scribed in subsection (a) to include, at a minimum, elements to address the following, as applicable:

(1) Determination of the seriousness of any occurrence or threat.

(2) Crew and passenger communication and coordination.

(3) Appropriate responses to defend or protect oneself.

(4) Use of personal and other protective equipment.

(5) Evacuation procedures for passengers and railroad employees, including individuals with disabilities and the elderly.

(6) Psychology, behavior, and methods of terrorists, including observation and analysis.

(7) Training related to psychological responses to terrorist incidents, including the ability to cope with hijacker behavior and passenger responses.

(8) Live situational training exercises regarding various threat conditions, including tunnel evacuation procedures.

(9) Recognition and reporting of dangerous substances, suspicious packages, and situations.

(10) Understanding security incident procedures, including procedures for communicating with governmental and nongovernmental emergency response providers and for on-scene interaction with such emergency response providers.

(11) Operation and maintenance of security equipment and systems.

(12) Other security training activities that the Secretary considers appropriate.

(d) Required programs

(1) Development and submission to Secretary

Not later than 90 days after the Secretary issues regulations under subsection (a), each railroad carrier shall develop a security training program in accordance with this section and submit the program to the Secretary for approval.

(2) Approval or disapproval

Not later than 60 days after receiving a security training program proposal under this subsection, the Secretary shall approve the program or require the railroad carrier that developed the program to make any revisions to the program that the Secretary considers necessary for the program to meet the requirements of this section. A railroad carrier shall respond to the Secretary's comments within 30 days after receiving them.

(3) Training

Not later than 1 year after the Secretary approves a security training program in accordance with this subsection, the railroad carrier that developed the program shall complete the training of all railroad frontline employees who were hired by a carrier more than 30 days preceding such date. For such employees employed less than 30 days by a carrier preceding such date, training shall be completed within the first 60 days of employment.

(4) Updates of regulations and program revisions

The Secretary shall periodically review and update as appropriate the training regulations issued under subsection (a) to reflect new or changing security threats. Each railroad carrier shall revise its training program accordingly and provide additional training as necessary to its frontline employees within a reasonable time after the regulations are updated.

(e) National Training Program

The Secretary shall ensure that the training program developed under subsection (a) is a component of the National Training Program established under section 748 of this title.

(f) Reporting requirements

Not later than 2 years after the date of regulation issuance, the Secretary shall review implementation of the training program of a representative sample of railroad carriers and railroad frontline employees, and report to the appropriate congressional committees on the number of reviews conducted and the results of such reviews. The Secretary may submit the report in both classified and redacted formats as necessary.

(g) Other employees

The Secretary shall issue guidance and best practices for a railroad shipper employee security program containing the elements listed under subsection (c).

(Pub. L. 110–53, title XV, § 1517, Aug. 3, 2007, 121 Stat. 439.)

§ 1168. Railroad security research and development

(a) Establishment of research and development program

The Secretary, acting through the Under Secretary for Science and Technology and the Administrator of the Transportation Security Administration, shall carry out a research and development program for the purpose of improving the security of railroad transportation systems.

(b) Eligible projects

The research and development program may include projects—

(1) to reduce the vulnerability of passenger trains, stations, and equipment to explosives and hazardous chemical, biological, and radioactive substances, including the development of technology to screen passengers in large numbers at peak commuting times with minimal interference and disruption;

(2) to test new emergency response and recovery techniques and technologies, including those used at international borders;

(3) to develop improved railroad security technologies, including—

(A) technologies for sealing or modifying railroad tank cars;

(B) automatic inspection of railroad cars;

(C) communication-based train control systems;

(D) emergency response training, including training in a tunnel environment;

(E) security and redundancy for critical communications, electrical power, computer, and train control systems; and

(F) technologies for securing bridges and tunnels;

(4) to test wayside detectors that can detect tampering;

(5) to support enhanced security for the transportation of security-sensitive materials by railroad;

(6) to mitigate damages in the event of a cyber attack; and

(7) to address other vulnerabilities and risks identified by the Secretary.

(c) Coordination with other research initiatives

The Secretary—

(1) shall ensure that the research and development program is consistent with the National Strategy for Railroad Transportation Security developed under section 1161 of this title and any other transportation security research and development programs required by this Act;

(2) shall, to the extent practicable, coordinate the research and development activities of the Department with other ongoing research and development security-related initiatives, including research being conducted by—

(A) the Department of Transportation, including University Transportation Centers and other institutes, centers, and simulators funded by the Department of Transportation;

(B) the National Academy of Sciences;

(C) the Technical Support Working Group;

(D) other Federal departments and agencies; and

(E) other Federal and private research laboratories, research entities, and universities and institutions of higher education, including Historically Black Colleges and Universities, Hispanic Serving Institutions, or Indian Tribally Controlled Colleges and Universities;

(3) shall carry out any research and development project authorized by this section through a reimbursable agreement with an appropriate Federal agency, if the agency—

(A) is currently sponsoring a research and development project in a similar area; or

(B) has a unique facility or capability that would be useful in carrying out the project;

(4) may award grants, or enter into cooperative agreements, contracts, other transactions, or reimbursable agreements to the entities described in paragraph (2) and the eligible grant recipients under section 1163 of this title; and

(5) shall make reasonable efforts to enter into memoranda of understanding, contracts, grants, cooperative agreements, or other transactions with railroad carriers willing to contribute both physical space and other resources.

(d) Privacy and civil rights and civil liberties issues

(1) Consultation

In carrying out research and development projects under this section, the Secretary shall consult with the Chief Privacy Officer of the Department and the Officer for Civil Rights and Civil Liberties of the Department as appropriate and in accordance with section 142 of this title.

(2) Privacy impact assessments

In accordance with sections 142 and 345 of this title, the Chief Privacy Officer shall conduct privacy impact assessments and the Officer for Civil Rights and Civil Liberties shall conduct reviews, as appropriate, for research and development initiatives developed under this section that the Secretary determines could have an impact on privacy, civil rights, or civil liberties.

(e) Authorization of appropriations

(1) In general

Out of funds appropriated pursuant to section 114(w) of title 49, there shall be made available to the Secretary to carry out this section—

(A) $33,000,000 for fiscal year 2008;

(B) $33,000,000 for fiscal year 2009;

(C) $33,000,000 for fiscal year 2010; and

(D) $33,000,000 for fiscal year 2011.

(2) Period of availability

Such sums shall remain available until expended.

(Pub. L. 110–53, title XV, § 1518, Aug. 3, 2007, 121 Stat. 441.)

REFERENCES IN TEXT

This Act, referred to in subsec. (c)(1), is Pub. L. 110–53, Aug. 3, 2007, 121 Stat. 266, known as the Implementing Recommendations of the 9/11 Commission Act of 2007, which enacted this chapter and enacted and amended numerous other sections and notes in the Code. For complete classification of this Act to the Code, see Short Title of 2007 Amendment note set out under section 101 of this title and Tables.

§ 1169. Railroad tank car security testing

(a) Railroad tank car vulnerability assessment

(1) Assessment

The Secretary shall assess the likely methods of a deliberate terrorist attack against a railroad tank car used to transport toxic-inhalation-hazard materials, and for each method assessed, the degree to which it may be successful in causing death, injury, or serious adverse effects to human health, the environment, critical infrastructure, national security, the national economy, or public welfare.

(2) Threats

In carrying out paragraph (1), the Secretary shall consider the most current threat information as to likely methods of a successful terrorist attack on a railroad tank car transporting toxic-inhalation-hazard materials, and may consider the following:

(A) Explosive devices placed along the tracks or attached to a railroad tank car.

(B) The use of missiles, grenades, rockets, mortars, or other high-caliber weapons against a railroad tank car.

(3) Physical testing

In developing the assessment required under paragraph (1), the Secretary shall conduct physical testing of the vulnerability of railroad tank cars used to transport toxic-inhala-