEST AND EVALUATION.—Within the Division there shall be a Deputy Director of Operational Test and Evaluation, who—

“(A) is the principal operational test and evaluation official for the Department; and

“(B) shall—

“(i) monitor and review the operational testing and evaluation activities conducted by or on behalf of components of the Department in major acquisition programs of the Department, as designated by the Secretary, based on risk, acquisition level, novelty, complexity, and size of the acquisition program, or as otherwise established in statute;

“(ii) provide the Department with assessments of the adequacy of testing and evaluation activities conducted in support of major acquisitions programs; and

“(iii) have prompt and full access to test and evaluation documents, data, and test results of the Department that the Deputy Director considers necessary to review in order to carry out the duties of the Deputy Director under this section.

“(5) STANDARDS EXECUTIVE.—Within this Division, there shall be a Standards Executive as described in Office of Management and Budget Circular A-119. The Standards Executive shall—

“(A) implement the Department's standards policy as described in section 102(g); and

“(B) support the Department's use of technical standards that are developed or adopted by voluntary consensus standards bodies in accordance with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note).

“(6) LIMITATION.—The Division is not required to carry out operational testing.

“(7) EVALUATION OF DEPARTMENT OF DEFENSE TECHNOLOGIES.—The Director of Test, Evaluation, and Standards may evaluate technologies currently in use or being developed by the Department of Defense to assess whether they can be leveraged to address homeland security capability gaps.”

SEC. 203. EXTERNAL REVIEW.

(a) RESPONSIBILITIES AND AUTHORITIES OF THE UNDER SECRETARY.—Section 302 (6 U.S.C. 183) is amended by striking “and” after the semicolon at the end of paragraph (13), by striking the period at the end of paragraph (14) and inserting “; and”, and by adding at the end the following new paragraph:

“(15) developing and overseeing the administration of guidelines for periodic external review of research and development programs or activities, including through—

“(A) consultation with experts, including scientists and practitioners, about the research and development activities conducted by the Directorate of Science and Technology; and

“(B) ongoing independent, external review—

“(i) initially at the division level; or

“(ii) when divisions conduct multiple programs focused on significantly different subjects, at the program level.”

(b) REPORT.—The Secretary shall report to Congress not later than 60 days after the completion of the first review under section 302(15)(B) of the Homeland Security Act of 2002, as amended by subsection (a) of this section on—

(1) the findings of the review; and

(2) any future efforts to ensure that the Department's research programs or activities

are subject to external review, as appropriate.

SEC. 204. OFFICE OF PUBLIC-PRIVATE PARTNERSHIPS.

(a) ESTABLISHMENT.—Section 313 (6 U.S.C. 193) is amended to read as follows:

“SEC. 313. OFFICE OF PUBLIC-PRIVATE PARTNERSHIPS.

“(a) ESTABLISHMENT OF OFFICE.—There is established an Office of Public-Private Partnerships in the Directorate of Science and Technology.

“(b) DIRECTOR.—The Office shall be headed by a Director, who shall be appointed by the Secretary. The Director shall report to the Under Secretary for Science and Technology.

“(c) RESPONSIBILITIES.—The Director, in coordination with the Private Sector Office of the Department, shall—

“(1) engage and initiate proactive outreach efforts and provide guidance on how to pursue proposals to develop or deploy homeland security technologies (including regarding Federal funding, regulation, or acquisition), including to persons associated with small businesses (as that term is defined in the Small Business Act (15 U.S.C. 631 et seq.));

“(2) coordinate with components of the Department to issue announcements seeking unique and innovative homeland security technologies to address homeland security capability gaps;

“(3) promote interaction between homeland security researchers and private sector companies in order to accelerate transition research or a prototype into a commercial product and streamline the handling of intellectual property; and

“(4) conduct technology research assessment and marketplace analysis for the purpose of identifying, leveraging, and integrating best-of-breed technologies and capabilities from industry, academia, and other Federal Government agencies, and disseminate research and findings to Federal, State, and local governments.

“(d) RAPID REVIEW DIVISION.—

“(1) ESTABLISHMENT.—There is established the Rapid Review Division within the Office of Public-Private Partnerships.

“(2) PURPOSE AND DUTIES.—

“(A) IN GENERAL.—The Division—

“(i) is responsible for maintaining a capability to perform business and technical reviews to assist in screening unsolicited homeland security technology proposals submitted to the Secretary; and

“(ii) shall assess the feasibility, scientific and technical merits, and estimated cost of such proposals.

“(B) SPECIFIC DUTIES.—In carrying out those duties, the Division shall—

“(i) maintain awareness of the technological requirements of the Directorate's customers;

“(ii) establish and publicize accessible, streamlined procedures allowing a participant to have their technology assessed by the Division;

“(iii) make knowledgeable assessments of a participant's technology after receiving a business plan, a technology proposal, and a list of corporate officers, directors, and employees with technical knowledge of the proposal, within 60 days after such a submission;

“(iv) review proposals submitted by components of the Department to the Division, subject to subsection (e); and

“(v) in reviewing proposals submitted to the Secretary, give priority to any proposal submitted by a small business concern as defined under section 3 of the Small Business Act (15 U.S.C. 632).

“(3) COORDINATION.—The Director shall submit for consideration promising homeland security technology research, development, testing, and evaluation proposals,

along with any business and technical reviews, to the appropriate subcomponents of the Directorate and the appropriate operational components of the Department for consideration for support.

“(e) **LIMITATION ON CONSIDERATION OR EVALUATION OF PROPOSALS.**—The Office may not consider or evaluate homeland security technology proposals submitted in response to a solicitation for offers for a pending procurement or for a specific agency requirement.

“(f) **SATELLITE OFFICES.**—The Under Secretary, acting through the Director, may establish up to 3 satellite offices across the country to enhance the Department's outreach efforts. The Secretary shall notify the appropriate congressional committees in writing within 30 days after establishing any satellite office.

“(g) **PERSONNEL.**—The Secretary shall establish rules to prevent the Director or any other employee of the Office from acting on matters where a conflict of interest may exist.”.

(b) **CLERICAL AMENDMENT.**—The table of contents in section 1(b) is amended by striking the item relating to such section and inserting the following:

“Sec. 313. Office of Public-Private Partnerships.”.

(c) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amount authorized by section 101, there is authorized to be appropriated \$30,000,000 for the Office of Public-Private Partnerships for each of fiscal years 2011 and 2012.

TITLE III—REPORTS

SEC. 301. DIRECTORATE OF SCIENCE AND TECHNOLOGY STRATEGIC PLAN.

(a) **IN GENERAL.**—Title III (6 U.S.C. 181 et seq.), as amended by section 201, is further amended by adding at the end the following new section:

“SEC. 323. STRATEGIC PLAN.

“(a) **REQUIREMENT FOR STRATEGIC PLAN.**—Not later than 1 year after the date of enactment of this section and every other year thereafter, the Under Secretary for Science and Technology shall prepare a strategic plan for the activities of the Directorate.

“(b) **CONTENTS.**—The strategic plan required by subsection (a) shall be prepared in accordance with applicable Federal requirements, and shall include the following matters:

“(1) The long-term strategic goals of the Directorate.

“(2) Identification of the research programs of the Directorate that support achievement of those strategic goals.

“(3) The connection of the activities and programs of the Directorate to requirements or homeland security capability gaps identified by customers within the Department and outside of the Department, including the first responder community.

“(4) The role of the Department's risk analysis in the activities and programs of the Directorate.

“(5) A technology transition strategy for the programs of the Directorate.

“(6) A description of the policies of the Directorate on the management, organization, and personnel of the Directorate.

“(c) **SUBMISSION OF PLAN TO CONGRESS.**—The Secretary shall submit to Congress any update to the strategic plan most recently prepared under subsection (a) at the same time that the President submits to Congress the budget for each even-numbered fiscal year.”.

(b) **CLERICAL AMENDMENT.**—The table of contents in section 1(b), as amended by section 201, is further amended by adding at the end of the items relating to title III the following new item:

“Sec. 323. Strategic plan.”.

SEC. 302. REPORT ON TECHNOLOGY REQUIREMENTS.

Section 302 (6 U.S.C. 182) is amended by inserting “(a) **IN GENERAL.**—” before the first sentence, and by adding at the end the following new subsection:

“(b) **REPORT ON TECHNOLOGY REQUIREMENTS.**—

“(1) **IN GENERAL.**—Within 90 days after the date of enactment, the Under Secretary shall, for each current project conducted by the Directorate and having a Federal cost share greater than \$80,000,000, and on an ongoing basis thereafter for any new project conducted by the Directorate and having a Federal cost share greater than \$80,000,000, provide to the appropriate congressional committees a description of—

“(A) the Department components and customers consulted during the development of the operational and technical requirements associated with the project; and

“(B) the extent to which the requirements incorporate the input of those components or customers.

“(2) **LARGE PROJECTS.**—Within 90 days after the date of enactment, the Secretary shall, for each current project conducted by a component of the Department besides the Directorate, and having a life-cycle cost greater than \$1,000,000,000, and on an ongoing basis thereafter for any new project conducted by a component of the Department besides the Directorate, and having a life-cycle cost greater than \$1,000,000,000, provide to the appropriate congressional committees detailed operational and technical requirements that are associated with the project.”.

SEC. 303. REPORT ON VENTURE CAPITAL ORGANIZATION.

(a) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit a report to the appropriate congressional committees—

(1) assessing the current role of the venture capital community in funding advanced homeland security technologies, including technologies proposed by small business concerns as defined under section 3 of the Small Business Act (15 U.S.C. 632); and

(2) providing recommendations about creating a nonprofit organization for the purposes of delivering advanced homeland security technologies to the homeland security community to further its missions.

(b) **CONTENTS.**—The report shall include the following:

(1) An assessment of the current awareness and insight that the Department has regarding advanced private sector homeland security innovation, and the Department's ability to quickly transition innovative products into acquisitions.

(2) A description of how the Department currently finds and works with emerging companies, particularly firms that have never done business with the Federal Government, small business concerns, small business concerns that are owned and operated by women, small business concerns that are owned and operated by veterans, and minority-owned and operated small business concerns.

(3) An assessment and analysis of the current role that venture capitalists play in the development of homeland security technologies, including an assessment of how the venture capital community could be leveraged to accelerate technology, foster development, and introduce new technologies needed by the homeland security community.

(4) An assessment of whether the Department could help nascent commercial technologies mature into commercial-off-the-shelf products the homeland security community could acquire.

(5) An analysis of whether the Central Intelligence Agency's In-Q-Tel organization or the Department of Defense's OnPoint Technologies organization could serve as a model for the development of homeland security technology at the Department.

(6) Recommendations of the Secretary regarding how Congress could authorize the establishment of a private, independent, not-for-profit organization to bridge the gap between the technology needs of the homeland security community and new advances in commercial technology, including specifics on potential funding levels, activities for the organization, including the provision of technical assistance, and whether to establish set-asides for small businesses that are minority-owned and operated or located in socially and economically disadvantaged areas.

(c) **USE OF RESEARCH AND DEVELOPMENT CENTER.**—The Secretary is encouraged to use a federally funded research and development center to produce the report under this section.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amount authorized by section 101, there is authorized to be appropriated \$500,000 for the report under this section.

TITLE IV—DIRECTORATE OF SCIENCE AND TECHNOLOGY PROGRAMS

SEC. 401. LIMITATIONS ON RESEARCH.

Section 302(a)(4), as designated by section 302, is further amended by inserting after “extramural programs,” the following: “that, to the greatest extent possible, addresses a prioritized risk to the homeland as identified by a risk analysis under section 226(e) of this Act”.

SEC. 402. UNIVERSITY-BASED CENTERS.

(a) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amount authorized by section 101, there is authorized to be appropriated \$40,000,000 for fiscal year 2011 and \$41,200,000 for fiscal year 2012 to the Secretary to carry out the university-based centers program of the Department.

(b) **CRITERIA FOR DESIGNATION.**—Section 308(b)(2)(B)(iii) (6 U.S.C. 188(b)(2)(B)(iii)) is amended by inserting before the period at the end the following: “, including medical readiness training and research, and community resiliency for public health and healthcare critical infrastructure”.

(c) **EXPLOSIVE COUNTERMEASURES OR DETECTION.**—Section 308(b)(2)(B)(iv) (6 U.S.C. 188(b)(2)(B)(iv)) is amended by striking “and nuclear” and inserting “nuclear, and explosive”.

SEC. 403. REVIEW OF UNIVERSITY-BASED CENTERS.

(a) **GAO STUDY OF UNIVERSITY-BASED CENTERS.**—Not later than 120 days after the date of enactment of this Act, the Comptroller General of the United States shall initiate a study to assess the university-based centers for homeland security program authorized by section 308(b)(2) of the Homeland Security Act of 2002 (6 U.S.C. 188(b)(2)), and provide recommendations to the appropriate congressional committees for appropriate improvements.

(b) **SUBJECT MATTERS.**—The study under subsection (a) shall include the following:

(1) A review of the Department's efforts to identify key areas of study needed to support the homeland security mission, and criteria that the Department utilized to determine those key areas for which the Department should maintain, establish, or eliminate university-based centers.

(2) A review of the method by which university-based centers, federally funded research and development centers, and Department of Energy national laboratories receive tasking from the Department, including a review of how university-based research is identified, prioritized, and funded.

(3) A review of selection criteria for designating university-based centers and a weighting of such criteria.

(4) An examination of best practices from other agencies efforts to organize and use university-based research to support their missions.

(5) A review of the Department's criteria and metrics to measure demonstrable progress achieved by university-based centers in fulfilling Department taskings, and mechanisms for delivering and disseminating the research results of designated university-based centers within the Department and to other Federal, State, and local agencies.

(6) An examination of the means by which academic institutions that are not designated or associated with the designated university-based centers can optimally contribute to the research mission of the Directorate.

(7) An assessment of the interrelationship between the different university-based centers.

(8) A review of any other essential elements of the programs determined in the conduct of the study.

(c) **MORATORIUM ON NEW UNIVERSITY-BASED CENTERS.**—The Secretary may not designate any new university-based centers to research new areas in homeland security prior to the completion of the Comptroller General's review.

SEC. 404. CYBERSECURITY RESEARCH AND DEVELOPMENT.

(a) **IN GENERAL.**—The Under Secretary shall support research, development, testing, evaluation, and transition of cybersecurity technology, including fundamental, long-term research to improve the ability of the United States to prevent, protect against, detect, respond to, and recover from acts of terrorism and cyber attacks, with an emphasis on research and development relevant to large-scale, high-impact attacks.

(b) **ACTIVITIES.**—The research and development supported under subsection (a) shall include work to—

(1) advance the development and accelerate the deployment of more secure versions of fundamental Internet protocols and architectures, including for the domain name system and routing protocols;

(2) improve and create technologies for detecting attacks or intrusions, including real-time monitoring and real-time analytic technologies;

(3) improve and create mitigation and recovery methodologies, including techniques and policies for real-time containment of attacks, and development of resilient networks and systems that degrade gracefully;

(4) develop and support infrastructure and tools to support cybersecurity research and development efforts, including modeling, testbeds, and data sets for assessment of new cybersecurity technologies;

(5) assist the development and support of technologies to reduce vulnerabilities in process control systems;

(6) develop and support cyber forensics and attack attribution; and

(7) test, evaluate, and facilitate the transfer of technologies associated with the engineering of less vulnerable software and securing the information technology software development lifecycle.

(c) **COORDINATION.**—In carrying out this section, the Under Secretary shall coordinate activities with—

(1) the Under Secretary for National Protection and Programs; and

(2) the heads of other relevant Federal departments and agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the Information Assurance Directorate of the National Security Agency, the National Insti-

tute of Standards and Technology, the Department of Commerce, and other appropriate working groups established by the President to identify unmet needs and cooperatively support activities, as appropriate.

(d) **AUTHORIZATION OF CYBERSECURITY PREPAREDNESS CONSORTIUM AND TRAINING CENTER.**—

(1) **CYBERSECURITY PREPAREDNESS CONSORTIUM.**—Subtitle C of title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.) is amended by adding at the end the following new section:

“SEC. 226. CYBERSECURITY PREPAREDNESS CONSORTIUM.

“(a) **IN GENERAL.**—To assist the Secretary in carrying out the requirements of section 404(a) of the Homeland Security Science and Technology Authorization Act of 2010, the Secretary may establish a consortium to be known as the ‘Cybersecurity Preparedness Consortium’.

“(b) **FUNCTIONS.**—The Consortium shall—

“(1) provide training to State and local first responders and officials specifically for preparing and responding to cybersecurity attacks;

“(2) develop and update a curriculum and training model for State and local first responders and officials;

“(3) provide technical assistance services to build and sustain capabilities in support of cybersecurity preparedness and response;

“(4) conduct cybersecurity training and simulation exercises to defend from and respond to cyber attacks; and

“(5) coordinate all cybersecurity preparedness training activities conducted by the Department.

“(c) **MEMBERS.**—The Consortium shall consist of academic, nonprofit, and government partners that—

“(1) have demonstrated expertise in developing and delivering cybersecurity training in support of homeland security;

“(2) have demonstrated ability to utilize existing courses and expertise developed by the Department;

“(3) have demonstrated ability to coordinate with the National Domestic Preparedness Consortium and other training programs within the Department; and

“(4) include at least 3 academic institutions that are any combination of historically Black colleges and universities, Hispanic-serving institutions, or tribal colleges and universities, that fulfill the criteria of paragraphs (1), (2) and (3) of this subsection.

“(d) **DEFINITIONS.**—In this section:

“(1) **HISTORICALLY BLACK COLLEGE OR UNIVERSITY.**—The term ‘historically Black college or university’ has the meaning given the term ‘part B institution’ in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2)).

“(2) **HISPANIC-SERVING INSTITUTION.**—The term ‘Hispanic-serving institution’ has the meaning given that term in section 502 of the Higher Education Act of 1965 (20 U.S.C. 1101(a)).

“(3) **TRIBAL COLLEGE OR UNIVERSITY.**—The term ‘tribal college or university’ has the meaning given that term in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b)).”

(2) **CLERICAL AMENDMENT.**—Section 1(b) of such Act is further amended by adding at the end of the items relating to such subtitle the following new item:

“Sec. 226. Cybersecurity Preparedness Consortium.”

(3) **CYBERSECURITY TRAINING CENTER.**—Subtitle C of title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.) is further amended by adding at the end the following new section:

“SEC. 227. CYBERSECURITY TRAINING CENTER.

“The Secretary may establish where appropriate a Cybersecurity Training Center to provide training courses and other resources for State and local first responders and officials to improve preparedness and response capabilities.”

(4) **CLERICAL AMENDMENT.**—Section 1(b) of such Act is further amended by adding at the end of the items relating to such subtitle the following new item:

“Sec. 227. Cybersecurity Training Center.”

(e) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amount authorized by section 101, there is authorized to be appropriated \$75,000,000 to the Department for each of fiscal years 2011 and 2012 for the cybersecurity research and development activities of the Directorate to prevent, detect, and respond to acts of terrorism and other large-scale disruptions to information infrastructure.

SEC. 405. NATIONAL RESEARCH COUNCIL STUDY OF CYBERSECURITY INCENTIVES.

(a) **STUDY.**—Not later than 90 days after the date of enactment of this Act, the Under Secretary and the Under Secretary for National Protection and Programs of the Department shall seek to enter into an agreement with the National Research Council of the National Academy of Sciences to conduct a study to assess methods that might be used to promote market mechanisms that further cybersecurity and make recommendations for appropriate improvements thereto.

(b) **SUBJECT MATTERS.**—The study required under subsection (a) shall include the following:

(1) Liability that subjects software and system vendors and system operators to potential damages for system breaches.

(2) Mandated reporting of security breaches that could threaten critical functions, including provision of electricity and resiliency of the financial sector.

(3) Regulation that under threat of civil penalty, imposes best practices on system operators of critical infrastructure.

(4) Certification from standards bodies about conformance to relevant cybersecurity standards that can be used as a marketplace differentiation.

(5) Accounting practices that require companies to report their cybersecurity practices and postures and the results of independently conducted red team simulated attacks or exercises.

(6) Cybersecurity risk insurance, including analysis of the current marketplace and recommendations to promote cybersecurity insurance.

(c) **SUBMISSION TO CONGRESS.**—Not later than two years after the date of enactment of this Act, the Secretary shall submit to the appropriate congressional committees the results of the study required under subsection (a), together with any recommendations of the Secretary related thereto.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—Of the amount authorized by section 101, there is authorized to be appropriated \$500,000 to the Department for fiscal year 2011 to carry out this section.

SEC. 406. RESEARCH ON CYBER COMPROMISE OF INFRASTRUCTURE.

(a) **IN GENERAL.**—Pursuant to section 201 of the Homeland Security Act of 2002 (6 U.S.C. 121) and in furtherance of domestic preparedness for and collective response to a cyber attack by a terrorist or other person, the Secretary, working with the heads of other national security and intelligence agencies, shall periodically conduct research to determine if the security of federally owned programmable electronic devices and communication networks, including hardware, software, and data, essential to the reliable operation of critical electric infrastructure has been compromised.

(b) **SCOPE OF RESEARCH.**—The scope of the research required under subsection (a) shall include the following:

- (1) The extent of any compromise.
- (2) An identification of any attackers, including any affiliations with terrorists, terrorist organizations, state entities, and non-state entities.
- (3) The method of penetration.
- (4) Ramifications of any such compromise on future operations of critical electric infrastructure.
- (5) Secondary ramifications of any such compromise on other critical infrastructure sectors and the functioning of civil society.
- (6) Ramifications of any such compromise on national security, including war fighting capability.
- (7) Recommended mitigation activities.

(c) **REPORT.**—Not later than 30 days after the date a determination has been made under subsection (a), the Secretary shall submit to the appropriate congressional committees a report on the findings of such determination. The report may contain a classified annex if the Secretary determines it to be appropriate.

SEC. 407. DUAL-USE TERRORIST RISKS FROM SYNTHETIC GENOMICS.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that the field of synthetic genomics has the potential to facilitate enormous gains in fundamental discovery and biotechnological applications, but it also has inherent dual-use homeland security risks that must be managed.

(b) **REQUIREMENT.**—The Under Secretary shall examine and report to the appropriate congressional committees by not later than one year after the date of enactment of this Act on the homeland security implications of the dual-use nature of synthetic genomics and, if the Under Secretary determines that such research is appropriate, may conduct research in that area, including—

- (1) determining the current capability of synthetic nucleic acid providers to effectively differentiate a legitimate customer from a potential terrorist or other malicious actor;
- (2) determining the current capability of synthetic nucleic acid providers to effectively screen orders for sequences of homeland security concern; and
- (3) making recommendations regarding screening software, protocols, and other remaining capability gaps uncovered by the study.

SEC. 408. UNDERWATER TUNNEL SECURITY DEMONSTRATION PROJECT.

(a) **IN GENERAL.**—The Under Secretary, in consultation with the Assistant Secretary of the Transportation Security Administration, shall conduct a demonstration project to test and assess the feasibility and effectiveness of certain technologies to enhance the security of underwater public transportation tunnels against terrorist attacks involving the use of improvised explosive devices.

(b) **INFLATABLE PLUGS.**—At least one of the technologies tested under subsection (a) shall be inflatable plugs that may be rapidly deployed to prevent flooding of an underwater public transportation tunnel.

(c) **REPORT.**—Not later than 180 days after the completion of the demonstration project under subsection (a), the Under Secretary shall submit to the appropriate congressional committees a report on the results of the demonstration project.

SEC. 409. THREATS RESEARCH AND DEVELOPMENT.

(a) **IN GENERAL.**—The Under Secretary, in carrying out responsibilities under section 302 of the Homeland Security Act of 2002 (6 U.S.C. 182), may support research, development, testing, evaluation, and transition of

technology that increases the Nation's preparedness against chemical and biological threats and strengthens the Nation's preparedness and collective response against those threats through improved threat awareness and advanced surveillance, detection, and protective countermeasures, and to enhance the development of border security technology.

(b) **BIOLOGICAL SECURITY.**—To carry out subsection (a), the Under Secretary may conduct research to develop understanding, technologies, and systems needed to protect against biological attacks on the Nation's population or infrastructure, including—

- (1) providing advanced planning tools, concepts of operations (including alarm resolution protocols), and training exercises for responding to and recovering from biological attacks;
- (2) developing biological assays and improved detection technology that will operate with faster detection times, lower costs, and the potential for increased geographical coverage to the Nation when compared to existing homeland security technologies;
- (3) characterizing threats posed by biological weapons, anticipating future threats, conducting comprehensive threat and risk assessments to guide prioritization of the Nation's biodefense investments, and developing population threat assessments that inform the issuance of material threat determinations;
- (4) conducting bioforensics research in support of criminal investigations to aid attribution, apprehension, and prosecution of a terrorist or other perpetrator of a biological attack, and providing tools and facilities that Federal law enforcement investigators need to analyze biological threat evidence recovered, including operation of the National Bioforensic Analysis Center; and
- (5) conducting appropriate research and studies that will increase our understanding of and uncertainties associated with risk and threats posed by biological agents through the Biological Threat Characterization Center and other means as determined by the Secretary.

(c) **AGRICULTURAL SECURITY.**—The Under Secretary may conduct research and development to enhance the protection of the Nation's agriculture and food system against terrorist attacks, and other emergency events through enhancement of current agricultural countermeasures, development of new agricultural countermeasures, and provision of safe, secure, state-of-the-art biocontainment laboratories for researching foreign animal and zoonotic diseases, including—

- (1) developing technologies to defend the Nation against the natural and intentional introduction of selected foreign animal diseases, developing next-generation vaccines and diagnostics in coordination with the Department of Agriculture, and modeling the spread of foreign animal diseases and their economic impact to evaluate strategies for controlling outbreaks; and
- (2) leading the Department effort to enhance interagency coordination of research and development of agricultural disease countermeasures.

(d) **CHEMICAL SECURITY.**—The Under Secretary may develop technology to reduce the Nation's vulnerability to chemical warfare agents and commonly used toxic industrial chemicals, including—

- (1) developing a robust and enduring analytical capability in support of chemical countermeasures development, including developing and validating forensic methodologies and analytical tools, conducting risk and vulnerability assessments based on chemical threat properties, and maintaining

infrastructure including the Chemical Security Analysis Center;

(2) developing technology to detect a chemical threat release; and

(3) developing technologies and guidance documents to foster a coordinated approach to returning a chemically contaminated area to a normal condition, and to foster analysis of contaminated areas both before and after the restoration process.

(e) **RISK ASSESSMENTS.**—

(1) **IN GENERAL.**—The Under Secretary shall produce risk assessments for biological and chemical threats, and shall coordinate with the Director of the Domestic Nuclear Detection Office of the Department, the Assistant Secretary of the Office of Health Affairs of the Department, and the Assistant Secretary of Infrastructure Protection of the Department on an integrated risk assessment, including regarding chemical, biological, radiological, nuclear, and explosive threats.

(2) **USAGE.**—The assessments required under paragraph (1) shall be used to inform and guide the threat assessments and determinations by the Secretary regarding agents and toxins pursuant to section 302(9) of the Homeland Security Act of 2002 (6 U.S.C. 182(9)), and to guide prioritization of other homeland defense activities, as appropriate.

(3) **TASK FORCE.**—The Under Secretary for Science and Technology shall convene an interagency task force of relevant subject matter experts to assess the proposed methodology to be used for each assessment required under paragraph (1), and to provide recommendations to the Under Secretary as to the adequacy of such methodology.

(f) **BORDER SECURITY.**—The Under Secretary may develop technology, in coordination with the Commissioner of Customs and Border Protection, to gain effective control of the international land borders of the United States within 5 years after the date of enactment of this Act. In carrying out such development activities, the Under Secretary shall ensure coordination and integration between new technologies developed and those already utilized by U.S. Customs and Border Protection.

SEC. 410. MARITIME DOMAIN AWARENESS AND MARITIME SECURITY TECHNOLOGY TEST, EVALUATION, AND TRANSITION CAPABILITIES.

(a) **GLOBAL MARITIME DOMAIN AWARENESS AND MARITIME SECURITY TECHNOLOGY TEST, EVALUATION, AND TRANSITION CAPABILITIES.**—

(1) **ESTABLISHMENT.**—The Secretary shall establish capabilities for conducting global maritime domain awareness and maritime security technology test, evaluation, and transition, as provided in this subsection.

(2) **PURPOSE.**—The purpose of such capabilities shall be to—

(A) direct technology test, evaluation, and transition activities in furtherance of border and maritime security; and

(B) evaluate such technology in diverse environments including coastal, seaport, and offshore locations.

(b) **COORDINATION.**—The Secretary, acting through the Under Secretary, shall ensure that—

(1) technology test, evaluation, and transition efforts funded by the Department in furtherance of border and maritime security avoid duplication of efforts, reduce unnecessary redundancies, streamline processes, increase efficiencies, and otherwise complement existing Department and other efforts in border and maritime security; and

(2) the results of such efforts are shared with the appropriate congressional committees and others as determined appropriate by the Secretary.

SEC. 411. RAPID BIOLOGICAL THREAT DETECTION AND IDENTIFICATION.

(a) **IN GENERAL.**—Notwithstanding section 302(4) of the Homeland Security Act of 2002 (6

U.S.C. 182(4)), the Secretary shall require the Under Secretary, in consultation with other relevant operational components of the Department, to assess whether the development of screening capabilities for pandemic influenza and other infectious diseases should be undertaken by the Directorate to support entry and exit screening at ports of entry and for other purposes.

(b) **DEVELOPMENT OF METHODS.**—If the Under Secretary determines that the development of such screening capabilities should be undertaken, the Secretary shall, to the extent possible, initiate development of safe and effective methods to rapidly screen incoming travelers at ports of entry for pandemic influenza and other infectious diseases.

(c) **COLLABORATION.**—In developing methods under subsection (b), the Secretary may collaborate with other Federal agencies, as appropriate.

SEC. 412. EDUCATING THE PUBLIC ABOUT RADIOLOGICAL THREATS.

(a) **PUBLIC AWARENESS CAMPAIGN.**—The Secretary shall develop a public awareness campaign to enhance preparedness and collective response to a radiological attack, including the following:

(1) A clear explanation of the dangers associated with radioactive materials.

(2) Possible effects of different levels of radiation exposure, including a clear description of the how radiation exposure occurs and the amount of exposure necessary to be of concern.

(3) Actions that members of the public should take regarding evacuation, personal decontamination, and medical treatment.

(b) **RECOVERY.**—The Secretary shall develop a plan for postevent recovery from a radiological attack. Such plan shall include the following:

(1) A definition of the demarcation between response and recovery from a radiological attack.

(2) Consideration of multiple attack scenarios, including a worst-case scenario.

(3) Consideration of multiple recovery strategies, including decontamination, demolition and removal, and relocation.

(4) Consideration of economic, health, and psychological effects.

SEC. 413. RURAL RESILIENCE INITIATIVE.

(a) **IN GENERAL.**—The Under Secretary shall conduct research intended to assist State, local, and tribal leaders and the private sector in developing the tools and methods to enhance preparation for, and response and resilience to, terrorist events and other incidents.

(b) **INCLUDED ACTIVITIES.**—Activities under this section may include—

(1) research and implementation through outreach activities with rural communities;

(2) an examination of how communities employ resilience capabilities and response assets;

(3) a community resilience baseline template for determining the resilience capacity of a rural community;

(4) a plan to address community needs for resilience;

(5) an education program for community leaders and first responders about their resilience capacity and mechanisms for mitigation, including via distance learning; and

(6) a mechanism by which this research can serve as a model for adoption by communities across the Nation.

SEC. 414. SENSE OF CONGRESS REGARDING THE NEED FOR INTEROPERABILITY STANDARDS FOR INTERNET PROTOCOL VIDEO SURVEILLANCE TECHNOLOGY.

It is the sense of Congress that—

(1) video surveillance systems that operate over the Internet are an emerging homeland

security technology that has the potential of significantly improving homeland security forensic and analytical capability;

(2) to realize the full security benefits of such emerging homeland security technology, there should be interoperability standards for such technology;

(3) the Directorate, working with the National Institute of Standards and Technology and any other appropriate Federal agencies, should encourage the private sector to develop interoperability standards for such emerging homeland security technology; and

(4) such efforts will help the Federal Government, which is one of the largest users of surveillance technology, in detecting, deterring, preventing, and responding to terrorist attacks.

SEC. 415. HOMELAND SECURITY SCIENCE AND TECHNOLOGY FELLOWS PROGRAM.

(a) **IN GENERAL.**—Title III of the Homeland Security Act of 2002 (6 U.S.C. 181 et seq.) is further amended by adding at the end the following new section:

“SEC. 324. HOMELAND SECURITY SCIENCE AND TECHNOLOGY FELLOWS PROGRAM.

“(a) **ESTABLISHMENT.**—The Secretary, acting through the Under Secretary for Science and Technology, shall establish a fellows program, to be known as the Homeland Security Science and Technology Fellows Program, under which the Under Secretary shall facilitate the temporary placement of scientists in relevant scientific or technological fields for up to two years in components of the Department with a need for scientific and technological expertise.

“(b) **UTILIZATION OF FELLOWS.**—

“(1) **IN GENERAL.**—Under the Program, the Under Secretary may employ fellows—

“(A) for the use of the Directorate of Science and Technology; or

“(B) for the use of Department components outside the Directorate, under an agreement with the head of such a component under which the component will reimburse the Directorate for the costs of such employment.

“(2) **RESPONSIBILITIES.**—Under such an agreement—

“(A) the Under Secretary shall—

“(i) solicit and accept applications from individuals who are currently enrolled in graduate programs, or have received a graduate degree within 3 years prior to the time of application in scientific and engineering fields related to the promotion of securing the homeland, including—

“(I) biological, chemical, physical, behavioral, social, health, medical, and computational sciences;

“(II) geosciences;

“(III) all fields of engineering; and

“(IV) such other disciplines as are determined relevant by the Secretary;

“(ii) screen applicant candidates and interview them as appropriate to ensure that they possess the appropriate level of scientific and engineering expertise and qualifications;

“(iii) provide a list of qualified applicants to the heads of Department components seeking to utilize qualified fellows;

“(iv) pay financial compensation to such fellows;

“(v) coordinate with the Chief Security Officer to facilitate and expedite provision of security clearances to fellows, as appropriate; and

“(vi) otherwise administer all aspects of the fellows’ employment with the Department; and

“(B) the head of the component utilizing the fellow shall—

“(i) select a fellow from the list of qualified applicants provided by the Under Secretary;

“(ii) reimburse the Under Secretary for the costs of employing the fellow selected; and

“(iii) be responsible for the day-to-day management of the fellow.

“(c) **APPLICATIONS FROM ASSOCIATIONS.**—The Under Secretary may accept applications under subsection (b)(2)(A) that are submitted by science or policy associations on behalf of individuals whom such an association has determined may be qualified applicants under the program.”.

(b) **CLERICAL AMENDMENT.**—The table of contents in section 1(b) of such Act is further amended by adding at the end of the items relating to title III the following new item:

“Sec. 324. Homeland Security Science and Technology Fellows Program.”.

SEC. 416. BIOLOGICAL THREAT AGENT ASSAY EQUIVALENCY.

(a) **IN GENERAL.**—Title III (6 U.S.C. 181 et seq.) is further amended by adding at the end the following new section:

“SEC. 325. BIOLOGICAL THREAT AGENT ASSAY EQUIVALENCY PROGRAM.

“(a) **IN GENERAL.**—To facilitate equivalent biological threat agent identification among federally operated biomonitoring programs, the Under Secretary, in consultation with other relevant Federal agencies, may implement an assay equivalency program for biological threat assays.

“(b) **FEATURES.**—In order to establish assay performance equivalency to support homeland security and public health security decisions, the program may—

“(1) evaluate biological threat detection assays, their protocols for use, and their associated response algorithms for confirmation of biological threat agents, taking performance measures and concepts of operation into consideration; and

“(2) develop assay equivalency standards based on the findings of the evaluation under paragraph (1).

“(c) **UPDATE.**—The Under Secretary shall update the program as necessary.

“(d) **IMPLEMENTATION.**—The Secretary shall—

“(1) require implementation of the standards developed under subsection (b)(2) for all Department biomonitoring programs; and

“(2) make such standards available to support all other Federal biomonitoring programs.

“(e) **ASSAY DEFINED.**—In this section the term ‘assay’ means any scientific test that is—

“(1) designed to detect the presence of a biological threat agent; and

“(2) of a type selected under criteria established by the Secretary.”.

(b) **CLERICAL AMENDMENT.**—The table of contents in section 1(b) is further amended by adding at the end of the items relating to title III the following new item:

“Sec. 325. Biological threat agent assay equivalency program.”.

SEC. 417. STUDY OF FEASIBILITY AND BENEFIT OF EXPANDING OR ESTABLISHING PROGRAM TO CREATE A NEW CYBERSECURITY CAPACITY BUILDING TRACK AT CERTAIN INSTITUTIONS OF HIGHER EDUCATION.

(a) **IN GENERAL.**—Within 90 days of enactment, the Secretary, in coordination with the National Science Foundation, shall commission a study by a nonprofit research institution to determine the feasibility and potential benefit of expanding the Federal Cyber Service Scholarship for Service Program, or establishing a parallel program, as methods to create a new cybersecurity or information assurance capacity building track at institutions of higher education that are not currently designated as a National Center of Academic Excellence in Information Assurance Education or a National Center of Academic Excellence in Research.

(b) **SUBJECT MATTERS.**—The study under subsection (a) shall include examinations of the following:

(1) The feasibility and potential benefit of allowing the following types of institutions into the existing Federal Cyber Service program:

(A) Community colleges.

(B) Institutions offering an undergraduate degree, graduate degree, or post-graduate degree, but do not qualify under the existing program.

(C) Institutions offering a certificate or industry-recognized credential.

(2) The feasibility and potential benefit of establishing a new program modeled after the Federal Cyber Service program to build capacity at—

(A) community colleges;

(B) institutions offering an undergraduate degree, graduate degree, or post-graduate degree, but do not qualify under the existing program; or

(C) institutions offering a certificate or industry-recognized credential.

(3) The projected extent to which an expansion of the existing Federal Cyber Service program as described in paragraph (1) would—

(A) expand the availability of qualified individuals to work in information assurance and cybersecurity within the Department and other Federal, State, local, and tribal agencies, and the private sector;

(B) encourage institutions of higher education to develop a new information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential;

(C) increase the number of students graduating annually from existing information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential; or

(D) improve existing information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential.

(4) The projected extent to which the establishment of a new program modeled after the Federal Cyber Service program as described in paragraph (2) would—

(A) expand the availability of qualified individuals to work in information assurance and cybersecurity within the Department and other Federal, State, local, and tribal agencies, and the private sector;

(B) encourage institutions of higher education to develop a new information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential;

(C) increase the number of students graduating annually from existing information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential; or

(D) improve existing information assurance or cybersecurity education undergraduate degree programs, graduate degree programs, or programs conferring a certificate or industry-recognized credential.

(c) **REPORT.**—Not later than 30 days after receiving the findings of the study, the Secretary shall transmit the findings, together with any comments thereon by the Secretary, to the appropriate congressional committees.

SEC. 418. SENSE OF CONGRESS REGARDING CENTERS OF EXCELLENCE.

It is the sense of Congress that centers of excellence have the potential—

(1) to be a very useful tool in developing defensive countermeasures to secure critical infrastructure and prevent terrorism; and

(2) to play a key role in the Department's efforts to research and develop new technologies to secure the homeland.

SEC. 419. ASSESSMENT, RESEARCH, TESTING, AND EVALUATION OF TECHNOLOGIES TO MITIGATE THE THREAT OF SMALL VESSEL ATTACK.

The Under Secretary may—

(1) assess what technologies are available to mitigate the threat of small vessel attack in secure zones of ports, including the use of transponders or radio frequency identification devices to track small vessels; and

(2) conduct research, testing, and evaluation of new technologies that might be capable of tracking small vessels.

SEC. 420. RESEARCH AND DEVELOPMENT PROJECTS.

Section 831 (6 U.S.C. 391) is amended—

(1) in subsection (a), by striking “2010,” and inserting “2012.”;

(2) in subsection (a), by adding at the end the following new paragraph:

“(3) **PRIOR APPROVAL.**—In any case in which the Under Secretary for Science and Technology intends to exercise other transaction authority, the Under Secretary must receive prior approval from the Secretary after submitting to the Secretary a proposal that includes the rationale for why a grant or contract issued in accordance with the Federal Acquisition Regulation is not feasible or appropriate and the amount to be expended for such project. In such a case, the authority for evaluating the proposal may not be delegated by the Secretary to anyone other than the Under Secretary for Management.”; and

(3) by redesignating subsection (e) as subsection (i), and by inserting after subsection (d) the following new subsections:

“(e) **ANNUAL REPORT ON EXERCISE OF OTHER TRANSACTION AUTHORITY.**—

“(1) **IN GENERAL.**—The Secretary shall submit to the appropriate congressional committees an annual report on the exercise of other transaction authority.

“(2) **CONTENT.**—The report shall include the following:

“(A) The subject areas in which research projects were conducted using other transaction authority.

“(B) The extent of cost-sharing for such projects among Federal and non-Federal sources.

“(C) The extent to which use of other transaction authority has addressed a homeland security capability gap identified by the Department.

“(D) The total amount of payments, if any, that were received by the Federal Government as a result of such exercise of other transaction authority during the period covered by the report.

“(E) The rationale for using other transaction authority, including why grants or contracts issued in accordance with the Federal Acquisition Regulation were not feasible or appropriate.

“(F) the amount expended for each such project.

“(f) **TRAINING.**—The Secretary shall develop a training program for acquisitions staff in the use of other transaction authority to help ensure the appropriate use of such authority.

“(g) **REVIEW AUTHORITY.**—The exercise of other transaction authority shall be subject to review by the Comptroller General of the United States to ensure that an agency is not attempting to avoid the requirements of procurement statutes and regulations.

“(h) **OTHER TRANSACTION AUTHORITY DEFINED.**—In this section the term ‘other transaction authority’ means authority under subsection (a).”.

SEC. 421. NATIONAL URBAN SECURITY TECHNOLOGY LABORATORY.

(a) **IN GENERAL.**—The National Urban Security Technology Laboratory (formerly the Environmental Measurements Laboratory) is authorized within the Directorate for fiscal years 2011 and 2012.

(b) **RESPONSIBILITIES.**—The Under Secretary shall utilize the National Urban Security Technology Laboratory to test, evaluate, and analyze homeland security capabilities and serve as a technical authority to first responders and State and local entities, including by—

(1) conducting test programs, pilots projects, demonstrations, and other forms of evaluations of homeland security technologies both in the field and in the laboratory;

(2) applying knowledge of operational end-user environments and support for operational integration to technology development, including—

- (A) training;
- (B) exercises;
- (C) equipment;
- (D) tactics;
- (E) techniques; and
- (F) procedures;

(3) representing interests and requirements between technology developers and operational end-users; and

(4) supporting development and use of homeland security equipment and operational standards.

SEC. 422. HOMELAND SECURITY SCIENCE AND TECHNOLOGY ADVISORY COMMITTEE.

Section 301 of the Homeland Security Act of 2002 (6 U.S.C. 191) is amended—

(1) by striking subsection (a) and inserting the following new subsection:

“(a) There is established within the Department a science and technology advisory committee (in this section referred to as the ‘advisory committee’). The advisory committee shall make recommendations with respect to the activities of the under secretary for science and technology, including—

“(1) identifying research areas of potential importance to the security of the Nation; and

“(2) providing advice in developing and updating the strategic plan required under section 318.”.

(2) by striking subsection (j).

TITLE V—DOMESTIC NUCLEAR DETECTION OFFICE

SEC. 501. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated for the Domestic Nuclear Detection Office of the Department—

- (1) \$305,840,000 for fiscal year 2011; and
- (2) \$315,005,000 for fiscal year 2012.

SEC. 502. DOMESTIC NUCLEAR DETECTION OFFICE OVERSIGHT.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that the Directorate should conduct basic and innovative research and non-developmental testing on behalf of the Domestic Nuclear Detection Office (in this section referred to as “DNDO”), in order to advance next generation nuclear detection technologies.

(b) **INTERNAL REVIEW OF PROJECT SELECTION AND EVALUATION METHODOLOGY.**—Not later than 90 days after the date of enactment of this Act, the Director of the DNDO, the Under Secretary, and the heads of all operational components of the Department that own, operate, or maintain nuclear or radiological detection equipment shall begin an internal review of the methodology by which research, development, testing, and evaluation is identified, prioritized, and funded within the Department.

(c) **CONTENTS OF REVIEW.**—In carrying out the review under subsection (b), the Director of the DNDO shall—

(1) identify the process by which basic and applied research and operational testing that should be conducted in concert and under agreement with the Directorate;

(2) describe the roles, responsibilities, common definitions, standard operating procedures, and decision process for research, development, testing, and evaluation activities;

(3) describe and implement a transparent system for tracking research, development, testing, and evaluation requirements;

(4) describe and implement a mechanism to provide regular updates to components of the Department on the progress of such research;

(5) evaluate the degree to which needs of the operational components of the Department and State and local first responders are being adequately addressed by the existing project selection process, and if not, how such process can be improved;

(6) establish a method to collect and evaluate Department component feedback;

(7) utilize departmental matrices and systems to determine if technologies produced by the Directorate have enhanced the ability of Department components to perform their missions;

(8) identify appropriate five-year levels of investment in basic and applied research and development, in particular among the Department laboratories, federally funded research and development centers, university-based centers, Department of Energy national laboratories, and other Federal laboratories;

(9) project balance of use of the entities referred to in paragraph (8) among the Directorate and other Department components; and

(10) establish a formal merit review process, with external peer review where appropriate.

(d) **REPORT.**—Not later than one year after the completion of the review required by subsection (b), the Director of the DNDO shall submit to the Secretary and the appropriate congressional committees a report containing the findings of such review, together with information on the systems, methods, and mechanisms established, and recommendations for additional improvements.

(e) **UPDATES ON IMPLEMENTATION.**—One hundred and twenty days after the date of enactment of this Act, and annually thereafter, the Inspector General of the Department shall submit to the appropriate congressional committees an update on the status of implementation of this section and activities in support of such implementation.

SEC. 503. STRATEGIC PLAN AND FUNDING ALLOCATIONS FOR GLOBAL NUCLEAR DETECTION ARCHITECTURE.

Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the appropriate congressional committees a report containing the following:

(1) A strategic plan for the global nuclear detection architecture to deter and detect the transport of nuclear or radioactive materials by all means possible, with specific focus on establishing the goals, objectives, and cost projections for the next five years, including a discussion of—

(A) technological and nontechnological methods to increase detection capabilities;

(B) the preventive nature of the global nuclear detection architecture, including projected impact on would-be terrorists;

(C) detection capability enhancements for the various transportation modes, at ports of entry and between ports of entry;

(D) balanced risk-based deployment of detection assets across all border and other pathways; and

(E) any emerging threat vectors identified by the Director of the Domestic Nuclear Detection Office.

(2) In consultation with the Secretary of Defense, the Secretary of Energy, the Secretary of State, the Nuclear Regulatory Commission, the Intelligence Community, and the Attorney General, an analysis of overall budget allocations that determines whether Government wide nuclear detection resources clearly align with identified priorities to maximize results and minimize duplication of efforts.

SEC. 504. RADIATION PORTAL MONITOR ALTERNATIVES.

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that in view of the Secretary's decision not to certify advanced spectroscopic portal monitors for primary screening applications because they do not offer a significant increase in operational effectiveness over existing technology, the Director must attempt to identify viable alternatives.

(b) **ANALYSIS AND REPORT.**—The Director of the Domestic Nuclear Detection Office shall analyze and report to the appropriate congressional committees by not later than 90 days after the date of enactment of this Act on both existing and developmental alternatives to existing radiation portal monitors and advanced spectroscopic portal monitors that would provide the Department with a significant increase in operational effectiveness for primary screening for radioactive materials.

SEC. 505. AUTHORIZATION OF SECURING THE CITIES INITIATIVE.

(a) **FINDINGS.**—Congress finds the following:

(1) The Securing the Cities Initiative of the Department uses next generation radiation detection technology to detect the transport of nuclear and radiological material in urban areas by terrorists or other unauthorized individuals.

(2) The technology used by partners in the Securing the Cities Initiative leverages radiation detection technology used at ports of entry.

(3) The Securing the Cities Initiative has fostered unprecedented collaboration and coordination among its Federal, State, and local partners.

(4) The Securing the Cities Initiative is a critical national capability to detect the dangerous introduction of nuclear and radiological material.

(b) **AUTHORIZATION OF APPROPRIATIONS.**—Of amounts authorized by section 501, there is authorized to be appropriated to the Director of the Domestic Nuclear Detection Office of the Department for the Securing the Cities Initiative such sums as may be necessary for each of fiscal years 2011 and 2012, including—

(1) for each city in which it has been implemented by fiscal year 2009—

(A) \$20,000,000 for fiscal year 2011; and

(B) \$10,000,000 for fiscal year 2012; and

(2) for additional Securing the Cities initiatives to be implemented in not fewer than 2 sites participating in the Urban Area Security Initiative, such sums as may be necessary each fiscal year to implement and sustain each additional initiative.

TITLE VI—CLARIFYING AMENDMENTS

SEC. 601. FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS.

Section 305 (6 U.S.C. 184) is amended—

(1) by inserting “(a) ESTABLISHMENT.—” before the first sentence; and

(2) by adding at the end the following new subsections:

“(b) **CONGRESSIONAL TASKING.**—Upon a request of the chairman and the ranking minority member of an appropriate congressional committee, a federally funded research and development center established

under this section may perform independent analysis of homeland security issues and report its findings to the appropriate congressional committees and the Secretary.

“(c) **CONGRESSIONAL OVERSIGHT.**—Federally funded research and development centers established under this section are encouraged, upon request of the chairman and the ranking minority member of an appropriate congressional committee, to provide to the committee a copy of any report it produces for the Department or any of its components.

“(d) **CONFLICTS OF INTEREST.**—The Secretary shall review and revise, as appropriate, the policies of the Department relating to personnel conflicts of interest to ensure that such policies specifically address employees of federally funded research and development centers established under this section who are in a position to make or materially influence research findings or agency decisionmaking.

“(e) **ANNUAL REPORTS.**—Each federally funded research and development center established under this section shall transmit to the Secretary and appropriate congressional committees an annual report on the activities of the center.”

SEC. 602. ELIMINATION OF HOMELAND SECURITY INSTITUTE.

(a) **REPEAL.**—Section 312 (6 U.S.C. 192) is repealed.

(b) **CLERICAL AMENDMENT.**—The table of contents in section 1(b) is amended by striking the item relating to such section.

SEC. 603. GAO STUDY OF THE IMPLEMENTATION OF THE STATUTORY RELATIONSHIP BETWEEN THE DEPARTMENT AND THE DEPARTMENT OF ENERGY NATIONAL LABORATORIES.

(a) **IN GENERAL.**—Not later than one year after the date of the enactment of this Act, the Comptroller General of the United States shall—

(1) conduct a study to assess the implementation of the statutory relationship between the Department and the Department of Energy national laboratories, as established by section 309(a)(2) of the Homeland Security Act of 2002 (6 U.S.C. 189(a)(2)); and

(2) submit recommendations to the appropriate congressional committees for appropriate improvements to such relationship.

(b) **STUDY SUBJECTS.**—The study shall include the following:

(1) Review of how the Department and the Department of Energy national laboratories—

(A) communicate needs and capabilities; and

(B) select projects to be performed by the Department of Energy national laboratories under such statutory relationship.

(2) Review of contracting mechanisms that the Department and the Department of Energy national laboratories use to initiate and track work under such statutory relationship.

(3) Review of the fraction of Department of Energy national laboratory work performed for the Department under such statutory relationship, compared to other Department of Energy national laboratory work performed for the Department on a “work for others” basis.

(4) Review the cost savings identified by the Department and the Department of Energy achieved through use of such statutory relationship, compared to other Department of Energy national laboratory work performed for the Department on a “work for others” basis.

SEC. 604. TECHNICAL CHANGES.

Section 1902 of the Homeland Security Act (6 U.S.C. 592) is amended by—

(1) striking paragraph (6); and

(2) redesignating paragraphs (7) through (14) as paragraphs (6) through (13), respectively.

TITLE VII—COMMISSION ON THE PROTECTION OF CRITICAL ELECTRIC AND ELECTRONIC INFRASTRUCTURES

SEC. 701. COMMISSION ON THE PROTECTION OF CRITICAL ELECTRIC AND ELECTRONIC INFRASTRUCTURES.

(a) **ESTABLISHMENT.**—There is established the Commission on the Protection of Critical Electric and Electronic Infrastructures (in this section referred to as the “Commission”).

(b) **PURPOSES.**—

(1) **IN GENERAL.**—The purposes of the Commission are to—

(A) assess vulnerabilities of electric and electronic infrastructures, including—

(i) all components of the United States electric grid, including electricity generation, transmission, distribution and metering; and

(ii) all computerized control systems used in all United States critical infrastructure sectors;

(B) provide a clear and comprehensive strategy and specific recommendations for protecting these critical electric and electronic infrastructures; and

(C) test, evaluate, and report on specific mitigation protection and recovery devices or methods.

(2) **IN PARTICULAR.**—The Commission shall give particular attention to threats that can disrupt or damage critical electric and electronic infrastructures, including—

(A) cyber attacks or unintentional cyber disruption;

(B) electromagnetic phenomena such as geomagnetically induced currents, intentional electromagnetic interference, and electromagnetic pulses caused by nuclear weapons; and

(C) other physical attack, act of nature, or accident.

(c) **COMPOSITION OF COMMISSION.**—

(1) **MEMBERS.**—The Commission shall be composed of 9 members, of whom—

(A) 1 member shall be appointed by the Chairman of the House of Representatives Committee on Homeland Security;

(B) 1 member shall be appointed by the ranking minority member of the House of Representatives Committee on Homeland Security;

(C) 1 member shall be appointed by the Chairman of the House of Representatives Committee on Energy and Commerce;

(D) 1 member shall be appointed by the ranking minority member of the House of Representatives Committee on Energy and Commerce;

(E) 1 member shall be appointed by the Chairman of the Senate Committee on Homeland Security and Governmental Affairs;

(F) 1 member shall be appointed by the ranking minority member of the Senate Committee on Homeland Security and Governmental Affairs;

(G) 1 member shall be appointed by the Chairman of the Senate Committee on Energy and Natural Resources;

(H) 1 member shall be appointed by the ranking minority member of the Senate Committee on Energy and Natural Resources; and

(I) 1 member who shall serve as the Chairman of the Commission, and who shall be appointed by the Speaker of the House of Representatives with the concurrence of the President Pro Tempore of the Senate.

(2) **QUALIFICATIONS.**—It is the sense of Congress that individuals appointed to the Commission should have significant depth of experience in electric and electronic infrastructures, their function, and their protection, as well as the threats to these infrastructures as identified in subsection (b)(2).

(3) **DEADLINE FOR APPOINTMENT.**—All members of the Commission shall be appointed within 30 days after the date of enactment of this Act.

(4) **INITIAL MEETING.**—The Commission shall meet and begin the operations of the Commission as soon as practicable.

(5) **QUORUM; VACANCIES.**—After its initial meeting, the Commission shall meet upon the call of the Chairman or a majority of its members. Six members of the Commission shall constitute a quorum. Any vacancy in the Commission shall not affect its powers, but shall be filled in the same manner in which the original appointment was made.

(d) **RESPONSIBILITIES OF COMMISSION.**—The Commission shall address—

(1) the quantification of the threats identified in subsection (b)(2) to the United States electric and electronic infrastructure, and a cost-benefit analysis of possible protection and recovery strategies;

(2) the roles, missions, and structure of all relevant Federal, State, and local government departments and agencies with responsibilities for ensuring protection and reliability for electric and electronic infrastructures;

(3) the roles, missions, and structure of all relevant private sector entities with responsibilities for ensuring protection and reliability for electric and electronic infrastructures;

(4) inter-agency coordination between and among the entities identified in paragraphs (2) and (3); and

(5) recommendations for protections and recovery devices and measures.

(e) **POWERS OF COMMISSION.**—

(1) **HEARINGS AND EVIDENCE.**—The Commission or, on the authority of the Commission, any subcommittee or member thereof, may, for the purpose of carrying out this section, hold such hearings and sit and act at such times and places, take such testimony, receive such evidence, and administer such oaths as the Commission or such designated subcommittee or designated member may determine advisable.

(2) **CONTRACTING.**—The Commission may, to such extent and in such amounts as are provided in appropriations Acts, enter into contracts to enable the Commission to discharge its duties under this subtitle.

(3) **STAFF OF COMMISSION.**—

(A) **APPOINTMENT AND COMPENSATION.**—The Chairman of the Commission, in accordance with rules agreed upon by the Commission, may appoint and fix the compensation of a staff director and such other personnel as may be necessary to enable the Commission to carry out its functions, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, except that no rate of pay fixed under this subsection may exceed the equivalent of that payable for a position at level I of the Executive Schedule under section 5316 of title 5, United States Code.

(B) **PERSONNEL AS FEDERAL EMPLOYEES.**—

(i) **IN GENERAL.**—The executive director and any employees of the Commission shall be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title.

(ii) **MEMBERS OF COMMISSION.**—Subparagraph (A) shall not be construed to apply to members of the Commission.

(C) **DETAILEES.**—Any Federal Government employee may be detailed to the Commission without reimbursement from the Commission, and such detailee shall retain the rights, status, and privileges of his or her regular employment without interruption.

(D) **CONSULTANT SERVICES.**—The Commission may procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code, but at rates not to exceed the daily rate paid a person occupying a position at level I of the Executive Schedule under section 5315 of title 5, United States Code.

(E) **SECURITY CLEARANCES.**—The Chairman shall place an emphasis on hiring and retaining employees, contractors, and detailees with active security clearances. For employees who do not have security clearances but are determined by the Chairman to need them, the Central Intelligence Agency, Department of Energy, Department of Defense, and any other relevant agency shall expedite the necessary clearance processes.

(F) **FORMER EMP COMMISSION STAFF AND RESOURCES.**—The Chairman may make use of any existing and viable staff and resources previously employed by the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack established by section 1401 of Public Law 106-398 (114 Stat. 1654A-345).

(4) **INFORMATION FROM FEDERAL AGENCIES.**—

(A) **IN GENERAL.**—The Commission may secure directly from any executive department, bureau, agency, board, commission, office, independent establishment, or instrumentality of the Government, information, suggestions, estimates, and statistics for the purposes of this section. Each department, bureau, agency, board, commission, office, independent establishment, or instrumentality shall, to the extent authorized by law, furnish such information, suggestions, estimates, and statistics directly to the Commission, upon request made by the Chairman, the chairman of any subcommittee created by a majority of the Commission, or any member designated by a majority of the Commission.

(B) **RECEIPT, HANDLING, STORAGE, AND DISSEMINATION.**—Information shall only be received, handled, stored, and disseminated by members of the Commission and its staff consistent with all applicable statutes, regulations, and Executive orders.

(5) **ASSISTANCE FROM FEDERAL AGENCIES.**—

(A) **GENERAL SERVICES ADMINISTRATION.**—The Administrator of General Services shall provide to the Commission on a reimbursable basis and as necessary, administrative support and other services for the performance of the Commission's functions.

(B) **OTHER DEPARTMENTS AND AGENCIES.**—In addition to the assistance prescribed in paragraph (1), departments and agencies of the United States may provide to the Commission such services, funds, facilities, staff, and other support services as they may determine advisable and as may be authorized by law.

(6) **GIFTS.**—The Commission may accept, use, and dispose of gifts or donations of services or property.

(7) **POSTAL SERVICES.**—The Commission may use the United States mails in the same manner and under the same conditions as departments and agencies of the United States.

(f) **PUBLIC MEETINGS AND RELEASE OF PUBLIC VERSIONS OF REPORTS.**—The Commission shall—

(1) hold public hearings and meetings to the extent appropriate;

(2) release public versions of the report required under subsection (g); and

(3) conduct any public hearing in a manner consistent with the protection of sensitive or classified information provided to or developed for or by the Commission as required by any applicable statute, regulation, or Executive order.

(g) REPORT.—Not later than 180 days after the appointment of the Commission, and annually thereafter, the Commission shall submit to the President and Congress a report containing such findings, conclusions, and recommendations for protection and recovery measures for electric and electronic infrastructures as have been agreed to by a majority of Commission members.

(h) FUNDING.—Of the amounts authorized by section 101, there is authorized to be appropriated for the activities of the Commission under this section—

- (1) \$4,000,000 for fiscal year 2011; and
- (2) \$4,000,000 for fiscal year 2012.

TITLE VIII—BORDER SECURITY TECHNOLOGY INNOVATION

SEC. 801. ENSURING RESEARCH ACTIVITIES OF THE DEPARTMENT OF HOMELAND SECURITY INCLUDE APPROPRIATE CONCEPTS OF OPERATION.

The Under Secretary shall ensure that any Federal Government interagency or intra-agency agreement entered into by the Under Secretary to develop and transition new technology explicitly characterizes the requirements, expected use, and concept of operations for that technology, including—

- (1) the manpower needed to effectively operate the technology;
- (2) the expected training requirements; and
- (3) the expected operations and maintenance costs.

SEC. 802. REPORT ON BASIC RESEARCH NEEDS FOR BORDER AND MARITIME SECURITY.

Not later than 6 months after the date of enactment of this Act, the Under Secretary shall enter into an arrangement with the National Research Council for a one-year assessment of the basic science research needs in the border and maritime security domain. The assessment shall include consideration of—

- (1) detection, tracking, and identification technologies for cargo and people;
- (2) personal protective equipment;
- (3) document security and authentication technologies;
- (4) nonradiological advanced screening technologies at ports of entry; and
- (5) technologies for real time tactical scene awareness.

SEC. 803. INCORPORATING UNMANNED AERIAL VEHICLES INTO BORDER AND MARITIME AIRSPACE.

(a) RESEARCH AND DEVELOPMENT.—The Secretary and the Director of the Joint Planning and Development Office shall research and develop technologies to permit routine operation of unmanned aerial vehicles, including autonomously piloted drones, within the national airspace for border and maritime security missions without any degradation of existing levels of safety for all national airspace system users.

(b) PILOT PROJECTS.—The Secretary shall coordinate with the Administrator of the Federal Aviation Administration and the Director of the Joint Planning Office to enter into pilot projects in sparsely populated, low-density Class G air traffic airspace to conduct experiments and collect data in order to accelerate the safe integration of unmanned aircraft systems into the national airspace system as part of research activities of the Joint Planning and Development Office.

SEC. 804. ESTABLISHING A RESEARCH PROGRAM IN TUNNEL DETECTION.

(a) RESEARCH AND DEVELOPMENT.—The Under Secretary shall research and develop technologies to permit detection of near surface voids, such as tunnels, with an emphasis on technologies with real time capability.

(b) COORDINATION.—The Secretary shall coordinate with other appropriate Federal

agencies, including the Department of Defense and the United States Geological Survey, and ensure the integration of activities under subsection (a) with relevant efforts of such other agencies and the Department's Centers of Excellence Program.

SEC. 805. RESEARCH IN DOCUMENT SECURITY AND AUTHENTICATION TECHNOLOGIES.

(a) ESTABLISHMENT OF PROGRAM.—The Under Secretary, in coordination with the Director of the National Institute of Standards and Technology, shall conduct a research and development program on document security, validation, and authentication technologies and standards. The program may include assessment or development of imitation-resistant and tamper-resistant documentation, imitation-resistant or tamper-resistant devices, document validation and authentication technologies, and document identification standards.

(b) COORDINATION.—In carrying out the program in subsection (a), the Under Secretary shall coordinate with other Federal agencies engaged in similar activities, including Immigration and Customs Enforcement, the Department of State, the Department of Defense, the United States Coast Guard, and the Department of Justice.

(c) REPORT TO CONGRESS.—Not later than 12 months after the date of enactment of this Act, the Under Secretary and the Director of the National Institute of Standards and Technology shall provide to the Committee on Homeland Security and the Committee on Science and Technology of the House of Representatives, and the Committee on Homeland Security and Government Affairs of the Senate, a report detailing the actions taken by the Under Secretary and the Director under this section.

SEC. 806. STUDY ON GLOBAL POSITIONING SYSTEM TECHNOLOGIES.

(a) IN GENERAL.—The Under Secretary shall conduct a study of the need for next generation global positioning system technology as it relates to border security, including—

- (1) conducting an analysis of the frequency of unintended border crossings and the capability of global positioning system technologies to address unintended border crossings by government personnel;
- (2) undertaking an examination of the potential end user requirements for global positioning system technologies, including cost limitations, accessibility, and reliability; and
- (3) developing recommendations for potential near-term and long-term research, development, testing, and evaluation of border security-focused global positioning technologies.

(b) CONSULTATION.—In conducting the study under subsection (a), the Under Secretary shall consult with U.S. Customs and Border Protection, the National Institute of Standards and Technology and appropriate Federal, State, and local law enforcement officials.

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Under Secretary shall report to Congress the findings of the study conducted under this section.

SEC. 807. STUDY OF MOBILE BIOMETRIC TECHNOLOGIES AT THE BORDER.

(a) IN GENERAL.—The Under Secretary, in coordination with the Commissioner of United States Customs and Border Protection, shall establish a research program on the use of mobile biometric technology at the Nation's borders between the ports of entry, including—

- (1) conducting an analysis of existing mobile biometric technologies and the extent to

which they can be deployed in Border Patrol agents' vehicles and used at the border, in terms of operability, reliability, cost, and overall benefit to border operations;

(2) undertaking an examination of the potential end-user requirements of mobile biometric technology by the Border Patrol and other relevant end-users;

(3) developing recommendations for addressing capability gaps in mobile biometric technologies; and

(4) examining the feasibility of implementing a pilot program for use of mobile biometric technologies at the border.

(b) CONSULTATION.—In conducting the research program under subsection (a), the Under Secretary shall consult the National Institute of Standards and Technology, other appropriate Federal agencies, and appropriate Federal, State, and local law enforcement officials.

(c) COORDINATION.—The Secretary shall ensure that the research program is coordinated with other biometric identification programs within the Department.

(d) REPORT.—Not later than 6 months after the date of enactment of this Act, the Under Secretary shall transmit to Congress a report on the findings of the research program conducted under this section.

SEC. 808. AUTHORIZATION OF APPROPRIATIONS.

Of the amount authorized by section 101 of this Act, such sums as may be necessary are authorized to be appropriated to carry out this title.

The SPEAKER pro tempore (Mr. DEUTCH). Pursuant to the rule, the gentleman from New York (Ms. CLARKE) and the gentleman from California (Mr. DANIEL E. LUNGREN) each will control 20 minutes.

The Chair recognizes the gentleman from New York.

GENERAL LEAVE

Ms. CLARKE. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and insert extraneous material on the bill under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

Ms. CLARKE. I yield myself such time as I may consume.

Mr. Speaker, there are hundreds of thousands of Americans who work day in and day out to protect our communities and our Nation. They perform a wide range of services for the country, responding to emergencies, screening bags and cargo, watching our borders. They are outstanding public servants, and we thank them for their service. We know that without them we are less secure. They know that without science and technology they can't accomplish their mission.

So today we consider H.R. 4842, to acknowledge the importance of science and technology research, development, testing and evaluation, to ensuring the safety and security of the American people and our Nation.

□ 1610

H.R. 4842, the Homeland Security Science and Technology Authorization Act of 2010, reauthorizes the Department of Homeland Security, Science

and Technology Directorate, and Domestic Nuclear Detection Office through fiscal year 2012. Since 2003, S&T has been responsible for developing technologies to address Homeland Security capability gaps as identified by DHS and its operational components, most notably Customs and Border Protection, the U.S. Coast Guard, the Transportation Security Administration, and the Federal Emergency Management Agency. DNDO was established in 2006 to develop detection technologies for nuclear and radiological devices, a high-consequence terrorist threat.

This bipartisan legislation reauthorizes the activities of S&T and DNDO and puts these two DHS components on a path to greater effectiveness and efficiency by requiring strategic plans, benchmarking, and accountability systems.

For nearly a year, Mr. LUNGREN and I worked with my colleagues on the committee to craft this bipartisan authorization bill, which would ensure that the Department of Homeland Security Science and Technology Directorate has the right tools available to be successful. Success in this context means delivering products into the hands of our first responders, law enforcement officials, or critical infrastructure owners, to help them achieve their mission and make America more secure.

In conducting our review, we examined the Homeland Security Act and the Department's use of the authorities the Congress has vested in it. We have also received insight and information from DHS leadership, stakeholders, the R&D community, private sector leaders, and independent analysts.

I believe that by reaching out to key stakeholders, we developed a very good bill that will authorize important management functions and programs within the S&T Directorate while emphasizing efficiency and cost savings.

Within this legislation, we institutionalize the process by which research and development is identified, prioritized, and funded within DHS. We emphasize the importance of strategic planning and require DHS S&T to do so every 2 years.

We establish training programs for developing technology requirements at DHS. We authorize an Office of Testing and Evaluation designed to prevent problems that occurred in major acquisition programs like SBInet, the infamous virtual fence, which will help curb wasteful spending in the Department.

We create an Office of Public-Private Partnerships and establish within S&T a streamlined review process for unsolicited proposals. We authorize twice the current amount of funding for cybersecurity R&D.

We explore alternatives for ASP technologies for detecting nuclear and radiological materials, and we affirm the committee's support for university programs and small businesses.

I look forward to discussing these and other matters with my colleagues today.

Finally, I want to express my appreciation and thanks to our chairman, Mr. THOMPSON, and Ranking Member KING for their support of this important legislation.

Mr. LUNGREN was very instrumental in crafting the bill, and I thank him for working with me on it. I want to also thank the majority and minority committee and personal office staffs for their efforts.

We often say that Homeland Security is not a partisan issue, and that is evidenced today by this bipartisan legislation.

JUNE 25, 2010.

Hon. BART GORDON,

Chairman, Committee on Science and Technology, House of Representatives, Rayburn House Office Building, Washington, DC.

DEAR MR. CHAIRMAN: I write to you regarding H.R. 4842, the "Homeland Security Science and Technology Authorization Act of 2010."

I agree that provisions in H.R. 4842 are of jurisdictional interest to the Committee on Science and Technology. I acknowledge that by forgoing further consideration, your Committee is not relinquishing its jurisdiction and I will fully support your request to be represented in a House-Senate conference on those provisions over which the Committee on Science and Technology has jurisdiction in H.R. 4842.

This exchange of letters will be inserted in the Congressional Record as part of the consideration of this legislation in the House.

I look forward to working with you on this legislation and other matters of great importance to this nation.

Sincerely,

BENNIE G. THOMPSON,
Chairman.

Hon. BENNIE G. THOMPSON,

Chairman, Committee on Homeland Security, Ford House Office Building, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to you concerning the jurisdictional interest of the Committee on Science and Technology in H.R. 4842, the Homeland Security Science and Technology Authorization Act of 2010.

H.R. 4842 was favorably reported by the Committee on Homeland Security on May 18, 2010. I recognize and appreciate your desire to bring this legislation before the House in an expeditious manner, and, accordingly, I will waive further consideration of this bill in Committee. However, agreeing to waive consideration of this bill should not be construed as the Committee on Science and Technology waiving its jurisdiction over H.R. 4842.

Further, I request your support for the appointment of Science and Technology Committee conferees during any House-Senate conference convened on this legislation. I also ask that a copy of this letter and your response be placed in the Congressional Record during consideration of this bill on the House floor.

Thank you for your attention to this matter.

Sincerely,

BART GORDON,
Chairman.

Mr. Speaker, I reserve the balance of my time.

Mr. DANIEL E. LUNGREN of California. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 4842, the Homeland Security Science and Technology Authorization Act of 2010. It gives me great pleasure to work with the gentlewoman in bringing forward this authorization bill to the floor.

This bipartisan legislation reauthorizes the Science and Technology Directorate and the Domestic Nuclear Detection Office for fiscal years 2011 and 2012, and I want to thank the chairwoman for her bipartisan leadership on this legislation.

This process started last summer with numerous stakeholder meetings, followed by meetings and recommendations from the Department of Homeland Security and concluding with the recent improvements and support of the House Science and Technology Committee. When it comes to homeland security, there is no room for partisanship. Chairwoman Clark and the chairman of our full committee, Chairman THOMPSON, working together with Mr. KING from New York, the ranking Republican on the committee, all deserve a great deal of credit for reaching out across the aisle to craft a more effective bill, and, I must say, it does include provisions of importance to our Republican members.

These provisions would include the establishment of research initiatives to bolster border and maritime security; the development of tools to enhance resilience to terrorist attacks and other incidents, especially in rural communities; research and testing of technologies to help secure the border and ensure the safety of our underground mass transit systems; as well as an assessment of how useful rapid screening tools for influenza and other biological threats would be at our border ports of entry.

Our bill emphasizes management and administrative reforms that target the needs of the Science and Technology customers, those being the Border Patrol, TSA, Coast Guard, FEMA, and ICE, by most closely aligning the Directorate's research and development activities with identified homeland security risks so there will be a more rapid application of the technology to the true needs as identified by S&T's customers.

It will improve our homeland security by establishing a more rigorous process within the S&T Directorate for identifying, prioritizing, and funding these important research opportunities.

It recognizes the need to prioritize research around risk and authorizes the establishment of a Testing, Evaluation, and Standards Division within the S&T Directorate to help ensure that technology is properly evaluated.

So, Mr. Speaker, in order to foster closer collaboration between the Science and Technology Directorate and commercial companies with promising Homeland Security technologies, our bill authorizes the Office of Public-Private Partnerships to be established within the S&T Directorate.

Importantly, title VII of our legislation establishes a Commission on the Protection of Critical Electric and Electronic Infrastructures to assess the vulnerabilities of this infrastructure and make recommendations for better securing this critically important infrastructure in the future.

While we rely on the cyberworld for much of our embedded command and control systems, perhaps it is no more important than in the area of critical electric and electronic infrastructure, and it is our hope that this commission will help us in the Congress to prioritize those needs with respect to the vulnerabilities of the infrastructure and the protection of that infrastructure.

We depend on the Science and Technology Directorate to develop state-of-the-art technology to protect our citizens and critical infrastructure from terrorist attacks. Timely and accurate intelligence is always our best defense against the terror threat. However, when we have no actionable intelligence, we must rely on the skill of our personnel and the effectiveness of our technology in order to detect, deter, and defend against the terrorist enemy. The better technology we develop and deploy, the stronger, therefore, our homeland security. We believe this legislation will help provide the necessary technology tools to bolster our homeland defenses.

Mr. Speaker, I would also like to highlight a very important provision in this bill that is critical to both Ranking Member KING and the security of New York City, as well as to our Nation as a whole. It is the authorization and expansion of the Securing the Cities program.

Securing the Cities is a vital Homeland Security program to help prevent terrorist attacks in major cities using nuclear radiological weapons such as a dirty bomb. The program has enabled the establishment of a network ring of radiological detectors on highways, toll plazas, bridges, tunnels, and waterways leading into and out of New York City, which, as we know, is perhaps the top terrorist target for al Qaeda and affiliated terrorist organizations.

□ 1620

The detonation of a nuclear or dirty bomb in the New York City Tri-State area or any other major metropolitan area would inflict serious damage to our country's economy in addition to the terrible tragedy of the human lives involved, and it would be much like the 9/11 attacks.

Securing the Cities is a successful program that can and should be replicated in other areas around the country. That's why language in this bill would expand the program to at least two additional high-risk cities where these capabilities are most needed, therefore leveraging what we already have learned about building defenses against nuclear and radiological weapons in New York City to erect similar

security perimeters in and around other cities.

I want to remind our colleagues that the threat of nuclear or radiological terrorism is real. It's not just an academic exercise. It's not just some fiction. It is real. The Weapons of Mass Destruction Commission, the WMD Commission, warned in 2008 that an attack using a weapon of mass destruction was likely to happen somewhere in the world by 2013. Commissioners Graham and Talent, appearing before our committee on April 21 of this year, repeated this warning.

The President's National Security Strategy that was released earlier this year concluded this: "The American people face no greater or more urgent danger than a terrorist attack with a nuclear weapon. The potential of nuclear or radiological terrorism is a nightmare scenario that we must guard against with every available capability and resource. We believe that authorizing and expanding Securing the Cities will help protect our country, not just New York City but the entire country, from such a danger."

Now, let me close, Mr. Speaker, by saying that while I'm pleased we are considering this bill today, I do believe that the House should be considering a comprehensive authorization bill for the Department of Homeland Security. This House has not done so since 2007, with one of the reasons being that we, frankly, have too many committees and subcommittees having jurisdiction over homeland security.

The 9/11 Commission recommended, in 2004, that "Congress should create a single, principal point of oversight review for homeland security." Unfortunately, the current jurisdictional web of congressional oversight under the Department of Homeland Security results in conflicting guidance to the Department and is a serious drain on its time and resources. And, Mr. Speaker, I don't say this as a Republican criticizing the majority in the House. This was true when the Republicans were in control. It is the remaining recommendation by the 9/11 Commission that has not been enacted into law here by this House.

The chairman and the vice chairman of the 9/11 Commission, Governor Kean and Congressman Hamilton, testified that this jurisdictional maze is unworkable, and they said it could make our country less safe. Those are strong words, but they repeated them in their testimony before our committee.

I hope that we can streamline congressional jurisdiction moving forward so that Congress can enact a comprehensive authorization bill for the Department, which, I say, has not happened since its creation in 2003. The failure to do so jeopardizes our ability to ensure that our Nation's homeland security policies are as robust as they need to be to meet the evolving nature of terrorism.

I want to again thank Chairman THOMPSON, Chairwoman CLARKE, and

Ranking Member KING for all their help in crafting a very good bipartisan bill that strengthens our homeland security capabilities, and I would, of course, urge all my colleagues to support passage of the bill.

Mr. Speaker, I reserve the balance of my time.

Ms. CLARKE. Mr. Speaker, I yield 3 minutes to the gentlewoman from Texas, the subcommittee chairwoman of the Transportation Security and Infrastructure Protection Committee of Homeland Security, Ms. JACKSON LEE.

Ms. JACKSON LEE of Texas. I thank the gentlelady who chairs the Subcommittee on Cybersecurity and has done an excellent job. I thank the ranking member that shares that responsibility with her, Mr. LUNGREN.

I rise today to congratulate these members for the Homeland Security Science and Technology Authorization Act of 2010 and to make the point that under Chairman THOMPSON we have, in actuality, passed more authorization bills on our committee, and particularly those that relate to subcommittees. The Committee on Transportation Security has passed H.R. 2200 and is waiting for action in the Senate.

I join my friend from California and indicate that homeland security is not a partisan issue; it is a bipartisan issue, as he has indicated. And I join him in wondering when we can adhere to the 9/11 Commission report and get a more single-focused review of homeland security in the Homeland Security Committee. I hope that maybe we will have the opportunity to work in a bipartisan manner, to work with the other body, and to really accomplish the idea of maintaining homeland security issues in the Homeland Security committees, both in the House and the Senate.

This legislation shows what our committee can do under the leadership of Chairwoman CLARKE and Ranking Member LUNGREN to be able to establish a roadmap for Science and Technology. After listening to the oversight findings of the Committee on Homeland Security, the GAO, and the DHS Inspector General, H.R. 4842 requires Science and Technology to establish requirements for how basic and applied homeland security research is identified, prioritized, funded, passed, and evaluated, and emphasizes the need to prioritize research around risk.

We all know that Science and Technology really is the backbone of our homeland security efforts. It is to keep us ahead of the terrorists who want to do us harm. H.R. 4852 authorizes the establishment of a more quasi-autonomous Testing, Evaluations and Standards Division within S&T to help ensure that technology is properly evaluated.

Additionally, in an effort to foster better collaboration between S&T and the private sector firms—most especially small firms—with promising homeland security technologies, H.R.

4842 authorizes the Office of Public-Private Partnerships. I want to congratulate the chairwoman and the ranking member on this issue.

Before my committee, the Subcommittee on Transportation Security, many times small businesses will come before us and really act in angst about the fact that their new technology is languishing at the Department of Homeland Security. Now we have, because of this legislation, the Rapid Review Division that is in charge of establishing an accessible, streamlined system to conduct timely reviews of unsolicited technology proposals in order to more effectively harness the ingenuity of the American private sector in an area where DHS continues to struggle. It is important that we do that.

The SPEAKER pro tempore. The time of the gentleman has expired.

Ms. CLARKE. I yield an additional 2 minutes to Ms. JACKSON LEE.

Ms. JACKSON LEE of Texas. I thank the gentlelady for her courtesy.

To be able to help our small businesses is a leap forward, and I congratulate them for this innovative division that will help move these technologies forward. I hope that small businesses are listening. They now have a rapid ear under Science and Technology to listen to them in the Department of Homeland Security.

I am very excited about handheld detectors for the Department of Homeland Security to do rapid detection of biological threats at ports and airports and the dual-use terrorist risks of synthetic genomics.

I think it is also important that we have enhancements to unmanned aerial surveillance technology for safe and effective deployment for border and maritime missions. We had a hearing on this just recently. Many of us questioned the safety or the results-oriented work of that unmanned aerial surveillance being used at the border. We need to have those results, and I believe that this legislation will help us do so.

So this is a great step forward, in addition to the authorization of \$20 million for the Securing the Cities program for fiscal year 2011 and directs DNDO, in fiscal year 2012, to add at least two new cities, based on risk, to this radiation detection program in operation in New York City. We all know that the threat of nuclear attacks as a homeland security threat is evident, and radiation detection is crucial for us to be sure that we have a number of elements to assess the potential of that kind of threat.

This legislation takes advantage of the concerns we all have of making sure our science and technology is an integral part of defending the homeland. I believe this legislation, H.R. 4842, takes a giant leap forward in being part of the work that we do for defending this Nation, the work that is done by this committee, led by Chairman THOMPSON and Ranking Member

KING, and of course the work of this subcommittee, Chairwoman CLARKE and Ranking Member LUNGREN. I thank them for their work and ask my colleagues to support this legislation, H.R. 4842.

H.R. 4842, the "Homeland Security Science and Technology Authorization Act of 2010" reauthorizes the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO) through 2012, and puts these two DHS components on a path to greater effectiveness and efficiency by requiring strategic plans, milestones, and accountability systems.

This bipartisan legislation was introduced by the Committee on Homeland Security's Subcommittee on Emerging Threats, Cybersecurity, Science and Technology Chairwoman YVETTE CLARKE and Ranking Member DAN LUNGREN.

In advance of floor consideration, the Committees on Homeland Security and Science and Technology collaborated extensively on this legislation and worked together to deliver a bill with the bipartisan support of both committees.

Since 2003, S&T has been responsible for developing technologies to address homeland security capability gaps, as identified by DHS and its operational components—Customs and Border Protection (CBP), the U.S. Coast Guard (USCG), the Transportation Security Administration (TSA), Immigration and Customs Enforcement (ICE), Infrastructure Protection (IP), and the Federal Emergency Management Agency (FEMA).

DNDO was established in 2006 to develop detection technologies for nuclear and radiological devices—a high-consequence terrorist threat.

H.R. 4842 takes a two-layered approach to authorizing S&T and DNDO: an overarching approach aimed at creating more accountability and effective management of each component; and a more targeted approach focused on specific programs and activities.

In response to oversight findings of the Committee on Homeland Security, the Government Accountability Office, and the DHS Inspector General, H.R. 4842 requires S&T to establish requirements for how basic and applied homeland security research is identified, prioritized, funded, tasked, and evaluated and emphasizes the need to prioritize research around risk.

H.R. 4842 authorizes the establishment of a more quasi-autonomous Testing, Evaluations and Standards Division within S&T to help ensure that technology is properly evaluated.

Additionally, in an effort to foster better collaboration between S&T and private sector firms—most especially small firms—with promising homeland security technologies, H.R. 4842 authorizes the Office of Public-Private Partnerships. Within this office, the Rapid Review Division is charge with establishing an accessible, streamlined system to conduct timely reviews of unsolicited technology proposals in order to more effectively harness the ingenuity of the American private sector, an area where DHS continues to struggle.

With respect to specific programs, H.R. 4842 directs S&T to work towards giving DHS new tools to address the threat of terrorism and enhance homeland security by conducting researching and development regarding: Mo-

bile biometric technologies for deployment at the border (Sec. 807), technology to enhance detection of border tunnels (Sec.804), and utilization of global positioning satellite systems for detection of unauthorized border crossings (Sec. 806);

Hand-held detectors for DHS to do rapid detection of biological threats at ports and airports (Sec. 411) and the dual-use terrorist risks of synthetic genomics (Sec. 407);

Maritime domain awareness enhancements (Sec. 410), technologies to improve the security of underwater public transportation tunnels against explosives (Sec. 408), and technologies to mitigate the threat of small vessel attack (Sec. 419);

Cyber compromises to federally-owned networks and devices that are essential to the reliable operation of critical infrastructure (Sec. 406);

Enhancements to unmanned aerial surveillance technology for safe and effective deployment for border and maritime missions (Sec. 803); and

Technologies to strengthen document security and authentication (Sec. 805).

H.R. 4842 requires S&T to give particular attention to the border security mission. Specifically, the Homeland Security Science and Technology Authorization Act of 2010 authorizes S&T, in coordination with CBP, to pursue research and development to improve effective control of the international land borders of the United States within 5 years (Sec. 409).

In addition to the S&T directorate, H.R. 4842 reauthorizes the DNDO.

Important provisions regarding this vital agency include:

Language to codify in statute the movement of basic and transformational nuclear and radiological research and development activities to S&T;

Requirements for strategic planning, milestones, and accountability in place at DNDO that are parallel to the requirements for S&T;

Authorization of \$20 million for the Securing the Cities program for fiscal year 2011 and directs DNDO, in fiscal year 2012, to add at least two new cities, based on risk, to this radiation detection program in operation in New York City. (The House approved H.R. 2611, which authorized the Securing the Cities program on January 20, 2010.)

AUTHORIZATION OF APPROPRIATIONS

S&T—\$1.12 billion for fiscal year 2011 (\$12 million over the President's request to restore funding for the University Programs) and \$1.15 billion for fiscal year 2012 (3% increase over the 2011 level).

DNDO—\$305.8 million for fiscal year 2011 (President's request) and \$315 million for fiscal year 2012 (3% increase over 2011 level).

Mr. DANIEL E. LUNGREN of California. I continue to reserve the balance of my time.

Ms. CLARKE. Mr. Speaker, I yield 3 minutes to the gentleman from Oregon (Mr. WU), who is a leader on the Science and Technology Committee, who worked very closely with our committee to make this legislation a reality. We want to thank him for his leadership in that regard.

□ 1630

Mr. WU. I thank the gentlewoman for her kind comments.

I rise in support of the Homeland Security Science and Technology Authorization Act of 2010, which reauthorizes

the activities of the Science and Technology Directorate and the DNDO at the Department of Homeland Security.

As the chair of the Science and Technology Committee's Subcommittee on Technology and Innovation, I very much appreciate the important role that technology plays in empowering DHS to carry out its very, very important mission. The Science and Technology Directorate is responsible for ensuring that those who are responsible for keeping us safe have the best tools and the most up-to-date technologies to get their job done.

Over the last year and a half, my subcommittee, the Technology and Innovation Subcommittee, has held multiple hearings on the work being carried out by the Science and Technology Directorate and the DNDO. Through these hearings, we were able to identify critical areas where the directorate could use new tools or, in some cases, new direction to help it achieve its mission effectively and efficiently.

I look forward to working with the Homeland Security Committee to address some of the issues that arose during my subcommittee's hearings, particularly those relating to the public's acceptance of new technologies.

For example, I remain very concerned about TSA's decision to spend hundreds of millions of dollars to deploy full-body scanners in airports across the country without fully understanding the potential reluctance of the public to accept these technologies. This research into acceptance should be done before purchase to avoid wasting taxpayer money.

I want to thank Chairman THOMPSON, Chairwoman CLARKE, Ranking Member KING, and Ranking Member LUNGREN for their work on this important legislation.

I am pleased that our committees were able to work together over the last couple of months to craft this important bipartisan legislation, and I hope that this reauthorization bill will improve the way the Department sets priorities for its research and involves the end users of equipment to ensure that new technology is actually deployable and usable in the field. This has been a gaping shortfall to date.

The reauthorization bill we are considering today takes important steps forward in improving the research and development conducted by DHS, and I look forward to having the Science and Technology Committee work with the chairwoman's subcommittee in exercising our oversight and in continuing to improve the vital research capacity at the Department of Homeland Security.

Mr. DANIEL E. LUNGREN of California. Mr. Speaker, I yield 2 minutes to a very valuable member of our committee, the gentleman from Ohio (Mr. AUSTRIA).

Mr. AUSTRIA. I thank the gentleman from California for yielding.

Mr. Speaker, I rise in support of H.R. 4842, the Homeland Security Science

and Technology Authorization Act of 2010. This bipartisan legislation is the first authorization bill for the Science and Technology Directorate of the Department of Homeland Security since the Department was created in 2002.

The Science and Technology Directorate is a critical component within the Department of Homeland Security as it works in collaboration with national laboratories, universities and other public and private entities to develop the technologies needed to address our Nation's security needs.

The Homeland Security Committee included an important amendment to this bill. It would add "medical readiness and community resiliency for health care critical infrastructure" to the existing criteria for the university-based Homeland Security Centers of Excellence program. In bringing together leading experts and researchers in university-based settings, the Centers of Excellence program has been successful in facilitating the development of homeland security solutions.

While this program does a good job in strengthening the use of technology and the role of our first responders, such as law enforcement officers, firefighters and EMTs, when it comes to recovering from and responding to a man-made or natural disaster, it currently lacks a distinct focus on medical readiness and community resiliency for existing health care critical infrastructure.

First responders and medical care providers are critical to our Nation's ability to recover from a terrorist attack or from a natural disaster, and they deserve our support and the support of the Department of Homeland Security. In adding medical readiness to the criteria for the university-based Homeland Security Centers of Excellence program, this gap will be addressed, further advancing our country's homeland security initiatives.

Again, I strongly support this important and much needed piece of legislation.

I would like to thank Chairwoman CLARKE and Ranking Member LUNGREN for their hard work as well as Chairman THOMPSON and Ranking Member KING.

Ms. CLARKE. Mr. Speaker, I reserve the balance of my time.

Mr. DANIEL E. LUNGREN of California. Mr. Speaker, I would just like to say in my remaining time that I hope that this is a unanimous vote in support of this legislation. It gives a framework to the S&T directorate, and it is an assertion of the proper jurisdiction of this committee and of this House, and I do believe this moves us in the right direction.

I have no further requests for time, and I yield back the balance of my time.

Ms. CLARKE. I yield myself such time as I may consume.

Mr. Speaker, I urge my colleagues to support this important Homeland Security legislation. This legislation au-

thorizes a program that has been very instrumental in keeping the City of New York and its environs safe, and that is securing the city. This initiative has proven to be an effective tool, and we are looking forward to a whole range of other important R&D programs to come forth as a result of this reauthorization. Securing the city should be expanded and will be expanded through this authorization to other environs throughout this Nation that could use that level of security through our efforts, as has been the case with securing the cities.

So I am urging my colleagues, once again, to make sure that this authorization passes.

Mr. THOMPSON of Mississippi. Mr. Speaker, I rise today in strong support of H.R. 4842, the "Homeland Security Science and Technology Authorization Act of 2010."

This bill authorizes the Department of Homeland Security's Science and Technology Directorate, S&T, and Domestic Nuclear Detection Office, DNDO, through fiscal year 2012.

Introduced by Representatives YVETTE CLARKE and DAN LUNGREN—the Chairwoman and Ranking Member of the Committee's Emerging Threats, Cybersecurity, and Science and Technology Subcommittee—H.R. 4842 seeks to strengthen our homeland security by ensuring more effective research, development, testing, and evaluation activities.

As Chairman of the Homeland Security Committee, I strongly believe that recurring authorizations are important mechanisms to effectuate oversight findings and help steer an agency on the right course.

This legislation represents the first reauthorization of S&T—which was authorized in 2002—and DNDO—which was established in 2006.

Taking into account the Committee's extensive oversight findings as well as findings of GAO, the Inspector General, and the National Academy of Sciences, H.R. 4842 directs DHS to put robust management, administration, and programmatic systems in place at S&T and DNDO.

Specifically, to foster greater alignment between S&T research and the needs of DHS' operational components—such as TSA, CBP, and the Coast Guard—H.R. 4842 directs the establishment of rigorous processes within S&T for identifying, prioritizing, and setting requirements for research opportunities.

The bill also recognizes that, in order to conduct the best research, we need the best people.

H.R. 4842 contains advanced professional development provisions and creates fellowship opportunities for new scientists and engineers to bring their skills to DHS.

H.R. 4842 also takes into account that innovation is often fueled by the private sector and that the challenging and evolving nature of the terrorist threat demands closer collaboration between S&T and the private sector.

Accordingly, in an effort to improve collaboration between S&T and the private sector, H.R. 4842 authorizes an office of Public-Private Partnerships and, within the office, establishes a "Rapid Review Division" to evaluate technological proposals and provide feedback within 60 days.

A common concern that I hear from firms with novel homeland security technologies is

that they do not know who to contact at S&T to pursue research opportunities and that they cannot seem to get anyone at S&T to look at their technologies.

Establishment of this new review division will go a long way to improving collaboration and innovation.

Further, H.R. 4842 directs DHS to evaluate whether establishing a venture capital program—modeled after the Defense Department's InQtel program—could facilitate swifter development of homeland security technologies.

H.R. 4842 also authorizes several specific programmatic areas for research including: mobile biometric technologies for deployment at the border; enhanced detection of border tunnels; hand-held detectors for DHS to do rapid detection of biological threats at ports and airports; technologies to mitigate the threat of small vessel attack; research to assess the extent of cyber compromises to federally-owned networks and devices; and enhancements to unmanned aerial surveillance technology for safe and effective deployment for border and maritime missions.

From the very beginning, H.R. 4842 was developed in an open, collegial, and bipartisan manner.

The Full Committee favorably reported H.R. 4842—which authorizes \$2.3 billion to S&T and \$620 million to DNDO through 2012—by a unanimous vote of “26 to 0”.

H.R. 4842 also reflects collaboration between my Committee and the Committee on Science and Technology.

I would like to thank Chairman BART GORDON and Ranking Member RALPH HALL for their contributions to the bill and for working with us to get H.R. 4842 to the floor today.

I think our process has proven that the barriers of partisanship and jurisdiction can be overcome when we put the good of the country first.

Finally, I would like to thank Under Secretary for Science and Technology Tara O'Toole, and the Acting Director of the Domestic Nuclear Detection Office Bill Hagan, as well as the dozens of stakeholders who took the time to give their input, as we worked through the process of developing this bill.

Again, I congratulate Representatives CLARKE and LUNGREN on their solid work steering this important homeland security bill and urge my colleagues to support H.R. 4842.

Ms. CLARKE. I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from New York (Ms. CLARKE) that the House suspend the rules and pass the bill, H.R. 4842, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

NATIONAL SEPTEMBER 11 MEMORIAL & MUSEUM COMMEMORATIVE MEDAL ACT OF 2010

Mrs. MALONEY. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4684) to require the Secretary of the Treasury to strike medals in com-

memoration of the 10th anniversary of the September 11, 2001, terrorist attacks on the United States and the establishment of the National September 11 Memorial & Museum at the World Trade Center, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 4684

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

SECTION 1. SHORT TITLE.

This Act may be cited as the “National September 11 Memorial & Museum Commemorative Medal Act of 2010”.

SEC. 2. STRIKING AND DESIGN OF MEDALS.

(a) STRIKING OF MEDALS.—In commemoration of the 10th anniversary of the September 11, 2001, terrorist attacks on the United States and the establishment of the National September 11 Memorial & Museum at the World Trade Center, the Secretary of the Treasury (hereinafter referred to as the “Secretary”) shall strike and make available for sale not more than 2,000,000 silver medals, each of which shall contain 1 ounce of silver.

(b) DESIGN REQUIREMENT.—

(1) IN GENERAL.—The design of the medals struck under this Act shall be emblematic of the courage, sacrifice, and strength of those individuals who perished in the terrorist attacks of September 11, 2001, the bravery of those who risked their lives to save others that day, and the endurance, resilience, and hope of those who survived.

(2) INSCRIPTIONS.—On each medal struck under this Act, there shall be—

(A) an inscription of the years “2001–2011”; and

(B) an inscription of the words “Always Remember”.

(c) SELECTION.—The design for the medals struck under this Act shall be—

(1) selected by the Secretary, after consultation with the National September 11 Memorial & Museum at the World Trade Center and the Commission of Fine Arts; and

(2) reviewed by the Citizens Coinage Advisory Committee.

SEC. 3. ISSUANCE OF MEDALS.

(a) QUALITY OF MEDALS.—The medals struck under this Act shall be made available for sale in the quality comparable to proof coins.

(b) MINT FACILITY.—

(1) IN GENERAL.—Only 2 facilities of the United States Mint may be used to strike medals under this Act.

(2) USE OF THE UNITED STATES MINTS AT WEST POINT, NEW YORK, AND PHILADELPHIA, PENNSYLVANIA.—It is the sense of Congress that, to the extent possible, approximately one-half of the medals to be struck under this Act should be struck at the United States Mint at West Point, New York, and approximately one-half struck at the United States Mint at Philadelphia, Pennsylvania.

(c) DATE OF ISSUANCE.—The Secretary may make the medals available for sale under this Act beginning on January 1, 2011.

(d) TERMINATION OF AUTHORITY.—No medals shall be struck under this Act after December 31, 2012.

SEC. 4. NUMISMATIC ITEMS.

For purposes of sections 5134 and 5136 of title 31, United States Code, all medals struck under this Act shall be considered to be numismatic items.

SEC. 5. NATIONAL MEDALS.

The medals struck under this Act are national medals for purposes of chapter 51 of title 31, United States Code.

SEC. 6. SALE OF MEDALS.

(a) SALES PRICE.—The medals made available for sale under this Act shall be sold by

the Secretary at a price equal to the sum of—

(1) the cost of designing and selling such medals (including labor, materials, dies, use of machinery, overhead expenses, marketing, and shipping); and

(2) the surcharge provided in section 7 with respect to such medals.

(b) BULK SALES.—The Secretary shall make bulk sales of the medals at a reasonable discount.

(c) INTRODUCTORY ORDERS.—

(1) IN GENERAL.—The Secretary shall accept introductory orders for medals made available for sale under this Act.

(2) DISCOUNT.—Sale prices with respect to introductory orders under paragraph (1) shall be made at a reasonable discount.

SEC. 7. SURCHARGES.

(a) IN GENERAL.—All sales of medals made available for sale under this Act shall include a surcharge of \$10 per medal.

(b) DISTRIBUTION.—Subject to section 5134(f) of title 31, United States Code, all surcharges received by the Secretary from the sale of medals under this Act shall be paid to the National September 11 Memorial & Museum at the World Trade Center to support the operations and maintenance of the National September 11 Memorial & Museum at the World Trade Center following its completion.

(c) AUDITS.—The Comptroller General of the United States shall have the right to examine such books, records, documents, and other data of the National September 11 Memorial & Museum at the World Trade Center as may be related to the expenditures of amounts paid under subsection (b).

SEC. 8. BUDGET COMPLIANCE.

The budgetary effects of this Act, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this Act, submitted for printing in the Congressional Record by the Chairman of the Committee on the Budget of the House of Representatives, provided that such statement has been submitted prior to the vote on passage.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from New York (Mrs. MALONEY) and the gentleman from New York (Mr. LEE) each will control 20 minutes.

The Chair recognizes the gentlewoman from New York (Mrs. MALONEY).

GENERAL LEAVE

Mrs. MALONEY. Mr. Speaker, I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks on this legislation and to insert any additional material that they wish to insert on this issue.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from New York?

There was no objection.

Mrs. MALONEY. I yield myself such time as I may consume.

Mr. Speaker, first of all, I would like to commend my colleague from New York (Mr. NADLER) for his leadership on this bill and on so many other issues and for working selflessly to help the survivors and the residents and to help the city recover from 9/11. This is an example of another one of his efforts to help the city, to help our country, and to help us remember the terrible events of 9/11.