H.R. 4909—FY17 NATIONAL DEFENSE AUTHORIZATION BILL

SUBCOMMITTEE ON STRATEGIC FORCES

SUMMARY OF BILL LANGUAGE	1
BILL LANGUAGE	23
DIRECTIVE REPORT LANGUAGE	111

SUMMARY OF BILL LANGUAGE

Table Of Contents

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS TITLE X—GENERAL PROVISIONS

- LEGISLATIVE PROVISIONS
 - SUBTITLE F—STUDIES AND REPORTS

Section 1067—Inclusion of Ballistic Missile Defense Information in Annual Report on Requirements of Combatant Commands

- TITLE XII—MATTERS RELATING TO FOREIGN NATIONS LEGISLATIVE PROVISIONS
 - SUBTITLE D—MATTERS RELATING TO THE RUSSIAN FEDERATION Section 1232—Military Response Options to Russian Federation Violation of INF Treaty

TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND

INTELLIGENCE MATTERS

LEGISLATIVE PROVISIONS

SUBTITLE A—SPACE ACTIVITIES

Section 1602—Analysis of Alternatives for Wide-Band Communications Section 1603—Modification to Pilot Program for Acquisition of Commercial Satellite Communications Services

Section 1604—Space-Based Environmental Monitoring

Section 1605—Prohibition on Use of Certain Non-Allied Precision, Navigation, and Timing Systems

Section 1606—Limitation of Availability of Funds for the Joint Space Operations Center Mission System

Section 1607—Space-Based Infrared System and Advanced Extremely High Frequency Program

Section 1608—Plans on Transfer of Acquisition and Funding Authority of Certain Weather Missions to National Reconnaissance Office

Section 1610—Organization and Management of National Security Space Activities of the Department of Defense

Section 1611—Review of Charter of Operationally Responsive Space Program Office

Section 1612—Backup and Complementary Positioning, Navigation, and Timing Capabilities of Global Positioning System

SUBTITLE D-NUCLEAR FORCES

Section 1641—Improvements to Council on Oversight of National Leadership Command, Control, and Communications System

Section 1644—Consolidation of Nuclear Command, Control, and

Communications Functions of the Air Force

Section 1645-Report on Russian and Chinese Political and Military

Leadership Survivability, Command and Control, and Continuity of Government Programs and Activities Section 1646—Sense of Congress on Importance of Independent Nuclear Deterrent of United Kingdom

SUBTITLE E—MISSILE DEFENSE PROGRAMS AND OTHER MATTERS

Section 1651—Extensions of Prohibitions Relating to Missile Defense Information and Systems

Section 1652—Review of the Missile Defeat Policy and Strategy of the United States

Section 1654—Maximizing Aegis Ashore Capability

Section 1655—Technical Authority for Integrated Air and Missile Defense Activities and Programs

Section 1656—Development and Research of Non-Terrestrial Missile Defense Layer

Section 1657—Limitation on Availability of Funds for Patriot Lower Tier Air and Missile Defense Capability of the Army

Section 1658—Limitation on Availability of Funds for Conventional Prompt Global Strike Weapons System

Section 1660—Review of Missile Defense Agency Budget Submissions for Ground-base Midcourse Defense and Evaluation of Alternative Ground-based Interceptor Deployments

Section 1661—Declaratory Policy, Concept of Operations, and Employment Guidelines for Left-of-Launch Capability

Section 1662—Sense of the Congress on Initial Operating Capability of Phase 2 of European Phased Adaptive Approach to Missile Defense

DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

LEGISLATIVE PROVISIONS

SUBTITLE B—PROGRAM AUTHORIZATIONS, RESTRICTIONS, AND LIMITATIONS Section 3112—Protection of Nuclear Facilities from Unmanned Aircraft Section 3113—Research and Development of Advanced Naval Nuclear Fuel System Based on Low-Enriched Uranium

Section 3114—Disposition of Weapons-Usable Plutonium

Section 3115—Design Basis Threat

Section 3118—Limitation on Availability of Funds for Defense Environmental Cleanup Program Direction

Section 3119—Limitation on Availablity of Funds for Acceleration of Nuclear Weapons Dismantlement

Section 3120—Annual Certification of Shipments to Waste Isolation Pilot Plant

SUBTITLE C—PLANS AND REPORTS

Section 3131—Clarification of Annual Report and Certification on Status of Security of Atomic Energy Defense Facilities Section 3133—Repeal of Certain Reporting Requirements Section 3134—Independent Assessment of Technology Development under Defense Environmental Cleanup Program TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD LEGISLATIVE PROVISIONS Section 3201—Authorization

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE X—GENERAL PROVISIONS

LEGISLATIVE PROVISIONS

SUBTITLE F—STUDIES AND REPORTS

Section 1067—Inclusion of Ballistic Missile Defense Information in Annual Report on Requirements of Combatant Commands

This section would amend the statutory requirement of section 153c of title 10, United States Code, that the Chairman of the Joint Chiefs of Staff submits to the congressional defense committees the annual Integrated Priorities List of the combatant commands to add a requirement that he also submit the Integrated Priorities List submitted to the Missile Defense Agency and U.S. Strategic Command and the Prioritized Capabilities List produced by them. This section would also sunset the reporting requirement on January 31, 2021.

TITLE XII—MATTERS RELATING TO FOREIGN NATIONS

LEGISLATIVE PROVISIONS

SUBTITLE D—MATTERS RELATING TO THE RUSSIAN FEDERATION

Section 1232—Military Response Options to Russian Federation Violation of INF Treaty

This section would withhold \$10.0 million from Department of Defense support functions to the Executive Office of the President until the Secretary of Defense submits to the appropriate congressional committees the plan required by section 1243(d)(1) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) for the development of military capabilities to respond to the violation of the Treaty on Intermediate-Range Nuclear Forces by the Russian Federation and until the Secretary carries out the development of capabilities pursuant to such plan and requirement of the same section of Public Law 114-92.

TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND INTELLIGENCE MATTERS

LEGISLATIVE PROVISIONS

SUBTITLE A—SPACE ACTIVITIES

Section 1602—Analysis of Alternatives for Wide-Band Communications

This section would amend section 1611 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) by striking subsection (b) and would insert a requirement for the Secretary of Defense to develop study guidance for the analysis of alternatives for wide-band communications to consider the full range of military and commercial satellite communications capabilities, acquisition processes, and service delivery models. This section would also require the Secretary to ensure that any cost assessments of military or commercial satellite communications systems include detailed full life cycle costs, as applicable, including but not limited to military personnel, military construction, military infrastructure operation, maintenance costs, and ground and user terminal impacts; and to also identify any considerations relating to the use of military versus commercial systems for wide-band satellite communications.

This section would also direct the Comptroller General of the United States to review the study guidance for the analysis of alternatives, as well as the completed analysis of alternatives, as to whether, and to what extent, the Secretary conducted such analysis using best practices; fully addressed the concerns of the acquisition, operational, and user communities; and complied with the guidance in this section. The Comptroller General would also be required to provide a description of how the Secretary identified the requirements and assessed and addressed the cost, schedule, and risks posed for each alternative included in such analysis. This section would require the Comptroller General to submit the review to the congressional defense committees not later than 120 days after the Comptroller General receives the completed analysis of alternatives.

The Secretary would also be required to provide a briefing to the congressional defense committees not later than 90 days after the date of the enactment of this Act, and semiannually thereafter until the date on which the analysis of alternatives is completed. The committee expects the study guidance to be provided to the committee as part of the briefings.

The committee notes that the removal of the fiscal year 2017 date for completing the analysis of alternatives does not reflect decreased interest or oversight of this program, but rather that this date was not realistic given the Department's progress on this analysis and the opportunities for a more complete analysis. The committee believes that allowing more time will enable the Department to consider the full range of options, to include the results of the commercial satellite communications pathfinders and pilot program.

Section 1603—Modification to Pilot Program for Acquisition of Commercial Satellite Communications Services

This section would amend section 1605 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), as amended by section 1612 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), by adding a requirement that in developing and carrying out the pilot program, the Secretary shall take actions to begin the implementation of each specified goal by not later than September 30, 2017.

Section 1604—Space-Based Environmental Monitoring

This section would direct the Secretary of Defense and the Director of the National Oceanic and Atmospheric Administration (NOAA) to establish mechanisms to collaborate and coordinate in defining the roles and responsibilities of the Department of Defense and NOAA with regards to carrying out space-based environmental monitoring and planning for future non-governmental space-based environmental monitoring capabilities. Furthermore, this section would direct the Secretary of Defense and the Director of NOAA to jointly submit a report to the appropriate congressional committees not later than 120 days after the date of the enactment of this Act on the mechanisms established.

This section is not an authorization for a joint satellite program of the Department of Defense and NOAA.

Section 1605—Prohibition on Use of Certain Non-Allied Precision, Navigation, and Timing Systems

This section would require that, not later than 60 days after the date of the enactment of this Act, the Secretary of Defense shall ensure that the Armed Forces and each element of the Department of Defense do not use a non-allied precision, navigation, and timing system or a service provided by such a system. This requirement would sunset on September 30, 2018.

This section would also provide that the Secretary of Defense may waive the prohibition if the Secretary determines it is in the national security interest of the United States and is necessary to mitigate exigent operational concerns, and notifies the appropriate congressional committees in writing and a period of 30 days has elapsed from the date of such notification.

This section would further require the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the Director of National Intelligence to submit to the congressional defense committees and the congressional intelligence committees not later than 120 days after the date of the enactment of this Act an assessment of the risks to national security and to the operations and plans of the Department of Defense from using a non-allied precision, navigation, and timing system or service provided by such a system.

Section 1606—Limitation of Availability of Funds for the Joint Space Operations Center Mission System

This section would limit 75 percent of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for increment 3 of the Joint Space Operations Center Mission System program, until the Secretary of the Air Force, in coordination with the Commander of the U.S. Strategic Command, submits to the congressional defense committees a report on such increment. The report would include the acquisition strategy; requirements; funding and schedule; the strategy for use of commercially available capabilities, as appropriate, relating to such increment to rapidly address warfighter requirements, including the market research and evaluation of such commercial capabilities; and how it relates to other applicable activities and investments of the Department of Defense.

The committee understands that these are critical capabilities and encourages the Secretary to rapidly conduct the requirements in this section as necessary to begin increment 3. Additionally, the committee recommends that the Secretary leverage commercially available capabilities, as appropriate and in accordance with the necessary security requirements, to support the warfighter requirements for the Joint Space Operations Center Mission System program.

Section 1607—Space-Based Infrared System and Advanced Extremely High Frequency Program

This section would state that Congress finds the recently completed analysis of alternatives (AOA) for the space-based infrared system did not define the criteria and assessment for resilience and mission assurance. In addition, Congress finds the AOA for the advanced extremely high frequency program is ongoing.

Therefore, this section would restrict the Secretary of Defense from developing or acquiring an alternative to the space-based infrared system program of record, as well as developing or acquiring an alternative to the advanced extremely high frequency program of record, until the Commander of U.S. Strategic Command and the Director of the Space Security and Defense Program, in coordination with the Defense Intelligence Officer for Science and Technology of the Defense Intelligence Agency, jointly submit an assessment to the appropriate congressional committees of the resilience and mission assurance of each alternative considered for the respective programs. Specifically such review would include the requirements for resilience and mission assurance; the criteria to measure such resilience and mission assurance; and how the alternatives affect deterrence, full spectrum warfighting, warfighting requirements and relative costs to include ground stations and user terminals, the potential order of battle of adversaries, and the capabilities of the broader space security and defense enterprise. The restriction would not apply to efforts to examine and develop technology insertion opportunities for the space-based infrared system program of record or the satellite communications programs of record.

Section 1608—Plans on Transfer of Acquisition and Funding Authority of Certain Weather Missions to National Reconnaissance Office

This section would limit 50 percent of the funding for the weather satellite follow-on program until the Secretary of the Air Force submits to the appropriate committees a plan for the Air Force to transfer, beginning with fiscal year 2018, the acquisition authority and the funding authority for certain space-based environmental monitoring missions from the Air Force to the National Reconnaissance Office (NRO), including a description of the amount of funds that would be necessary to be transferred from the Air Force to the NRO during fiscal years 2018 through 2022 to carry out such plan.

This section would also direct the Director of the NRO to develop a plan to carry out certain space-based environmental monitoring missions. The plan would include a description of the related national security requirements, a description of the appropriate manner to meet such requirements, and the amount of funding that would be necessary to be transferred from the Air Force to the NRO during fiscal years 2018 through 2022. The plan would be due to the appropriate committees not later than the date of the submission of the budget request for fiscal year 2018. The Director would be authorized to conduct pre-acquisition activities in fiscal year 2017, to include requests for information, analyses of alternatives, study contracts, modeling and simulation, and other activities the Director determines necessary to develop such plan.

Finally, this section would require the Director of the Cost Assessment Improvement Group of the Office of the Director of National Intelligence, in coordination with the Director of the Cost Assessment and Program Evaluation of the Office of the Secretary of Defense, to certify the funding identified by the Secretary of the Air Force and the Director of the NRO is sufficient.

As reflected in the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) and the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), the committee has been concerned with the Air Force's lack of planning, coordination, and execution of activities to meet the top two Joint Requirements Oversight Council certified requirements for space-based environmental monitoring. The committee notes that the current Defense Meteorological Satellite Program began with the NRO in the 1960s before the program and budget were transferred to the Air Force. The committee recommends the Director of the NRO and the Secretary of the Air Force arrange a similar agreement, in which the NRO develops the program and then transfers it back to the Air Force after it is in operation.

This section does not and is not intended to affect the jurisdiction of the congressional defense committees over the weather-related missions of the

Department of Defense. The committee expects the funds at the NRO for this activity will be classified within the Military Intelligence Program.

Section 1610—Organization and Management of National Security Space Activities of the Department of Defense

This section would state findings and the sense of Congress on the organization and management of the national security space activities of the Department of Defense. This section would also direct the Secretary of Defense and the Director of the Office of Management and Budget to each separately submit a report to the appropriate committees not later than 180 days after the date of the enactment of this Act on the recommendations to strengthen the leadership, management, and organization of the Department of Defense with respect to the national security space activities of the Department.

Section 1611-Review of Charter of Operationally Responsive Space Program Office

This section would direct the Secretary of Defense to conduct a review of the Operationally Responsive Space Program Office and submit a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act. This report would include a review of the key operationally responsive space needs with respect to the warfighter and with respect to national security; how the Office could fit into the broader resilience and space security strategy of the Department of Defense; an assessment of the potential of the Office to focus on the reconstitution capabilities with small satellites using low-cost launch vehicles and existing infrastructure; an assessment of the potential of the Office to leverage existing or planned commercial capabilities; a review of the necessary workforce specialties and acquisition authorities; a review of the funding profile; and a review of the organizational placement and reporting structure of the Office.

Section 1612—Backup and Complementary Positioning, Navigation, and Timing Capabilities of Global Positioning System

This section would direct the Secretary of Defense, Secretary of Transportation, and Secretary of Homeland Security to jointly conduct a study to assess and identify the technology-neutral requirements to backup and complement the positioning, navigation, and timing (PNT) capabilities of the Global Positioning System for national security and critical infrastructure.

This section would also direct the Secretary of Defense, Secretary of Transportation, and Secretary of Homeland Security to submit a report to the appropriate congressional committees not later than 1 year after the date of the enactment of this Act on the study.

The report would include the identification of the respective requirements to backup and complement the positioning, navigation, and timing capabilities of the Global Positioning System for national security and critical infrastructure; an analysis of alternatives to meet such requirements; and a plan and estimated costs, schedule, and system level technical considerations, including end user equipment and integration considerations, to meet such requirements.

This section would also require that each Secretary designate a single senior official to act as the primary representative of such Department for purposes of conducting the study.

The committee is aware that while a continental United States "enhanced" Long-Range Navigation (eLoran) system would not meet the Department's requirements for worldwide operations, it could contribute to increasing resilience of PNT in the United States. The committee is also aware that a complementary PNT tiger team recommended eLoran as the leading candidate for fulfilling the maximum number of PNT user needs within the next 5 years for certain sectors, but that there is currently no planned funding for this capability. The committee expects that a joint study will help inform a coordinated, effective and efficient way ahead for a backup and complementary system to GPS.

SUBTITLE D—NUCLEAR FORCES

Section 1641—Improvements to Council on Oversight of National Leadership Command, Control, and Communications System

This section would amend the statutory charter of the National Leadership Command, Control, and Communications System Council ("The Council"), to add to its responsibilities the oversight of the Integrated Tactical Warning and Attack Assessment (ITW/AA) system, as well as the continuity of Government functions of the Department of Defense. This section would also require The Council, acting through the Under Secretary of Defense for Acquisition, Technology, and Logistics, to submit a report to the congressional defense committees reviewing potential changes to the architectures of certain Air Force space systems prior to milestone A and milestone B approval.

This section would also require that prior to any changes to the systems under The Council's oversight that would reduce the strategic missile attack warning time provided to the national leadership of the United States, it must provide a notification to the congressional defense committees and wait a period of 1 year. Additionally, this section would require The Council to determine each year that the ITW/AA systems have met all warfighter requirements for operational availability, survivability, and endurability. In the event The Council cannot make such a determination, this section would require the Secretary of Defense and Chairman of the Joint Chiefs of Staff to jointly submit certain information to the congressional defense committees.

Lastly, this section would extend the requirement that The Council provide its annual report to the appropriate congressional committees until January 31, 2021.

Section 1644—Consolidation of Nuclear Command, Control, and Communications Functions of the Air Force

This section would require the Secretary of the Air Force to consolidate under a major command, commanded by a single general officer, the responsibility, authority, accountability, and resources for carrying out the nuclear command, control, and communications functions of the Air Force by March 31, 2017. This consolidation would be required to include, at a minimum, all terrestrial and aerial components of the nuclear command and control system that are survivable and endurable, as well as all terrestrial and aerial components of the integrated tactical warning and attack assessment (ITW/AA) system that are survivable and endurable.

This section would also require the Secretary to provide this same commander the responsibility, authority, accountability, and resources to:

(1) Conduct oversight over all components of the NC2 and ITW/AA systems, regardless of the location or the endurability of such components; and

(2) Approve or disapprove of any budgetary actions related to all components of the NC2 and ITW/AA systems, regardless of the location or the endurability of such components.

Finally, this section would require the Secretary to submit a report to the congressional defense committees by January 15, 2017, on the plans and actions taken by the Secretary to carry out this section, including any guidance, directives, and orders that have been or will be issued by the Secretary, the Chief of Staff of the Air Force, or other elements of the Air Force.

Section 1645—Report on Russian and Chinese Political and Military Leadership Survivability, Command and Control, and Continuity of Government Programs and Activities

This section would require the Director National Intelligence to submit a report to the appropriate congressional committees, consistent with the protection of sources and methods, by January 15, 2017, on the leadership survivability, command and control, and continuity of government programs and activities of the People's Republic of China and the Russian Federation. The report would be required to include various matters with respect to these programs and activities.

This section would also require, not later than 90 days after the Director submits the report described above, the Council on Oversight of the National Leadership Command, Control, and Communications System established by section 171a of title 10, United States Code, would be required to submit an assessment of how the command, control, and communications systems of the national leadership of China and Russia compare to such systems of the United States.

Finally, this section would require the Commander of U.S. Strategic Command to submit, together with the assessment submitted by the Council described above, the views of the Commander on the report of the Director, including a detailed description of how the leadership survivability, command and control, and continuity of government programs and activities of China and Russia are considered in plans and options for which the Commander is responsible.

Section 1646—Sense of Congress on Importance of Independent Nuclear Deterrent of United Kingdom

This section would express the sense of Congress regarding the importance of the United Kingdom of Great Britain and Northern Ireland's independent nuclear deterrent.

SUBTITLE E-MISSILE DEFENSE PROGRAMS AND OTHER MATTERS

Section 1651—Extensions of Prohibitions Relating to Missile Defense Information and Systems

This section would extend the prohibitions currently in law regarding sharing of certain missile defense information with the Russian Federation and integrating U.S. missile defenses with Russian or Chinese systems until January 1, 2027.

Section 1652—Review of the Missile Defeat Policy and Strategy of the United States

This section would require the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to jointly conduct a new review by January 31, 2018, of the missile defeat capability, policy, and strategy of the United States with respect to left- and right-of-launch ballistic missile defense, the integration of offensive and defensive forces for the defeat of ballistic missiles, and the cruise missile defense of the homeland.

The committee recommends this provision in order to require a new strategy for the more comprehensive set of capabilities and goals for ballistic and cruise missile defense the United States now faces. This new strategy would include the full range of missile defeat capabilities and requirements, including the integration of left- and right-of-launch ballistic missile defense, the integration of offensive and defensive capabilities in ballistic missile defense in both the defense of the homeland and in regional defense settings, and the development of homeland cruise missile defense.

This section would also require the Director of Cost Assessment and Program Evaluation to submit to the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the congressional defense committees an annual update on the implementation of the missile defeat strategy for the 5-year period beginning on the date of the submission of the report on the missile defeat policy and strategy review.

The section would further require the Director of National Intelligence to submit to the congressional defense committees and the congressional intelligence committees a report, within 180 days after the date of enactment of this Act, containing an unclassified summary of the existing ballistic and cruise missile threats to the United States, the deployed forces of the United States, and the friends and allies of the United States, and an assessment of such threat in 2026. The section would also prohibit the Secretary of Defense from changing the nonstandard acquisition authorities of the Missile Defense Agency until the Secretary notifies the congressional defense committees and a period of 180 days has elapsed. Lastly, the section would require the Secretary of Defense to designate, not later than March 31, 2018, a military department or defense agency with the acquisition authority for the capability to defend the United States from cruise missiles and the authority for left-of-launch ballistic missile defeat capability.

Section 1654—Maximizing Aegis Ashore Capability

This section would require the Secretary of Defense to conduct an evaluation of the optimal anti-air warfare capability for each current Aegis Ashore Site by not later than 180 days after the date of the enactment of this Act. This section would also require that such evaluation is a part of the future deployment of an Aegis Ashore site. The assessment of Aegis Ashore anti-air warfare capability would include use of enhanced sea-sparrow missiles, standard missile block 2 missiles, standard missile block 6 missiles, or the SeaRAM missile system. The Secretary of Defense would be required to carry out this subsection consistent with the classified annex accompanying this Act.

The Secretary of Defense and the Chairman of the Joint Chiefs of Staff would also be required to submit to the congressional defense committees not later than 120 days after the date of enactment of this Act an evaluation to include:

(1) The ballistic missile and air threat against the continental United States and the efficacy of deploying one or more Aegis Ashore sites and Aegis Ashore components for the ballistic and cruise missile defense of the continental United States; and

(2) The ballistic missile and air threat against Guam, and the cost and efficacy of deploying Aegis Ashore there.

Regarding the Aegis Ashore site on the Pacific Missile Range Facility (PMRF) in Hawaii, this section would restrict the Secretary from reducing the manning levels or test capability of that site as they were on January 1, 2015, or to put the site into a "cold" or "stand by" status. This section would also require the Director of the Missile Defense Agency to notify the congressional defense committees if the preferred alternative for fielding a medium-range ballistic missile defense sensor for the defense of Hawaii, identified through the study conducted by the Director pursuant to section 1689(b)(2) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), would require any study or assessment pursuant to the National Environmental Policy Act of 1969 (Public Law 91-190). The Director would be required to initiate that study or analysis not later than 60 days after his notification.

Lastly, this section would also require the Secretary and the Chairman to jointly submit to the congressional defense committees not later than 60 days after

the enactment of this Act an evaluation of the ballistic and air threat to Hawaii; the efficacy (including with respect to cost and potential alternatives) of making the Aegis Ashore site at PMRF operational; deploying the preferred alternative for fielding a medium-range ballistic missile defense sensor for the defense of Hawaii; and any other alternative the Secretary and Chairman determine appropriate.

Section 1655—Technical Authority for Integrated Air and Missile Defense Activities and Programs

This section would reaffirm the authority delegated to the Director of the Missile Defense Agency (MDA) as the Department of Defense technical authority for integrated air and missile defense activities and programs. The committee notes the May 8, 2013 Acquisition Decision Memorandum approved by the Under Secretary of Defense for Acquisition, Technology, and Logistics designating MDA as the technical authority for the Department of Defense on these programs, and believes this statutory step would improve the Department's efforts on integration and interoperability.

This section would further provide that the Director may obtain, as detailees from the Joint Functional Component Command for Integrated Missile Defense and the Joint Integrated Air and Missile Defense Command, such manpower as they deem necessary solely for technical authority responsibilities, but no more than double the manning assigned for that purpose as of January 1, 2016. This authority would be to obtain as detailees the Federal workforce of these two entities.

This section would further require the Director of MDA to provide an assessment to the congressional defense committees not later than January31, 2017, and biennially thereafter until January 31, 2021, of the state of integration and interoperability of the integrated air and missile defense capabilities of the Department of Defense. This assessment would include an identification of any gaps in the integration and interoperability of the air and missile defense capabilities of the Department; a description of the options to improve such capabilities and remediate such gaps; and a plan to carry out such improvements and remediations, including milestones and costs for such plan.

Section 1656—Development and Research of Non-Terrestrial Missile Defense Layer

The section would require that, not later than 30 days after the date of the enactment of this Act, the Director of the Missile Defense Agency, with the support of federally funded research and development centers with subject matter expertise, shall commence the concept definition, design, research, development, engineering evaluation, and test of a space-based ballistic missile intercept and defeat layer.

This section would also include a requirement to commence research, development, test, and evaluation activities with respect to a space test bed for a missile interceptor capability. This section would further require the Director to include in the budget request of the President for fiscal year 2018, and in the future years defense program, a detailed budget and development plan, irrespective of planned budgetary total obligation authority, assuming an initial on-orbit demonstration by 2025.

Section 1657—Limitation on Availability of Funds for Patriot Lower Tier Air and Missile Defense Capability of the Army

This section would limit the obligation or expenditure of fifty percent of the amounts authorized to be appropriated in fiscal year 2017 for the Patriot lower tier air and missile defense capability of the Army until:

(1) The Director of the Missile Defense Agency certifies to the congressional defense committees that such capability, upon completion of the modernization process for the Patriot radar, will be interoperable with the ballistic missile defense system and other air and missile defense capabilities;

(2) The Chairman of the Joint Chiefs of Staff certifies to the congressional defense committees that such capability, upon the completion of the modernization process for the Patriot radar, will meet the modularity sought by the geographic combatant commands and the validated and objective warfighter requirements for air and missile defense capability; and

(3) The Chief of Staff of the Army, in coordination with the Secretary of the Army, submits a determination as to whether the requirements of the radar modernization program are suitable for acquisition through an Army Rapid Capabilities office, the terms of the competition planned for the radar modernization program ensure fair competition for all competitors, and either a certification that the radar modernization acquisition program is the most modern rapid deployment acquisition program possible at low risk, or a revised acquisition program has been submitted to the congressional defense committees and a period of 30 days has lapsed.

Section 1658—Limitation on Availability of Funds for Conventional Prompt Global Strike Weapons System

This section would require that not more than 75 percent of the funds authorized to be appropriated for conventional prompt global strike capability may be obligated or expended until the date on which the Chairman of the Joint Chiefs of Staff, the Commander of U.S. European Command, the Commander of U.S. Pacific Command, and the Commander of U.S. Strategic Command, submit to the congressional defense committees a report on whether there are warfighter requirements or integrated priorities lists-submitted needs for a limited operational conventional prompt strike capability and whether the program plan and schedule proposed by the program office supports such requirements and integrated priorities lists submissions. Section 1660—Review of Missile Defense Agency Budget Submissions for Groundbase Midcourse Defense and Evaluation of Alternative Ground-based Interceptor Deployments

This section would require the Director of Cost Assessment and Program Evaluation in the Department of Defense to provide a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act concerning the sufficiency of the budget request to meet modernization, obsolescence, and to ensure industrial base capability. Such report would also be required not later than 30 days after the President's budget request is submitted in subsequent years through January 31, 2021.

This section would also require that the Commander of U.S. Northern Command submit to the congressional defense committees not later than 60 days after each budget request is submitted, through January 31, 2021, his certification that the budget request includes a sufficient level of funding for the ground-based midcourse defense system to modernize the system to remain paced ahead of the developing limited ballistic missile threat to the homeland.

This section would further require the Director of the Missile Defense Agency (MDA) to submit to the congressional defense committees a report on transportable ground based interceptors.

Section 1661—Declaratory Policy, Concept of Operations, and Employment Guidelines for Left-of-Launch Capability

This section would require the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to develop and provide to the congressional defense committees, not later than 120 days after the date of the enactment of this Act, the following: (1) both the classified and unclassified declaratory policy of the United States regarding the use of left-of-launch capability of the United States against potential targets and how the Secretary and Chairman intend to ensure that such capability is a deterrent to attacks by adversaries; (2) both the classified and unclassified concept of operations for the use of such capability across and between the combatant commands; and (3) both the classified and unclassified employment strategy, plans, and options for such capability.

The committee notes that in the committee report (H. Rept. 114-102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee directed the Secretary of Defense, in coordination with the Chairman of the Joint Chiefs of Staff, to submit a report on left-of-launch no later than December 1, 2015. The committee directed that this report detail, among other matters, how the concepts outlined in the Joint Integrated Air and Missile Defense: Vision 2020 strategy and in the memo from the Chief of Staff of the Army and Chief of Naval Operations were being implemented, including an assessment of left-of-launch and non-kinetic means of defense. While the Department provided a briefing in October 2015 and a more recent briefing on the fiscal year 2017 budget request for left-of-launch activities, the Department has not submitted the required report. The

committee notes that while the briefings answered several of the committee's questions and provided constructive engagements on this issue, they did not provide a comprehensive answer to the committee's request. The committee notes that the report is nearly 5 months late, and expects that this report will be submitted as soon as possible to help inform the committee's oversight on this important issue.

Section 1662—Sense of the Congress on Initial Operating Capability of Phase 2 of European Phased Adaptive Approach to Missile Defense

This section would state the sense of the Congress regarding the declaration at the upcoming North Atlantic Treaty Organization Summit in Warsaw, Republic of Poland, of the initial operating capability of the second phase of the European Phased Adaptive Approach.

DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

LEGISLATIVE PROVISIONS

SUBTITLE B—PROGRAM AUTHORIZATIONS, RESTRICTIONS, AND LIMITATIONS

Section 3112-Protection of Nuclear Facilities from Unmanned Aircraft

This section would amend section 161 of the Atomic Energy At of 1954 (42 U.S.C. 2201) to provide that, notwithstanding any other provision of law, the Secretary of Energy may authorize such officers, employees, and contractors of the Department of Energy to use prudent and reasonable measures to mitigate the threat from, disable, interdict, interfere with the operation of, or, if needed, intercept any unmanned aircraft system or unmanned aircraft that may present a threat to people, property, or classified information at Department of Energy facilities that store or use special nuclear material or with respect to property being transported to or from such facilities. The Secretary would be required to issue guidelines for the exercise of this authority.

With the rapid increase in the capabilities and prevalence of unmanned aircraft systems (UAS), the committee is concerned about the potential threat posed by UAS to defense nuclear facilities. Due to the nature of these facilities and the materials and information stored within and transported between them, the committee believes the Secretary must be provided the authority to address this emerging threat and be required to promulgate guidance for doing so. The committee stresses that the Secretary's guidance should ensure an appropriate escalation on the type and use of force against UAS incursions and that non-kinetic responses should be utilized when feasible to mitigate a threat.

Section 3113—Research and Development of Advanced Naval Nuclear Fuel System Based on Low-Enriched Uranium

This section would provide that none of the funds authorized to be appropriated by this Act for the Department of Energy may be used for research and development (R&D) of an advanced naval nuclear fuel system based on lowenriched uranium (LEU). However, this section would also authorize, from within amounts authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for defense nuclear nonproliferation, \$5.0 million for the Deputy Administrator for Naval Reactors to commence initial planning and early R&D of an advanced naval nuclear fuel system based on LEU for aircraft carriers and submarines.

This section would also amend section 3118 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) to clarify that, if the Secretary of Energy and the Secretary of the Navy jointly determine to pursue R&D of an advanced naval nuclear fuel system based on LEU, the Secretaries shall ensure that funding for such efforts is requested in fiscal year 2018 and any future fiscal years only within a budget line within defense nuclear nonproliferation.

The committee notes that the Secretary of Energy and the Secretary of the Navy have not yet submitted the determination, which was due in February 2016, as required by section 3118 of Public Law 114-92, regarding whether or not to continue to pursue this R&D program. The committee expects the Secretaries to submit this statutorily required determination expeditiously. The committee also expects that, if the Secretaries make a determination to continue the program, they carry it out only using funding from within the defense nuclear nonproliferation account. The committee believes such a program would need to fully explore whether an LEU-based fuel could meet military requirements, and assess the implications of such an LEU-based fuel for fleet size and logistics, costs, benefits to nonproliferation goals, lowered security costs, and enabling cutting-edge research for nuclear fuel scientists. The committee is aware of estimates that indicate that developing an LEU naval fuel and determining its viability could cost an estimated \$2.00 billion and take at least 10 to 15 years, and that at least another 10 years (and potentially additional time and funding) beyond that would be required to deploy an operational naval nuclear reactor with this fuel. The committee recognizes the potential benefits of this R&D program, but also notes that resultant costs and operational impacts of such a fuel are also unknown but likely considerable. The committee believes the Secretaries and Congress should carefully weigh the potential opportunities and benefits, as well as the potential risks and costs of this path.

Section 3114—Disposition of Weapons-Usable Plutonium

This section would require the Secretary of Energy to carry out construction and project support activities for the Mixed Oxide (MOX) Fuel Fabrication Facility with any funds authorized to be appropriated or otherwise made available for such purposes for fiscal year 2017, as well as any funds made available for such purposes in any prior fiscal years that are unobligated. The Secretary would be allowed to waive this requirement to carry out construction and project support activities related to MOX if the Secretary submits to the congressional defense committees the following, and waits a period of 15 days:

(1) An updated performance baseline for construction and project support activities relating to the MOX facility as required by section 3119(b) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92);

(2) Notification that the Secretary has sought to enter into consultations with any relevant State or government of a foreign country necessary to pursue an alternative option for carrying out the plutonium disposition program, including a comprehensive description of the status of such consultations and a detailed plan and schedule for concluding such consultations;

(3) The commitment of the Secretary to remove plutonium from South Carolina and ensure a sustainable future for the Savannah River Site; and

(4) Either a notification that the prime contractor of the MOX facility has not submitted a proposal for a fixed-price contract, within 3 months of the Secretary requesting such a proposal, for completing construction and project support activities for the MOX facility, or a certification that such proposal from the prime contractor is materially deficient or non-responsive or that an alternative option exists for carrying out the plutonium disposition program and the total lifecycle cost of such alternative option would be less than approximately half of the estimated remaining lifecycle cost of the mixed-oxide fuel program.

Section 3115—Design Basis Threat

This section would require the Secretary of Energy to update, by August 31, 2016, Department of Energy Order 470.3B relating to the design basis threat for protecting nuclear weapons, special nuclear material, and other critical assets in the custody of the Department of Energy. This section would also express the sense of Congress regarding the need for the Intelligence Community, the Department of Energy, and the Department of Defense to regularly review and assess threats to U.S. nuclear assets to inform adjustments to security postures.

Section 3118—Limitation on Availability of Funds for Defense Environmental Cleanup Program Direction

This section would provide that, of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for program direction purposes within the defense environmental cleanup program, not more than 90 percent may be obligated or expended until the date on which the Secretary of Energy submits to Congress the future-years defense environmental cleanup plan required during calendar year 2017 pursuant to section 4402A of the Atomic Energy Defense Act (50 U.S.C. 2582A).

The committee notes that while the requirement for development and submission of a future-years defense environmental cleanup plan was created 5 years ago by section 3116 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383), the Secretary of Energy has yet to carry out this requirement. The committee believes that 5-year budget plans, such as those created by both the National Nuclear Security Administration and the Department of Defense, are imperfect but useful planning and transparency tools. The committee expects the Secretary of Energy, acting through the Assistant Secretary for Environmental Management, to submit the future-years defense environmental cleanup plan as required.

Section 3119—Limitation on Availablity of Funds for Acceleration of Nuclear Weapons Dismantlement

This section would provide that, of the funds authorized to be appropriated by this Act or otherwise made available for any of fiscal years 2017-21 for the National Nuclear Security Administration (NNSA), not more than \$56.0 million may be obligated or expended in each such fiscal year to carry out nuclear weapons dismantlement and disposition activities.

This section would also prohibit any funds authorized to be appropriated by this Act or otherwise made available for any of fiscal years 2017-21 for NNSA to be obligated or expended to accelerate the nuclear weapons dismantlement activities of NNSA beyond the rate contained in the dismantlement schedule prescribed by the Administrator for Nuclear Security in table 2-7 of the annex of the Fiscal Year 2016 Stockpile Stewardship and Management Plan (SSMP) submitted by the Administrator to the congressional defense committees in March 2015.

This section would further prohibit any funds authorized to be appropriated by this Act or otherwise made available for any of fiscal years 2017-21 for NNSA to be obligated or expended to dismantle or dispose of a W84 nuclear weapon.

Finally, this section would include two exceptions to the prohibitions regarding the W84 and dismantlement schedule contained in table 2-7 of the SSMP. The first exception would allow the dismantlement of W84 weapons or weapons not included in table 2-7 if the Administrator certifies in writing to the congressional defense committees that:

(1) The components of such weapons are directly required for the purposes of a current life extension program; or

(2) Such dismantlement is necessary to conduct maintenance or surveillance of the nuclear weapons stockpile or to ensure the safety or reliability of the nuclear weapons stockpile.

The second exception would allow the dismantlement of a nuclear weapon if the President certifies in writing to the congressional defense committees that: (1) Such dismantlement is being carried out pursuant to a nuclear arms reduction treaty or similar international agreement that requires such dismantlement; and

(2) Such treaty or international agreement has entered into force after the date of enactment of this Act and was approved with the advice and consent of the Senate or by an Act of Congress.

Section 3120-Annual Certification of Shipments to Waste Isolation Pilot Plant

This section would require, during the 5-year period beginning on the date of the enactment of this Act, the Secretary of Energy to certify to the congressional defense committees by February 1 of each year that the management and operating contractors of the nuclear security enterprise have certified to the Administrator for Nuclear Security that they are aware of the contents of each container shipped by the contractor to the Waste Isolation Pilot Plant (WIPP) in sufficient detail. This is to ensure that the container is handled properly to prevent the release of radiation or contamination. This section would also require the Secretary to certify that the Administrator and the Assistant Secretary for Environmental Management are aware, for the facilities under their purview, of the contents of each container shipped to WIPP in sufficient detail.

SUBTITLE C-PLANS AND REPORTS

Section 3131—Clarification of Annual Report and Certification on Status of Security of Atomic Energy Defense Facilities

This section would amend section 4506(b)(1)(B) of the Atomic Energy Defense Act (50 U.S.C. 2657) to clarify that the report submitted by the Secretary of Energy pursuant to that section must contain the Secretary's written certification that certain atomic energy defense facilities are secure and that the security measures at such facilities meet the security standards and requirements of the Department of Energy.

Section 3133—Repeal of Certain Reporting Requirements

This section would repeal two reporting requirements. These include:

(1) Biennial reports on a plan to protect against release of certain information as required by section 4522(e) of the Atomic Energy Defense Act (50 U.S.C. 2672(e));

(2) A report by the Comptroller General of the United States on the National Nuclear Security Administration's scientific engagement for nonproliferation program.

Section 3134—Independent Assessment of Technology Development under Defense Environmental Cleanup Program This section would require the Secretary of Energy to seek to enter into an agreement with the National Academy of Sciences, within 60 days following the date of the enactment of this Act, to conduct an independent assessment of the defense environmental cleanup program. Such assessment would be required to include a review of the technology development efforts of the defense environmental cleanup program, including an assessment of the process by which the Secretary identifies and chooses technologies to pursue under the program. Such assessment would also include a comprehensive review of technologies or alternative approaches to defense environmental cleanup efforts that could reduce long-term costs, accelerate schedules, or mitigate uncertainties, vulnerabilities, or risks relating to such efforts; or otherwise significantly improve the defense environmental cleanup program. The National Academy of Sciences would be required to submit a report of the assessment to the Secretary and the congressional defense committees by September 30, 2017.

The committee recommends this provision to provide a comprehensive and independent assessment by national experts on how to strengthen technology development efforts and what technologies or alternative approaches may warrant investigation or application. Elsewhere in this title, the committee recommends a funding increase to technology development efforts for the defense environmental cleanup program. The committee believes increased funding and the recommendations from national experts at the National Academy of Sciences can bring renewed attention and focus to the program.

TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD

LEGISLATIVE PROVISIONS

Section 3201—Authorization

This section would authorize \$31.0 million for the Defense Nuclear Facilities Safety Board for fiscal year 2017.

BILL LANGUAGE

1	SEC. 1067[Log 63661]. INCLUSION OF BALLISTIC MISSILE
2	DEFENSE INFORMATION IN ANNUAL REPORT
3	ON REQUIREMENTS OF COMBATANT COM-
4	MANDS.

5 (a) IN GENERAL.—Paragraph (2)(A) of section 153(c) of title 10, United States Code, is amended by in-6 serting before the period the following: ", including the 7 8 integrated priorities list requirements for ballistic missile 9 defense by the geographic combatant commands and the prioritized capabilities list for ballistic missile defense de-10 veloped by the Commander of the United States Strategic 11 12 Command".

(b) REPORT DURATION.—Paragraph (1) of such section is amended by striking "At or about" and inserting
"During the period preceding January 31, 2021, at or
about".

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1SEC. 1232. [LOG 62735] MILITARY RESPONSE OPTIONS TO2RUSSIAN FEDERATION VIOLATION OF INF3TREATY.

4 (a) IN GENERAL.—An amount equal to \$10,000,000
5 of the amount authorized to be appropriated or otherwise
6 made available to the Department of Defense for fiscal
7 year 2017 to provide support services to the Executive Of8 fice of the President shall be withheld from obligation or
9 expenditure until the Secretary of Defense—

(1) submits to the appropriate congressional
committees the plan for the development of military
capabilities as described in paragraph (1) of section
1243(d) of the National Defense Authorization Act
for Fiscal Year 2016 (Public Law 114–92; 129 Stat.
1062); and

(2) carries out the development of capabilities
pursuant to such plan in accordance with the requirements described in paragraph (3) of such section.

(b) DEFINITION.—In this section, the term "appropriate congressional committees" has the meaning given
such term in section 1243(e) of the National Defense Authorization Act for Fiscal Year 2016.

7

1SEC. 1602.[Log 63400] ANALYSIS OF ALTERNATIVES FOR2WIDE-BAND COMMUNICATIONS.

3 Section 1611 of the National Defense Authorization
4 Act for Fiscal Year 2016 (Public Law 114–92; 129 Stat.
5 1103) is amended by striking subsection (b) and inserting
6 the following new subsections:

7 "(b) Scope.—

8 "(1) STUDY GUIDANCE.—In conducting the 9 analysis of alternatives under subsection (a), the 10 Secretary shall develop study guidance that requires 11 such analysis to include the full range of military 12 and commercial satellite communications capabili-13 ties, acquisition processes, and service delivery mod-14 els.

15 "(2) OTHER CONSIDERATIONS.—The Secretary16 shall ensure that—

"(A) any cost assessments of military or
commercial satellite communications systems included in the analysis of alternatives conducted
under subsection (a) include detailed full lifecycle costs, as applicable, including with respect
to—

23 "(i) military personnel, military con24 struction, military infrastructure operation,
25 maintenance costs, and ground and user
26 terminal impacts; and

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1	"(ii) any other costs regarding mili-
2	tary or commercial satellite communica-
3	tions systems the Secretary determines ap-
4	propriate; and
5	"(B) such analysis identifies any consider-
6	ations relating to the use of military versus
7	commercial systems.
8	"(c) Comptroller General Review.—
9	"(1) SUBMISSION.—Upon completion of the
10	analysis of alternatives conducted under subsection
11	(a), the Secretary shall submit such analysis to the
12	Comptroller General of the United States.
13	"(2) REVIEW.—Not later than 120 days after
14	the date on which the Comptroller General receives
15	the analysis of alternatives under paragraph (1) , the
16	Comptroller General shall submit to the congres-
17	sional defense committees a review of the analysis.
18	"(3) MATTERS INCLUDED.—The review under
19	paragraph (2) of the analysis of alternatives con-
20	ducted under subsection (a) shall include the fol-
21	lowing:
22	"(A) Whether, and to what extent, the
23	Secretary—
24	"(i) conducted such analysis using
25	best practices;

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1	"(ii) fully addressed the concerns of
2	the acquisition, operational, and user com-
3	munities; and
4	"(iii) complied with subsection (b).
5	"(B) A description of how the Secretary
6	identified the requirements and assessed and
7	addressed the cost, schedule, and risks posed
8	for each alternative included in such analysis.
9	"(d) Briefings.—Not later than 90 days after the
10	date of the enactment of the National Defense Authoriza-
11	tion Act for Fiscal Year 2017, and semiannually there-
12	after until the date on which the analysis of alternatives
13	conducted under subsection (a) is completed, the Secretary
14	shall provide the Committees on Armed Services of the
15	House of Representatives and the Senate (and any other
16	congressional defense committee upon request) a briefing
17	on such analysis.".

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1	SEC. 1603.[Log 63147] MODIFICATION TO PILOT PROGRAM
2	FOR ACQUISITION OF COMMERCIAL SAT-
3	ELLITE COMMUNICATION SERVICES.

4 Section 1605 of the Carl Levin and Howard P.
5 "Buck" McKeon National Defense Authorization Act for
6 Fiscal Year 2015 (Public Law 113–291; 10 U.S.C. 2208
7 note), as amended by section 1612 of the National De8 fense Authorization Act for Fiscal Year 2016 (Public Law
9 114–92; 129 Stat. 1103), is further amended by adding
10 at the end the following new subsection:

"(e) IMPLEMENTATION OF GOALS.—In developing and carrying out the pilot program under subsection (a)(1), by not later than September 30,
2017, the Secretary shall take actions to begin the
implementation of each goal specified in subsection
(b).".

1 SEC. 1604.[Log 62950] SPACE-BASED ENVIRONMENTAL MON-2 **ITORING.** 3 (a) ROLES OF DOD AND NOAA.— 4 (1) MECHANISMS.—The Secretary of Defense 5 and the Director of the National Oceanic and At-6 mospheric Administration shall jointly establish 7 mechanisms to collaborate and coordinate in defin-8 ing the roles and responsibilities of the Department 9 of Defense and the National Oceanic and Atmos-10 pheric Administration to— 11 (A) carry out space-based environmental 12 monitoring; and 13 (B) plan for future non-governmental 14 space-based environmental monitoring capabili-15 ties. 16 (2)RULE OF CONSTRUCTION.—Nothing in 17 paragraph (1) may be construed to authorize a joint 18 satellite program of the Department of Defense and 19 the National Oceanic and Atmospheric Administra-20 tion. 21 (b) REPORT.—Not later than 120 days after the date 22 of the enactment of this Act, the Secretary and the Direc-23 tor shall jointly submit to the appropriate congressional 24 committees a report on the mechanisms established under

11

25 subsection (a)(1).

30

(c) APPROPRIATE CONGRESSIONAL COMMITTEES DE FINED.—In this section, the term "appropriate congres sional committees" means—
 (1) the congressional defense committees;

- 5 (2) the Committee on Science, Space, and6 Technology of the House of Representatives; and
- 7 (3) the Committee on Commerce, Science, and8 Transportation of the Senate.

13

1	SEC. 1605.[Log 62981] PROHIBITION ON USE OF CERTAIN
2	NON-ALLIED PRECISION, NAVIGATION, AND
3	TIMING SYSTEMS.
4	(a) Prohibition.—During the period beginning not
5	later than 60 days after the date of the enactment of this
6	Act and ending on September 30, 2018, the Secretary of
7	Defense shall ensure that the Armed Forces and each ele-
8	ment of the Department of Defense do not use a non-allied

9 precision, navigation, and timing system or service pro-10 vided by such a system.

(b) WAIVER.—The Secretary may waive the prohibi-tion in subsection (a) if—

13 (1) the Secretary determines that the waiver
14 is—

15 (A) in the national security interest of the16 United States; and

17 (B) necessary to mitigate exigent oper-18 ational concerns;

19 (2) the Secretary notifies, in writing, the appro-20 priate congressional committees of such waiver; and

(3) a period of 30 days has elapsed followingthe date of such notification.

(c) ASSESSMENT.—Not later than 120 days after the
24 date of the enactment of this Act, the Secretary of De25 fense, the Chairman of the Joint Chiefs of Staff, and the
26 Director of National Intelligence shall jointly submit to

14

1	the appropriate congressional committees an assessment
2	of the risks to national security and to the operations and
3	plans of the Department of Defense from using a non-
4	allied precision, navigation, and timing system or service
5	provided by such a system. Such assessment shall—
6	(1) address risks regarding—
7	(A) espionage, counterintelligence, and tar-
8	geting;
9	(B) the use of the Global Positioning Sys-
10	tem by allies and partners of the United States
11	and others; and
12	(C) harmful interference to the Global Po-
13	sitioning System; and
14	(2) include any other matters the Secretary, the
15	Chairman, and the Director determine appropriate.
16	(d) DEFINITIONS.—In this section:
17	(1) The term "appropriate congressional com-
18	mittees" means—
19	(A) the congressional defense committees;
20	and
21	(B) the Permanent Select Committee on
22	Intelligence of the House of Representatives
23	and the Select Committee on Intelligence of the
24	Senate.

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1	(2) The term "non-allied precision, navigation,
2	and timing system" means any of the following sys-
3	tems:
4	(A) The Beidou system.
5	(B) The Glonass global navigation satellite
6	system.

1SEC. 1606.[Log 63399] LIMITATION OF AVAILABILITY OF2FUNDS FOR THE JOINT SPACE OPERATIONS3CENTER MISSION SYSTEM.

4 Of the funds authorized to be appropriated by this 5 Act or otherwise made available for fiscal year 2017 for increment 3 of the Joint Space Operations Center Mission 6 7 System, not more than 25 percent may be obligated or expended until the date on which the Secretary of the Air 8 9 Force, in coordination with the Commander of the United States Strategic Command, submits to the congressional 10 11 defense committees a report on such increment, includ-12 ing-

13 (1) an acquisition strategy for such increment;14 (2) the requirements of such increment;

15 (3) the funding and schedule for such incre-16 ment;

(4) the strategy for use of commercially available capabilities, as appropriate, relating to such increment to rapidly address warfighter requirements,
including the market research and evaluation of such
commercial capabilities; and

(5) the relationship of such increment with the
other related activities and investments of the Department of Defense.

1	SEC. 1607.[Log 63498] SPACE-BASED INFRARED SYSTEM
2	AND ADVANCED EXTREMELY HIGH FRE-
3	QUENCY PROGRAM.
4	(a) FINDINGS.—Congress finds the following:
5	(1) The recently completed analysis of alter-
6	natives for the space-based infrared system program
7	identified the cost and capability trades of various
8	alternatives, however the criteria and assessment for
9	resilience and mission assurance was undefined.
10	(2) The analysis of alternatives for the ad-
11	vanced extremely high frequency program is ongo-
12	ing.
13	(b) LIMITATION ON DEVELOPMENT AND ACQUISI-
14	TION OF ALTERNATIVES.—
15	(1) LIMITATION.—Except as provided by para-
16	graph (4), the Secretary of Defense may not develop
17	or acquire an alternative to the space-based infrared
18	system program of record or develop or acquire an
19	alternative to the advanced extremely high frequency
20	program of record until the date on which the Com-
21	mander of the United States Strategic Command
22	and the Director of the Space Security and Defense
23	Program, in consultation with the Defense Intel-
24	ligence Officer for Science and Technology of the
25	Defense Intelligence Agency, jointly submit to the
26	appropriate congressional committees the assess-

1	ments described in paragraph (2) for the respective
2	program.
3	(2) Assessment.—The assessments described
4	in this paragraph are—
5	(A) an assessment of the resilience and
6	mission assurance of each alternative to the
7	space-based infrared system being considered by
8	the Secretary of the Air Force; and
9	(B) an assessment of the resilience and
10	mission assurance of each alternative to the ad-
11	vanced extremely high frequency program being
12	considered by the Secretary of the Air Force.
13	(3) ELEMENTS.—An assessment described in
14	paragraph (2) shall include, with respect to each al-
15	ternative to the space-based infrared system pro-
16	gram of record and each alternative to the advanced
17	extremely high frequency program of record being
18	considered by the Secretary of the Air Force, the fol-
19	lowing:
20	(A) The requirements for resilience and
21	mission assurance.
22	(B) The criteria to measure such resilience
23	and mission assurance.
24	(C) How the alternative affects—

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1	(i) deterrence and full spectrum
2	warfighting;
3	(ii) warfighter requirements and rel-
4	ative costs to include ground station and
5	user terminals;
6	(iii) the potential order of battle of
7	adversaries; and
8	(iv) the required capabilities of the
9	broader space security and defense enter-
10	prise.
11	(4) EXCEPTION.—The limitation in paragraph
12	(1) shall not apply to efforts to examine and develop
13	technology insertion opportunities for the space-
14	based infrared system program of record or the sat-
15	ellite communications programs of record.
16	(c) Appropriate Congressional Committees De-
17	FINED.—In this section, the term "appropriate congres-
18	sional committees" means the following:
19	(1) With respect to the submission of the as-
20	sessment described in subparagraph (A) of sub-
21	section $(b)(2)$, the—
22	(A) the congressional defense committees;
23	and
24	(B) the Permanent Select Committee on
25	Intelligence of the House of Representatives.

(2) With respect to the submission of the as sessment described in subparagraph (B) of sub section (b)(2), the congressional defense committees.

1	SEC. 1608.[Log 62951] PLANS ON TRANSFER OF ACQUISI-
2	TION AND FUNDING AUTHORITY OF CERTAIN
3	WEATHER MISSIONS TO NATIONAL RECON-
4	NAISSANCE OFFICE.

5 (a) LIMITATION.—

6 (1) IN GENERAL.—Of the funds authorized to 7 be appropriated or otherwise made available for fis-8 cal year 2017 for research, development, test, and 9 evaluation, Air Force, for the weather satellite fol-10 low-on system, not more than 50 percent may be ob-11 ligated or expended until the date on which the Sec-12 retary of the Air Force submits to the appropriate 13 congressional committees the plan under paragraph 14 (2).

15 (2) AIR FORCE PLAN.—The Secretary shall de-16 velop a plan for the Air Force to transfer, beginning 17 with fiscal year 2018, the acquisition authority and 18 the funding authority for covered space-based envi-19 ronmental monitoring missions from the Air Force 20 to the National Reconnaissance Office, including a 21 description of the amount of funds that would be 22 necessary to be transferred from the Air Force to 23 the National Reconnaissance Office during fiscal 24 years 2018 through 2022 to carry out such plan.

25 (b) NRO PLAN.—

1	(1) IN GENERAL.—The Director of the National
2	Reconnaissance Office shall develop a plan for the
3	National Reconnaissance Office to address how to
4	carry out covered space-based environmental moni-
5	toring missions. Such plan shall include—
6	(A) a description of the related national se-
7	curity requirements for such missions;
8	(B) a description of the appropriate man-
9	ner to meet such requirements; and
10	(C) the amount of funds that would be
11	necessary to be transferred from the Air Force
12	to the National Reconnaissance Office during
13	fiscal years 2018 through 2022 to carry out
14	such plan.
15	(2) ACTIVITIES.—In developing the plan under
16	paragraph (1), the Director may conduct pre-acqui-
17	sition activities, including with respect to requests
18	for information, analyses of alternatives, study con-
19	tracts, modeling and simulation, and other activities
20	the Director determines necessary to develop such
21	plan.
22	(3) SUBMISSION.—Not later than the date on
23	which the President submits to Congress the budget
24	for fiscal year 2018 under section 1105(a) of title
25	31, United States Code, the Director shall submit to

the appropriate congressional committees the plan
 under paragraph (1).

3 (c) INDEPENDENT COST ESTIMATE.—The Director 4 of the Cost Assessment Improvement Group of the Office of the Director of National Intelligence, in coordination 5 with the Director of Cost Assessment and Program Eval-6 7 uation, shall certify to the appropriate congressional com-8 mittees that the amounts of funds identified under sub-9 sections (a)(2) and (b)(1)(C) as being necessary to trans-10 fer are appropriate and include funding for positions and personnel to support program office costs. 11

12 (d) DEFINITIONS.—In this section:

13 (1) The term "appropriate congressional com14 mittees" means—

15 (A) the congressional defense committees;
16 (B) the Permanent Select Committee on
17 Intelligence of the House of Representatives;

18 and

19 (C) the Select Committee on Intelligence of20 the Senate.

(2) The term "covered space-based environmental monitoring missions" means the acquisition
programs necessary to meet the national security requirements for cloud characterization and theater
weather imagery.

1	SEC. 1610.[Log 63148] ORGANIZATION AND MANAGEMENT
2	OF NATIONAL SECURITY SPACE ACTIVITIES
3	OF THE DEPARTMENT OF DEFENSE.
4	(a) FINDINGS.—Congress finds the following:
5	(1) National security space capabilities are a
6	vital element of the national defense of the United
7	States.
8	(2) The advantages of the United States in na-
9	tional security space are now threatened to an un-
10	precedented degree by growing and serious
11	counterspace capabilities of potential foreign adver-
12	saries, and the space advantages of the United
13	States must be protected.
14	(3) The Department of Defense has recognized
15	the threat and has taken initial steps necessary to
16	defend space, however the organization and manage-
17	ment may not be strategically postured to fully ad-
18	dress this changed domain of operations over the
19	long term.
20	(4) The defense of space is currently a priority
21	for the leaders of the Department, however the
22	space mission is managed within competing prior-
23	ities of each of the Armed Forces.
24	(5) Space elements provide critical capabilities
25	to all of the Armed Forces in the joint fight, how-
26	ever the disparate activities throughout the Depart-

ment have no single leader that is empowered to
 make decisions affecting the space forces of the De partment.

4 (b) SENSE OF CONGRESS.—It is the sense of Con-5 gress that, to modernize and fully address the growing threat to the national security space advantage of the 6 7 United States, the Secretary of Defense must evaluate the 8 range of options and take further action to strengthen the 9 leadership, management, and organization of the national security space activities of the Department of Defense, in-10 11 cluding with respect to—

12 (1) unifying, integrating, and de-conflicting ac-13 tivities to provide for stronger prioritization, ac-14 countability, coherency, focus, strategy, and integra-15 tion of the joint space program of the Department; (2) streamlining decision-making, limiting un-16 17 necessary bureaucracy, and empowering the appro-18 priate level of authority, while enabling effective 19 oversight;

20 (3) maintaining the involvement of each of the
21 Armed Forces and adapting the culture and improv22 ing the capabilities of the workforce to ensure the
23 workforce has the appropriate training, experience,
24 and tools to accomplish the mission; and

- (4) reviewing authorities and preparing for a
 conflict that could extend to space.
- 3 (c) RECOMMENDATIONS.—Not later than 180 days 4 after the date of the enactment of this Act, the Secretary 5 of Defense and the Director of the Office of Management 6 and Budget shall each separately submit to the appro-7 priate congressional committees recommendations, in ac-8 cordance with subsection (b), to strengthen the leadership, 9 management, and organization of the Department of Defense with respect to the national security space activities 10 11 of the Department.

12 (d) APPROPRIATE CONGRESSIONAL COMMITTEES.—
13 In this section, the term "appropriate congressional com14 mittees" means the following:

15 (1) The congressional defense committees.

16 (2) The Permanent Select Committee on Intel17 ligence of the House of Representatives and the Se18 lect Committee on Intelligence of the Senate.

291 SEC. 1611.[Log 62952] REVIEW OF CHARTER OF OPERATION-2 ALLY RESPONSIVE SPACE PROGRAM OFFICE. 3 (a) REVIEW.—The Secretary of Defense shall conduct a review of charter of the Operationally Responsive 4 5 Space Program Office established by section 2273a of title 10, United States Code (in this section referred to as the 6 "Office"). 7 8 (b) ELEMENTS.—The review under subsection (a) shall include the following: 9 10 (1) A review of the key operationally responsive 11 space needs with respect to the warfighter and with 12 respect to national security. 13 (2) How the Office could fit into the broader 14 resilience and space security strategy of the Depart-15 ment of Defense. 16 (3) An assessment of the potential of the Office 17 to focus on the reconstitution capabilities with small 18 satellites using low-cost launch vehicles and existing

19 infrastructure.

20 (4) An assessment of the potential of the Office 21 to leverage existing or planned commercial capabili-22 ties.

23 (5) A review of the necessary workforce special-24 ties and acquisition authorities of the Office.

25 (6) A review of the funding profile of the Of-26 fice.

(7) A review of the organizational placement
 and reporting structure of the Office.

3 (c) REPORT.—Not later than 180 days after the date 4 of the enactment of this Act, the Secretary shall submit 5 to the congressional defense committees a report con-6 taining the review under subsection (a), including any rec-7 ommendations for legislative actions based on such review.

1	SEC. 1612.[Log 63401] BACKUP AND COMPLEMENTARY POSI-
2	TIONING, NAVIGATION, AND TIMING CAPA-
3	BILITIES OF GLOBAL POSITIONING SYSTEM.
4	(a) Study.—
5	(1) IN GENERAL.—The covered Secretaries
6	shall jointly conduct a study to assess and identify
7	the technology-neutral requirements to backup and
8	complement the positioning, navigation, and timing
9	capabilities of the Global Positioning System for na-
10	tional security and critical infrastructure.
11	(2) REPORT.—Not later than one year after the
12	date of the enactment of this Act, the covered Secre-
13	taries shall submit to the appropriate congressional
14	committees a report on the study under paragraph
15	(1). Such report shall include—
16	(A) with respect to the Department of each
17	covered Secretary, the identification of the re-
18	spective requirements to backup and com-
19	plement the positioning, navigation, and timing
20	capabilities of the Global Positioning System for
21	national security and critical infrastructure;
22	(B) an analysis of alternatives to meet
23	such requirements; and
24	(C) a plan and estimated costs, schedule,
25	and system level technical considerations, in-

1	cluding end user equipment and integration
2	considerations, to meet such requirements.
3	(b) SINGLE DESIGNATED OFFICIAL.—Each covered
4	Secretary shall designate a single senior official of the De-
5	partment of the Secretary to act as the primary represent-
6	ative of such Department for purposes of conducting the
7	study under subsection (a)(1).
8	(c) DEFINITIONS.—In this section:
9	(1) The term "appropriate congressional com-
10	mittees" means—
11	(A) the congressional defense committees;
12	(B) the Committee on Science, Space, and
13	Technology, the Committee on Transportation
14	and Infrastructure, and the Committee on
15	Homeland Security of the House of Representa-
16	tives; and
17	(C) the Committee on Commerce, Science,
18	and Transportation and the Committee on
19	Homeland Security and Governmental Affairs
20	of the Senate.
21	(2) The term "covered Secretaries" means the
22	Secretary of Defense, the Secretary of Transpor-
23	tation, and the Secretary of Homeland Security.

1	Subtitle D—Nuclear Forces
2	SEC. 1641.[Log 62896] IMPROVEMENTS TO COUNCIL ON
3	OVERSIGHT OF NATIONAL LEADERSHIP COM-
4	MAND, CONTROL, AND COMMUNICATIONS
5	SYSTEM.
6	(a) RESPONSIBILITIES.—Subsection (d) of section
7	171a of title 10, United States Code, is amended—
8	(1) in paragraph (1), by inserting before the pe-
9	riod the following: ", and including with respect to
10	the integrated tactical warning and attack assess-
11	ment systems, processes, and enablers, and con-
12	tinuity of the governmental functions of the Depart-
13	ment of Defense''; and
14	(2) in paragraph $(2)(C)$, by inserting before the
15	period the following: "(including space system archi-
16	tectures and associated user terminals and ground
17	segments)".
18	(b) Ensuring Capabilities.—Such section is fur-
19	ther amended—
20	(1) by redesignating subsection (i) as subsection
21	(k); and
22	(2) by inserting after subsection (h) the fol-
23	lowing new subsections:
24	"(i) Reports on Space Architecture Develop-
25	MENT.— (1) Not less than 90 days before each of the dates

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46

on which a system described in paragraph (2) achieves 1 2 Milestone A or Milestone B approval, the Under Secretary of Defense for Acquisitions, Technology, and Logistics 3 4 shall submit to the congressional defense committees a re-5 port prepared by the Council detailing the implications of any changes to the architecture of such a system with re-6 7 spect to the systems, capabilities, and programs covered 8 under subsection (d).

9 "(2) A system described in this paragraph is any of10 the following:

11 "(A) Advanced extremely high frequency sat-12 ellites.

13 "(B) The space-based infrared system.

14 "(C) The integrated tactical warning and attack
15 assessment system and its command and control sys16 tem.

"(D) The enhanced polar system.

18 "(3) In this subsection, the terms 'Milestone A ap19 proval' and 'Milestone B approval' have the meanings
20 given such terms in section 2366(e) of this title.

21 "(j) NOTIFICATION OF REDUCTION OF CERTAIN
22 WARNING TIME.—(1) None of the funds authorized to be
23 appropriated or otherwise made available to the Depart24 ment of Defense for any fiscal year may be used to change
25 any command, control, and communications system de-

scribed in subsection (d)(1) in a manner that reduces the
 warning time provided to the national leadership of the
 United States with respect to a warning of a strategic mis sile attack on the United States unless—

- 5 "(A) the Secretary of Defense notifies the con6 gressional defense committees of such proposed
 7 change and reduction; and
- 8 "(B) a period of one year elapses following the9 date of such notification.

10 "(2) Not later than March 1, 2017, and each year thereafter, the Council shall determine whether the inte-11 12 grated tactical warning and attack assessment system and its command and control system have met all warfighter 13 requirements for operational availability, survivability, and 14 15 endurability. If the Council determines that such systems have not met such requirements, the Secretary of Defense 16 17 and the Chairman shall jointly submit to the congressional defense committees— 18

- 19 "(A) an explanation for such negative deter-20 mination;
- 21 "(B) a description of the mitigations that are in
 22 place or being put in place as a result of such nega23 tive determination; and

"(C) the plan of the Secretary and the Chair man to ensure that the Council is able to make a
 positive determination in the following year.".

4 (d) REPORTING REQUIREMENTS.—Subsection (e) of such section is amended by striking "At the same time" 5 and all that follows through "title 31," and inserting the 6 following: "During the period preceding January 31, 7 8 2021, at the same time each year that the budget of the 9 President is submitted to Congress pursuant to section 1105(a) of title 31, and from time to time after such pe-10 11 riod at the discretion of the Council,".

1	D4 SEC. 1644.[Log 63321] CONSOLIDATION OF NUCLEAR COM-
2	MAND, CONTROL, AND COMMUNICATIONS
3	FUNCTIONS OF THE AIR FORCE.
4	(a) Role of Major Command.—
5	(1) CONSOLIDATION.—Not later than March
6	31, 2017, the Secretary of the Air Force shall con-
7	solidate under a major command commanded by a
8	single general officer the responsibility, authority,
9	accountability, and resources for carrying out the
10	nuclear command, control, and communications
11	functions of the Air Force, including, at a minimum,
12	with respect to the following:
13	(A) All terrestrial and aerial components of
14	the nuclear command and control system that
15	are survivable and endurable.
16	(B) All terrestrial and aerial components
17	of the integrated tactical warning and attack
18	assessment system that are survivable and en-
19	durable.
20	(2) Oversight and budget approval.—Not
21	later than March 31, 2017, in addition to the re-
22	sponsibility, authority, accountability, and resources
23	for carrying out the nuclear command, control, and
24	communications functions of the Air Force provided
25	to a commander of a major command under para-
26	graph (1), the Secretary shall provide to the com-

mander the responsibility, authority, accountability,
 and resources to—

3 (A) conduct oversight over all components
4 of the nuclear command and control system and
5 the integrated tactical warning and attack as6 sessment system, regardless of the location or
7 the endurability of such components; and

8 (B) approve or disapprove of any budg-9 etary actions related to all components of the 10 nuclear command and control system and the 11 integrated tactical warning and attack assess-12 ment system, regardless of the location or the 13 endurability of such components.

14 (b) REPORT.—Not later than January 15, 2017, the 15 Secretary shall submit to the congressional defense committees a report on the plans and actions taken by the 16 17 Secretary to carry out subsection (a), including any guid-18 ance, directives, and orders that have been or will be issued by the Secretary, the Chief of Staff of the Air 19 20 Force, or other elements of the Air Force to carry out 21 subsection (a).

SEC. 1645.[Log 3] REPORT ON RUSSIAN AND CHINESE PO LITICAL AND MILITARY LEADERSHIP SURVIV ABILITY, COMMAND AND CONTROL, AND CON TINUITY OF GOVERNMENT PROGRAMS AND
 ACTIVITIES.

6 (a) REPORT.—Not later than January 15, 2017, the 7 Director of National Intelligence shall submit to the ap-8 propriate congressional committees, consistent with the 9 protection of sources and methods, a report on the leadership survivability, command and control, and continuity 10 11 of government programs and activities with respect to the People's Republic of China and the Russian Federation, 12 13 respectively. The report shall include the following:

- 14 (1) The goals and objectives of such programs15 and activities of each respective country.
- 16 (2) An assessment of how such programs and
 17 activities fit into the political and military doctrine
 18 and strategy of each respective country.
- (3) An assessment of the size and scope of such
 activities, including the location and description of
 above-ground and underground facilities important
 to the political and military leadership survivability,
 command and control, and continuity of government
 programs and activities of each respective country.

25 (4) An identification of which facilities various26 senior political and military leaders of each respec-

tive country are expected to operate out of during
 crisis and wartime.

3 (5) A technical assessment of the political and
4 military means and methods for command and con5 trol in wartime of each respective country.

6 (6) An identification of key officials and organi-7 zations of each respective country involved in man-8 aging and operating such facilities, programs and 9 activities, including the command structure for each 10 organization involved in such programs and activi-11 ties.

12 (7) An assessment of how senior leaders of each
13 respective country measure the effectiveness of such
14 programs and activities.

(8) An estimate of the annual cost of such pro-grams and activities.

(9) An assessment of the degree of enhanced
survivability such programs and activities can be expected to provide in various military scenarios ranging from limited conventional conflict to strategic
nuclear employment.

(10) An assessment of the type and extent of
foreign assistance, if any, in such programs and activities.

(11) An assessment of the status and the effec tiveness of the intelligence collection of the United
 States on such programs and capabilities, and any
 gaps in such collection.

5 (12) Any other matters the Director determines6 appropriate.

7 (b) COUNCIL ASSESSMENT.—Not later than 90 days 8 after the date on which the Director submits the report 9 under subsection (a), the Council on Oversight of the Na-10 tional Leadership Command, Control, and Communications System established by section 171a of title 10, 11 12 United States Code, shall submit to the appropriate con-13 gressional committees an assessment of how the command, control, and communications systems for the national 14 15 leadership of the People's Republic of China and the Russian Federation, respectively, compare to such system of 16 17 the United States.

18 (c) STRATCOM.—Together with the assessment 19 submitted under subsection (b), the Commander of the 20United States Strategic Command shall submit to the ap-21 propriate congressional committees the views of the Commander on the report under subsection (a), including a 22 23 detailed description for how the leadership survivability, 24 command and control, and continuity of government pro-25 grams and activities of the People's Republic of China and

the Russian Federation, respectively, are considered in the
 plans and options under the responsibility of the Com mander under the unified command plan.

4 (d) FORMS.—Each report or assessment submitted
5 under this section may be submitted in unclassified form,
6 but may include a classified annex.

7 (e) APPROPRIATE CONGRESSIONAL COMMITTEES DE8 FINED.—In this section, the term "appropriate congres9 sional committees" means—

10 (1) the congressional defense committees; and

(2) the Permanent Select Committee on Intelligence of the House of Representatives and the Select Committee on Intelligence of the Senate.

1	SEC. 1646.[Log 62891] SENSE OF CONGRESS ON IMPOR-
2	TANCE OF INDEPENDENT NUCLEAR DETER-
3	RENT OF UNITED KINGDOM.
4	It is the sense of Congress that—
5	(1) the United States believes that the inde-
6	pendent nuclear deterrent and decision-making of
7	the United Kingdom provides a crucial contribution
8	to international stability, the North Atlantic Treaty
9	Organization alliance, and the national security of
10	the United States;
11	(2) nuclear deterrence is and will continue to be
12	the highest priority mission of the Department of
13	Defense and the United States benefits when the
14	closest ally of the United States clearly and un-
15	equivocally sets similar priorities;
16	(3) the United States sees the nuclear deterrent
17	of the United Kingdom as central to trans-Atlantic
18	security and to the commitment of the United King-
19	dom to NATO to spend two percent of gross domes-
20	tic product on defense;
21	(4) the commitment of the United Kingdom to
22	maintain a continuous at-sea deterrence posture
23	today and in the future complements the deterrent
24	capabilities of the United States and provides a
25	credible "second center of decision making" which
26	ensures potential attackers cannot discount the soli-

darity of the mutual relationship of the United
 States and the United Kingdom;

3 (5) the United States Navy must execute the 4 Ohio-class replacement submarine program on time 5 and within budget, seeking efficiencies and cost sav-6 ings wherever possible, to ensure that the program 7 delivers a Common Missile Compartment, the Tri-8 dent II (D5) Strategic Weapon System, and associ-9 ated equipment and production capabilities, that 10 support the successful development and deployment 11 of the Vanguard-successor submarines of the United 12 Kingdom; and

(6) the close technical collaboration, especially
expert mutual scientific peer review, provides valuable resilience and cost effectiveness to the respective deterrence programs of the United States and
the United Kingdom.

1	Subtitle E—Missile Defense
2	Programs and Other Matters
3	SEC. 1651.[Log 62707] EXTENSIONS OF PROHIBITIONS RE-
4	LATING TO MISSILE DEFENSE INFORMATION
5	AND SYSTEMS.
6	(a) Prohibition on Integration of Certain Mis-
7	sile Defense Systems.—
8	(1) IN GENERAL.—Section 130h of title 10,
9	United States Code, is amended—
10	(A) by redesignating subsection (d) as sub-
11	section (e);
12	(B) by inserting after subsection (c) the
13	following new subsection (d):
14	"(d) INTEGRATION.—None of the funds authorized to
15	be appropriated or otherwise made available for any fiscal
16	year for the Department of Defense may be obligated or
17	expended to integrate a missile defense system of the Rus-
18	sian Federation or a missile defense system of the People's
19	Republic of China into any missile defense system of the
20	United States."; and
21	(C) by striking the section heading and in-
22	serting the following: "Prohibitions relat-
23	ing to missile defense information
24	and systems".

1	(2) CLERICAL AMENDMENT.—The table of sec-
2	tions at the beginning of chapter 3 of title 10,
3	United States Code, is amended by striking the item
4	relating to section 130h and inserting the following
5	new item:
	"130h. Prohibitions relating to missile defense information and systems.".
6	(3) Conforming Repeals.—Sections 1672
7	and 1673 of the National Defense Authorization Act
8	for Fiscal Year 2016 (Public Law 114–92; 129 Stat.
9	1130) are repealed.
10	(b) EXTENSION OF SUNSET.—Section 130h(e) of
11	title 10, United States Code, as redesignated by subsection
12	(a)(1), is amended to read as follows:
13	"(e) SUNSET.—The prohibitions in subsections (a),
14	(b), and (d) shall expire on January 1, 2027.".

1	SEC. 1652.[Log 62708] REVIEW OF THE MISSILE DEFEAT
2	POLICY AND STRATEGY OF THE UNITED
3	STATES.
4	(a) NEW REVIEW.—The Secretary of Defense and
5	the Chairman of the Joint Chiefs of Staff shall jointly con-
6	duct a new review of the missile defeat capability, policy,
7	and strategy of the United States, with respect to—
8	(1) left- and right-of-launch ballistic missile de-
9	fense for—
10	(A) both regional and homeland purposes;
11	and
12	(B) the full range of active, passive, ki-
13	netic, and nonkinetic defense measures across
14	the full spectrum of land-, air-, sea-, and space-
15	based platforms;
16	(2) the integration of offensive and defensive
17	forces for the defeat of ballistic missiles, including
18	against weapons initially deployed on ballistic mis-
19	siles, such as hypersonic glide vehicles; and
20	(3) cruise missile defense of the homeland.
21	(b) ELEMENTS.—The review under subsection (a)
22	shall address the following:
23	(1) The missile defeat policy, strategy, and ob-
24	jectives of the United States in relation to the na-
25	tional security strategy of the United States and the
26	military strategy of the United States.

- (2) The role of deterrence in the missile defeat
 policy and strategy of the United States.
- 3 (3) The missile defeat posture, capability, and
 4 force structure of the United States.

(4) With respect to both the five- and ten-year 5 6 periods beginning on the date of the review, the 7 planned and desired end-state of the missile defeat 8 programs of the United States, including regarding 9 the integration and interoperability of such pro-10 grams with the joint forces and the integration and 11 interoperability of such programs with allies, and 12 specific benchmarks, milestones, and key steps re-13 quired to reach such end-states.

14 (5) The organization, discharge, and oversight
15 of acquisition for the missile defeat programs of the
16 United States.

17 (6) The roles and responsibilities of the Office
18 of the Secretary of Defense, Defense Agencies, com19 batant commands, the Joint Chiefs of Staff, and the
20 military departments in such programs and the
21 process for ensuring accountability of each stake22 holder.

(7) The process for determining requirementsfor missile defeat capabilities under such programs,

1	including input from the joint military requirements
2	process.
3	(8) The process for determining the force struc-
4	ture and inventory objectives for such programs.
5	(9) Standards for the military utility, oper-
6	ational effectiveness, suitability, and survivability of
7	the missile defeat systems of the United States.
8	(10) The method in which resources for the
9	missile defeat mission are planned, programmed,
10	and budgeted within the Department of Defense.
11	(11) The near-term and long-term costs and
12	cost effectiveness of such programs.
13	(12) The options for affecting the offense-de-
14	fense cost curve.
15	(13) Accountability, transparency, and over-
16	sight with respect to such programs.
17	(14) The role of international cooperation on
18	missile defeat in the missile defeat policy and strat-
19	egy of the United States and the plans, policies, and
20	requirements for integration and interoperability of
21	missile defeat capability with allies.
22	(15) Options for enhancing and making routine
23	the codevelopment of missile defeat capabilities with
24	allies of the United States in the near-term and far-
25	term.

(16) Declaratory policy governing the employ ment of missile defeat capabilities and the military
 options and plans and employment options of such
 capabilities.

5 (17) The role of multi-mission defense and 6 other assets of the United States, including space 7 and terrestrial sensors and plans to achieve multi-8 mission capability in current, planned, and other fu-9 ture assets and acquisition programs.

(18) The indications and warning required to
meet the missile defeat strategy and objectives of the
United States described in paragraph (1) and the
key enablers and programs to achieve such indications and warning.

(19) The impact of the mobility, countermeasures, and denial and deception capabilities of
adversaries on the indications and warning described
in paragraph (16) and the consequences of such impact for the missile defeat capability, objectives, and
military options of the United States and the plans
of the combatant commanders.

(20) Any other matters the Secretary deter-mines relevant.

24 (c) REPORTS.—

(1) RESULTS.—Not later than January 31,
 2018, the Secretary shall submit to the congres sional defense committees a report setting forth the
 results of the review under subsection (a).

5 (2) FORM.—The report required by paragraph
6 (1) shall be submitted in unclassified form, but may
7 include a classified annex.

8 (3)ANNUAL IMPLEMENTATION UPDATES.— 9 During the five-year period beginning on the date of 10 the submission of the report under paragraph (1), 11 the Director of Cost Assessment and Program Eval-12 uation shall submit to the Secretary of Defense, the 13 Chairman of the Joint Chiefs of Staff, and the con-14 gressional defense committees annual status updates 15 detailing the progress of the Secretary in imple-16 menting the missile defeat strategy of the United 17 States.

(4) THREAT REPORT.—Not later than 180 days
after the date of the enactment of this Act, the Director of National Intelligence shall submit to the
congressional defense committees, the Permanent
Select Committee on Intelligence of the House of
Representatives, and the Select Committee on Intelligence of the Senate a report containing an unclas-

1	sified summary, consistent with the protection of in-
2	telligence sources and methods, of—
3	(A) as of the date of the report, the bal-
4	listic and cruise missile threat to the United
5	States, deployed forces of the United States,
6	and friends and allies of the United States from
7	short-, medium-, intermediate-, and long-range
8	nuclear and non-nuclear ballistic and cruise
9	missile threats; and
10	(B) an assessment of such threat in 2026.
11	(d) NOTIFICATION.—
12	(1) IN GENERAL.—None of the funds author-
13	ized to be appropriated by this Act or otherwise
14	made available for fiscal year 2017 or any fiscal year
15	thereafter for the Secretary of Defense may be obli-
16	gated or expended to change the non-standard acqui-
17	sition processes and responsibilities described in
18	paragraph (2) until—
19	(A) the Secretary notifies the congressional
20	defense committees of such proposed change;
21	and
22	(B) a period of 180 days has elapsed fol-
23	lowing the date of such notification.

24 (2) NON-STANDARD ACQUISITION PROCESSES
25 AND RESPONSIBILITIES DESCRIBED.—The non-

standard acquisition processes and responsibilities
described in this paragraph are such processes and
responsibilities described in—
(A) the memorandum of the Secretary of
Defense titled "Missile Defense Program Direc-
tion" signed on January 2, 2002; and
(B) Department of Defense Directive
5134.09, as in effect on the date of the enact-
ment of this Act.
(e) Designation Required.—
(1) AUTHORITY.—Not later than March 31,
2018, the Secretary of Defense shall designate a
military department or Defense Agency with acquisi-
tion authority with respect to—
(A) the capability to defend the homeland
from cruise missiles; and
(B) left-of-launch ballistic missile defeat
capability.
(2) VALIDATION.—In making such designation
under paragraph (1), the Secretary shall include a
description of the manner in which the military re-
quirements for such capabilities will be validated.

	78
1	SEC. 1654.[Log 62983] MAXIMIZING AEGIS ASHORE CAPA-
2	BILITY.
3	(a) Anti-air Warfare Capability of Aegis
4	Ashore Sites.—
5	(1) EVALUATION.—The Secretary of Defense
6	shall conduct a complete evaluation of the optimal
7	anti-air warfare capability—
8	(A) for each current Aegis Ashore site by
9	not later than 180 days after the date of the
10	enactment of this Act; and
11	(B) as part of any future deployment by
12	the United States of an Aegis Ashore site after
13	the date of such enactment.
14	(2) Assessments included.—Each evaluation
15	under paragraph (1) shall include an assessment of
16	the potential deployment of enhanced sea sparrow
17	missiles, standard missile block 2 missiles, standard
18	missile block 6 missiles, or the SeaRAM missile sys-
19	tem.
20	(3) Consistency with Annex.—The Sec-
21	retary shall carry out this subsection consistent with
22	any classified annex accompanying this Act.
23	(b) Aegis Ashore Capability Evaluation.—Not
24	later than 120 days after the date of the enactment of
25	this Act, the Secretary of Defense and the Chairman of
26	the Joint Chiefs of Staff shall jointly submit to the con-

gressional defense committees an evaluation of each of the
 following:

3 (1) The ballistic missile and air threat against
4 the continental United States and the efficacy (in5 cluding with respect to cost, ideal and optimal de6 ployment locations, and potential deployment sched7 ule) of deploying one or more Aegis Ashore sites and
8 Aegis Ashore components for the ballistic and cruise
9 missile defense of the continental United States.

10 (2) The ballistic missile and air threat against
11 the Armed Forces on Guam and the efficacy (includ12 ing with respect to cost and schedule) of deploying
13 an Aegis Ashore site on Guam.

14 (c) AEGIS ASHORE SITE ON THE PACIFIC MISSILE15 RANGE FACILITY.—

16 (1) LIMITATION.—The Secretary of Defense
17 may not reduce the manning levels or test capability,
18 as such levels and capability existed on January 1,
19 2015, of the Aegis Ashore site at the Pacific Missile
20 Range Facility in Hawaii, including by putting such
21 site into a "cold" or "stand by" status.

22 (2) Environmental impact statement.—

23 (A) Not later than 60 days after the date
24 on which the Director of the Missile Defense
25 Agency submits to the congressional defense

1 committees the report under section 1689(b)(2)2 of the National Defense Authorization Act for 3 Fiscal Year 2016 (Public Law 114–92; 129 4 Stat. 1144), the Director shall notify such com-5 mittees on whether the preferred alternative for 6 fielding a medium range ballistic missile defense 7 sensor for the defense of Hawaii identified by 8 such report would require an update to the en-9 vironmental impact statement required for con-10 structing the Aegis Ashore site at the Pacific 11 Missile Range Facility. 12 (B) If the Director determines that an up-

13 dated environmental impact statement, a new 14 environmental impact statement, or another ac-15 tion is required or recommended pursuant to 16 the National Environmental Policy Act of 1969 17 (42 U.S.C. et seq.), the Director shall com-18 mence such action by not later than 60 days 19 after the date on which the Director makes the 20 notification under subparagraph (A).

(3) EVALUATION.—Not later than 60 days after
the date of the enactment of this Act, the Secretary
of Defense and the Chairman of the Joint Chiefs of
Staff shall jointly submit to the congressional defense committees an evaluation of the ballistic mis-

1	sile and air threat against Hawaii (including with re-
2	spect to threats to the Armed Forces and installa-
3	tions located in Hawaii) and the efficacy (including
4	with respect to cost and potential alternatives) of—
5	(A) making the Aegis Ashore site at the
6	Pacific Missile Range Facility operational;
7	(B) deploying the preferred alternative for
8	fielding a medium range ballistic missile defense
9	sensor for the defense of Hawaii described in
10	paragraph $(2)(A)$; and
11	(C) any other alternative the Secretary and
12	the Chairman determine appropriate.
13	(d) FORMS.—The evaluations submitted under sub-
14	sections (b) and $(c)(3)$ shall each be submitted in unclassi-
15	fied form, but may each include a classified annex.

1	SEC. 1655.[Log 63508] TECHNICAL AUTHORITY FOR INTE-
2	GRATED AIR AND MISSILE DEFENSE ACTIVI-
3	TIES AND PROGRAMS.
4	(a) AUTHORITY.—

5 (1) IN GENERAL.—The Director of the Missile 6 Defense Agency is the technical authority of the De-7 partment of Defense for integrated air and missile 8 defense activities and programs, including joint engi-9 neering and integration efforts for such activities 10 and programs, including with respect to defining and 11 controlling the interfaces of such activities and pro-12 grams and the allocation of technical requirements 13 for such activities and programs.

14 (2) DETAILEES.—

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15 (A) In carrying out the technical authority 16 under paragraph (1), the Director may seek to 17 have staff detailed to the Missile Defense Agen-18 cy from the Joint Functional Component Com-19 mand for Integrated Missile Defense and the 20 Joint Integrated Air and Missile Defense Orga-21 nization in a number the Director determines 22 necessary in accordance with subparagraph (B).

(B) In detailing staff under subparagraph(A) to carry out the technical authority under paragraph (1), the total number of staff, including detailees, of the Missile Defense Agency

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1	who carry out such authority may not exceed
2	the number that is twice the number of such
3	staff carrying out such authority as of January
4	1, 2016.
5	(b) Assessments and Plans.—
6	(1) BIENNIAL SUBMISSION.—Not later than
7	January 31, 2017, and biennially thereafter through
8	2021, the Director shall submit to the congressional
9	defense committees an assessment of the state of in-
10	tegration and interoperability of the integrated air
11	and missile defense capabilities of the Department of
12	Defense.
13	(2) ELEMENTS.—Each assessment under para-
14	graph (1) shall include the following:
15	(A) Identification of any gaps in the inte-
16	gration and interoperability of the integrated
17	air and missile defense capabilities of the De-
18	partment.
19	(B) A description of the options to improve
20	such capabilities and remediate such gaps.
21	(C) A plan to carry out such improvements
22	and remediations, including milestones and
23	costs for such plan.
24	(3) FORM.—Each assessment under paragraph
25	(1) shall be submitted in classified form unless the

- 1 Director determines that submitting such assess-
- 2 ment in unclassified form is useful and expedient.

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1 SEC. 1656.[Log 4] DEVELOPMENT AND RESEARCH OF NON-

TERRESTRIAL MISSILE DEFENSE LAYER.

3 (a) DEVELOPMENT.—

4 (1) IN GENERAL.—Not later than 30 days after 5 the date of the enactment of this Act, the Director 6 of the Missile Defense Agency, with the support of 7 federally funded research and development centers 8 with subject matter expertise, shall commence the 9 concept definition, design, research, development, en-10 gineering evaluation, and test of a space-based bal-11 listic missile intercept and defeat layer to the bal-12 listic missile defense system that—

13 (A) shall provide defense options to bal14 listic missiles and re-entry vehicles, independent
15 of adversary country size and threat trajectory;
16 and

17 (B) may provide a boost-phase missile de18 fense capability, as well as additional defensive
19 options against direct ascent anti-satellite weap20 ons, hypersonic boost glide vehicles, and maneu21 vering re-entry vehicles.

(2) ACTIVITIES.—The activities authorized
under paragraph (1) shall include, at a minimum,
the following:

1	(A) The initiation of formal steps for po-
2	tential integration into the ballistic missile de-
3	fense system architecture.
4	(B) Mature planning for early proof of
5	concept component demonstrations.
6	(C) Draft operation concepts in the context
7	of a multi-layer architecture.
8	(D) Identification of proof of concept ven-
9	dor sources for demo components and sub-
10	assemblies.
11	(E) The development of multi-year tech-
12	nology and risk reduction investment plan.
13	(F) The commencement of the develop-
14	ment of a proof of concept master program
15	phasing schedule.
16	(G) Identification of proof of concept long
17	lead items.
18	(H) Initiation of requests for proposals
19	from industry with significant commercial, civil,
20	and national security space experience, includ-
21	ing for space launch services.
22	(I) Mature options for an aggressive but
23	low-risk acquisition strategy.
24	(b) Space Test Bed.—Not later than 60 days after
25	the date of the enactment of this Act, the Director shall

commence research, development, test, and evaluation ac tivities with respect to a space test bed for a missile inter ceptor capability.

4 (c) BUDGET SUBMISSIONS.—The Director shall in-5 clude in the budget of the President submitted to Congress 6 under section 1105(a) of title 31, United States Code, for 7 fiscal year 2018, and in the future-years defense program 8 under section 221 of title 10, United States Code, that is submitted in 2017, a detailed budget and development 9 plan, irrespective of planned budgetary total obligation au-10 11 thority, for the activities described in subsections (a) and (b), assuming initial demonstration, on-orbit, of such the 12 13 capabilities described in such subsections by 2025.

1	SEC. 1657.[]	Log 62986]	LIMITATION	N ON AVAILA	BILITY OF
2		FUNDS F	OR PATRIO	T LOWER TIE	R AIR AND
3		MISSILE	DEFENSE	CAPABILITY	OF THE
4		ARMY.			

5 Of the funds authorized to be appropriated by this 6 Act or otherwise made available for fiscal year 2017 for 7 the Patriot lower tier air and missile defense capability 8 of the Army, not more than 50 percent may be obligated 9 or expended until each of the following occurs:

(1) The Director of the Missile Defense Agency 10 11 certifies to the congressional defense committees 12 that such capability, upon the completion of the 13 modernization process addressed by the analysis of 14 alternatives regarding such capability, will be fully 15 interoperable with the ballistic missile defense sys-16 tem and other air and missile defense capabilities 17 deployed and planned to be deployed by the United 18 States.

19 (2) The Chairman of the Joint Chiefs of Staff
20 certifies to the congressional defense committees
21 that such capability, upon the completion of the
22 modernization process addressed by the analysis of
23 alternatives regarding such capability, will meet—

24 (A) the desired attributes for modularity
25 sought by the geographic combatant commands;
26 and

1	(B) the validated and objective warfighter
2	requirements for air and missile defense capa-
3	bility.
4	(3) The Chief of Staff of the Army, in coordina-
5	tion with the Secretary of the Army, submits to the
6	congressional defense committees—
7	(A) a determination as to whether the re-
8	quirements of the lower tier air and missile de-
9	fense program are appropriate for acquisition
10	through the Army Rapid Capabilities Office,
11	and if the determination is that such require-
12	ments are not so appropriate, an evaluation of
13	why;
14	(B) the terms of the competition planned
15	for the lower tier air and missile defense pro-
16	gram to ensure fair competition for all competi-
17	tors; and
18	(C) either—
19	(i) certification that—
20	(I) the requirements of the lower
21	tier air and missile defense program
22	can only be met through a multi-year
23	development and acquisition program,
24	rather than through more expedient
25	modification of existing or dem-

1	onstrated capabilities of the Depart-
2	ment of Defense; and
3	(II) the lower tier air and missile
4	defense acquisition program as de-
5	signed as of the date of the certifi-
6	cation will provide the most rapid de-
7	ployment of a modernized capability
8	to the warfighter at reasonable risk
9	levels (as compared to systems with
10	similar amounts of complexity and
11	technological readiness); or
12	(ii) a revised acquisition strategy for
13	the lower tier air and missile defense ac-
14	quisition program, including a schedule to
15	carry out such strategy.
16	(4) If the Chief of Staff of the Army submits
17	the revised acquisition strategy under paragraph
18	(3)(C)(ii), a period of 30 days has elapsed following
19	the date of such submission.

1SEC. 1658.[Log 63501] LIMITATION ON AVAILABILITY OF2FUNDS FOR CONVENTIONAL PROMPT GLOB-3AL STRIKE WEAPONS SYSTEM.

4 Of the funds authorized to be appropriated by this 5 Act or otherwise made available for fiscal year 2017 for research, development, test, and evaluation, Defense-wide, 6 7 for the conventional prompt global strike weapons system, 8 not more than 75 percent may be obligated or expended until the date on which the Chairman of the Joint Chiefs 9 of Staff, in consultation with the Commander of the 10 United States European Command, the Commander of the 11 United States Pacific Command, and the Commander of 12 the United States Strategic Command, submits to the con-13 14 gressional defense committees a report on—

- (1) whether there are warfighter requirements
 or integrated priorities list submitted needs for a
 limited operational conventional prompt strike capability; and
- (2) whether the program plan and schedule proposed by the program office in the Office of the
 Under Secretary of Defense for Acquisition, Technology, and Logistics supports such requirements
 and integrated priorities lists submissions.

1	SEC. 1660.[Log 2rl] REVIEW OF MISSILE DEFENSE AGENCY
2	BUDGET SUBMISSIONS FOR GROUND-BASED
3	MIDCOURSE DEFENSE AND EVALUATION OF
4	ALTERNATIVE GROUND-BASED INTER-
5	CEPTOR DEPLOYMENTS.
6	(a) Budget Sufficiency.—
7	(1) Report.—Not later than 180 days after
8	the date of the enactment of this Act, the Director
9	of Cost Assessment and Program Evaluation shall
10	submit to the congressional defense committees a re-
11	port on the ground-based midcourse defense system.
12	(2) ELEMENTS.—The report under paragraph
13	(1) shall include an evaluation of each of the fol-
14	lowing:
15	(A) The modernization requirements for
16	the ground-based midcourse system, including
17	all command and control, ground systems, sen-
18	sors and sensor interfaces, boosters and kill ve-
19	hicles, and integration of known future systems
20	and components.
21	(B) The obsolescence of such systems and
22	components.
23	(C) The industrial base requirements relat-
24	ing to the ground-based midcourse system.
25	(D) The extent to which the estimated lev-
26	els of annual funding included in the most re-

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cent budget and the future-years defense pro gram submitted under section 221 of this title
 fully fund the requirements under clause (i).
 (3) UPDATES.—Not later than 30 days after
 the date on which each budget is submitted through

January 31, 2021, the Director shall submit to the
congressional defense committees an update to the
report under paragraph (1).

9 (4) CERTIFICATION.—Not later than 60 days 10 after the date on which each budget is submitted 11 through January 31, 2021, the Commander of the 12 United States Northern Command shall certify to the congressional defense committees that the most 13 14 recent defense budget materials include a sufficient 15 level of funding for the ground-based midcourse de-16 fense system to modernize the system to remain 17 paced ahead of the developing limited ballistic mis-18 sile threat to the homeland, including from an acci-19 dental or unauthorized ballistic missile attack.

(b) EVALUATION OF TRANSPORTABLE GROUND21 BASED INTERCEPTOR.—Not later than 180 days after the
22 date of the enactment of this Act, the Director of the Mis23 sile Defense Agency shall submit to the congressional de24 fense committees a report on transportable ground-based

interceptors. Such report shall detail the views of the Di rector regarding—

- 3 (1) the cost that is unconstrained by current 4 projected budget levels for the Missile Defense Agen-5 cy (including a detailed program development pro-6 duction and deployment cost and schedule for the 7 earliest technically possible deployment), the associ-8 ated manning, and the comparative cost (including 9 as compared to developing a fixed ground-based in-10 terceptor site), technical readiness, and feasibility of 11 a transportable ground-based interceptor as a means 12 to deploy additional ground-based interceptors for 13 the defense of the United States and the operational 14 value of a transportable ground-based interceptor for 15 the defense of the homeland against a limited bal-16 listic missile attack, including from accidental or un-17 authorized ballistic missile launch;
- (2) the type and number of flight and or inter(2) the type and number of flight and or inter(2) cept tests that would be required to validate the capability and compatibility of a transportable groundbased interceptor in the ballistic missile defense system;
- (3) the enabling capabilities, and the cost ofsuch capabilities, to support such a system;

(4) any safety consideration of a transportable
 ground-based interceptor; and

3 (5) other matters that the Director determines4 pertinent to such a system.

5 (c) DEFINITIONS.—In this section, the terms "budg6 et" and "defense budget materials" have the meanings
7 given those terms in section 231 of title 10, United States
8 Code.

1	SEC. 1661.[Log 62985] DECLARATORY POLICY, CONCEPT OF
2	OPERATIONS, AND EMPLOYMENT GUIDE-
3	LINES FOR LEFT-OF-LAUNCH CAPABILITY.

4 Not later than 120 days after the date of the enact5 ment of this Act, the Secretary of Defense and the Chair6 man of the Joint Chiefs of Staff shall jointly submit to
7 the congressional defense committees the following:

8 (1) Both the classified and unclassified declara-9 tory policy of the United States regarding the use of 10 the left-of-launch capability of the United States 11 against potential targets and how the Secretary and 12 the Chairman intend to ensure that such capability 13 is a deterrent to attacks by adversaries.

14 (2) Both the classified and unclassified concept
15 of operations for the use of such capability across
16 and between the combatant commands.

17 (3) Both the classified and unclassified employ18 ment strategy, plans, and options for such capa19 bility.

1	SEC. 1662.[Log 62982] SENSE OF CONGRESS ON INITIAL OP-
2	ERATING CAPABILITY OF PHASE 2 OF EURO-
3	PEAN PHASED ADAPTIVE APPROACH TO MIS-
4	SILE DEFENSE.

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

6 (1) President Obama, during his announcement 7 of the European Phased Adaptive Approach on September 17, 2009, stated, "This approach is based on 8 9 an assessment of the Iranian missile threat," and 10 "the best way to responsibly advance our security 11 and the security of our allies is to deploy a missile 12 defense system that best responds to the threats we 13 face and that utilizes technology that is both proven 14 and cost-effective.".

(2) The 2010 Ballistic Missile Defense review
stated that "The [European] Phased Adaptive Approach utilizes existing and proven capabilities to
meet current threats and then will improve upon
these capabilities over time by integrating new technology.".

(3) Secretary of Defense Leon Panetta, during
a speech in Brussels on October 5, 2011, stated,
"The United States is fully committed to building a
missile defense capability for the full coverage and
protection of all our NATO European populations,

- their territory and their forces against the growing
 threat posed by ballistic missiles.".
- 3 (4) Secretary of Defense Chuck Hagel, during
 4 a press conference on March 15, 2013, stated, "The
 5 missile deployments the United States is making in
 6 phases one through three of the European Phased
 7 Adaptive Approach, including sites in Romania and
 8 Poland, will still be able to provide coverage of all
 9 European NATO territory as planned by 2018.".

10 (b) SENSE OF CONGRESS.—It is the sense of Con-11 gress that—

(1) the United States is committed to the defense of deployed members of the Armed Forces of
the United States and to the defense of the European allies of the Unites States by increasing the
ballistic missile defense capability of the North Atlantic Treaty Organization (in this section referred
to as "NATO");

(2) phase 2 of the European Phased Adaptive
Approach will provide NATO with a substantial increase in ballistic missile defense capability since
NATO declared Interim Ballistic Missile Defense
Capability at the Chicago Summit in 2012, and such
phase consists of—

25 (A) Aegis Ashore in Romania;

1	(B) four Aegis ballistic missile defense ca-
2	pable ships homeported at Rota, Spain; and
3	(C) a more capable SM–3 interceptor;
4	(3) NATO is moving forward with the mod-
5	ernization of the defense capabilities of NATO that
6	is responsive to 21st century threats to the territory
7	and populations of member states of NATO;
8	(4) the member states of NATO recognize the
9	importance of this contribution, which sends a clear
10	signal that NATO will not allow potential adver-
11	saries to threaten the use of ballistic missile strikes
12	to coerce NATO or deter NATO from responding to
13	aggression against the interests of NATO; and
14	(5) phase 2 of the European Phased Adaptive
15	Approach is ready for 24-hour-a-day, seven-day-a-
16	week operation, with proven military systems and
17	command and control capability, and should be so
18	declared at the July 2016 NATO Summit in War-
19	saw, Poland.

 1
 SEC. 3112.Log 63287 PROTECTION OF NUCLEAR FACILITIES

 2
 FROM UNMANNED AIRCRAFT.

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3 Subsection k. of section 161 of the Atomic Energy
4 Act of 1954 (42 U.S.C. 2201(k)) is amended—

5 (1) by inserting "(1)" before "authorize such of
6 its"; and

7 (2) by adding at the end the following new8 paragraph:

9 "(2) notwithstanding any other provision of law, authorize such of its officers, employees, and contractors as 10 11 it deems necessary in the interest of the common defense and security to use prudent and reasonable measures to 12 13 mitigate the threat from, disable, interdict, or interfere with the operation of, or, if needed, intercept, any un-14 manned aircraft system or unmanned aircraft (as such 15 terms are defined in section 331 of the FAA Moderniza-16 tion and Reform Act of 2012 (Public Law 112–95; 49 17 18 U.S.C. 40101 note)) that may present a threat to persons, 19 property, or classified information under the jurisdiction 20 of the United States at facilities that store or use special 21 nuclear material and are owned by or contracted to the 22 United States, or with respect to property being trans-23 ported to or from such facilities. The Secretary shall issue 24 guidelines for the exercise of this authority;".

1SEC. 3113.Log 63336 RESEARCH AND DEVELOPMENT OF AD-2VANCED NAVAL NUCLEAR FUEL SYSTEM3BASED ON LOW-ENRICHED URANIUM.

4 (a) PROHIBITION.—Except as provided in subsection 5 (b), none of the funds authorized to be appropriated by 6 this Act or otherwise made available for fiscal year 2017 7 for the Department of Energy may be obligated or ex-8 pended to plan or carry out research and development of 9 an advanced naval nuclear fuel system based on low-en-10 riched uranium.

11 (b) EXCEPTION.—Of the funds authorized to be appropriated by this Act or otherwise made available for fis-12 cal year 2017 for defense nuclear nonproliferation, as 13 14 specified in the funding table in division D, not more than \$5,000,000 shall be made available to the Deputy Admin-15 16 istrator for Naval Reactors for initial planning and early research and development of an advanced naval nuclear 17 fuel system based on low-enriched uranium. 18

(c) BUDGET MATTERS.—Section 3118 of the National Defense Authorization Act for Fiscal Year 2016
(Public Law 114–92; 129 Stat. 1196) is amended—

(1) by striking paragraph (2) of subsection (c)and inserting the following new paragraph:

24 "(2) BUDGET REQUESTS.—If the Secretaries
25 determine under paragraph (1) that research and
26 development of an advanced naval nuclear fuel sys-

tem based on low-enriched uranium should continue, 1 2 the Secretaries shall ensure that each budget of the 3 President submitted to Congress under section 1105(a) of title 31, United States Code, for fiscal 4 year 2018 and each fiscal year thereafter in which 5 such research and development is carried out in-6 cludes in the budget line item for the 'Defense Nu-7 clear Nonproliferation' account amounts necessary 8 to carry out the conceptual plan under subsection 9 (b)."; and 10 (2) in subsection (d), by striking "for material 11

12 management and minimization".

1SEC. 3114.Log63326DISPOSITION OF WEAPONS-USABLE2PLUTONIUM.

3 (a) IN GENERAL.—Except as provided by subsection
4 (c), using funds described in subsection (b), the Secretary
5 of Energy shall carry out construction and project support
6 activities relating to the MOX facility.

7 (b) FUNDS DESCRIBED.—The funds described in this8 subsection are the following:

9 (1) Funds authorized to be appropriated by this
10 Act or otherwise made available for fiscal year 2017
11 for the National Nuclear Security Administration for
12 the MOX facility for construction and project sup13 port activities.

14 (2) Funds authorized to be appropriated for a
15 fiscal year prior to fiscal year 2017 for the National
16 Nuclear Security Administration for the MOX facil17 ity for construction and project support activities
18 that are unobligated as of the date of the enactment
19 of this Act.

20 (c) WAIVER.—The Secretary may waive the require21 ment in subsection (a) to carry out construction and
22 project support activities relating to the MOX facility if—

23 (1) the Secretary submits to the congressional
24 defense committees—

25 (A) an updated performance baseline for26 construction and project support activities relat-

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ing to the MOX facility as required by section 3119(b) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92; 129 Stat. 1197);

(B) notification that the Secretary has 6 sought to enter into consultations with any rel-7 evant State or government of a foreign country 8 necessary to pursue an alternative option for 9 carrying out the plutonium disposition program, including a comprehensive description of the 10 status of such consultations and a detailed plan 12 and schedule for concluding such consultations;

> (C) the commitment of the Secretary to remove plutonium from South Carolina and ensure a sustainable future for the Savannah River Site; and

17 (D) either—

18 (i) notification that the prime con-19 tractor of the MOX facility has not sub-20 mitted a proposal, during the three-month 21 period following the date on which the Sec-22 retary requests such a proposal, for a 23 fixed-price contract for completing con-24 struction and project support activities for 25 the MOX facility; or

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1	(ii) certification that such proposal is
2	materially deficient or non-responsive, or
3	that an alternative option for carrying out
4	the plutonium disposition program exists
5	and the total lifecycle cost of such alter-
6	native option would be less than approxi-
7	mately half of the estimated remaining
8	total lifecycle cost of the mixed-oxide fuel
9	program; and
10	(2) a period of 15 days has elapsed following
11	the date of such submission.
12	(d) DEFINITIONS.—In this section:
13	(1) The term "MOX facility" means the mixed-
14	oxide fuel fabrication facility at the Savannah River
15	Site, Aiken, South Carolina.
16	(2) The term "project support activities" means
17	activities that support the design, long-lead equip-
18	ment procurement, and site preparation of the MOX
19	facility.

1 SEC. 3115.Log 62894 DESIGN BASIS THREAT.

(a) UPDATE TO ORDER.—Not later than August 31,
2016, the Secretary of Energy shall update Department
of Energy Order 470.3B relating to the design basis
threat for protecting nuclear weapons, special nuclear material, and other critical assets in the custody of the Department of Energy.

8 (b) SENSE OF CONGRESS.—It is the sense of Con-9 gress that—

(1) the intelligence community (as defined in
section 3(4) of the National Security Act of 1947
(50 U.S.C. 3003(4)) should promulgate regular, biannual updates to the Nuclear Security Threat Capabilities Assessment to better inform nuclear security postures within the Department of Defense and
the Department of Energy;

(2) the Department of Defense and the Department of Energy should closely, and in real-time,
track and assess national, regional, and local threats
to the defense nuclear facilities of the respective Departments; and

(3) the Department of Defense and the Department
ment of Energy should regularly review assessments
and other input provided by activities described in
paragraphs (1) and (2) and adjust security postures
accordingly.

1SEC. 3118.Log62844LIMITATION ON AVAILABILITY OF2FUNDSFORDEFENSEENVIRONMENTAL3CLEANUP PROGRAM DIRECTION.

4 Of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for 5 6 defense environmental cleanup for program direction, not more than 90 percent may be obligated or expended until 7 the date on which the Secretary of Energy submits to Con-8 gress the future-years defense environmental cleanup plan 9 required to be submitted during 2017 under section 10 4402A of the Atomic Energy Defense Act (50 U.S.C. 11 12 2582A).

1SEC. 3119.Log63335LIMITATION ON AVAILABILITY OF2FUNDSFOR ACCELERATION OF NUCLEAR3WEAPONS DISMANTLEMENT.

4 (a) LIMITATION ON MAXIMUM AMOUNT FOR DIS-5 MANTLEMENT.—Of the funds authorized to be appropriated by this Act or otherwise made available for any 6 7 of fiscal years 2017 through 2021 for the National Nu-8 clear Security Administration, not more than \$56,000,000 9 may be obligated or expended in each such fiscal year to carry out the nuclear weapons dismantlement and disposi-10 tion activities of the Administration. 11

12 (b) LIMITATION ON ACCELERATION OF DISMANTLE-13 MENT ACTIVITIES.—Except as provided by subsection (d), none of the funds authorized to be appropriated by this 14 Act or otherwise made available for any of fiscal years 15 16 2017 through 2021 for the National Nuclear Security Administration may be obligated or expended to accelerate 17 the nuclear weapons dismantlement activities of the Ad-18 19 ministration to a rate that exceeds the rate described in 20 the Stockpile Stewardship and Management Plan sched-21 ule.

(c) LIMITATION ON DISMANTLEMENT OF CERTAIN
CRUISE MISSILE WARHEADS.—Except as provided by
subsection (d), none of the funds authorized to be appropriated by this Act or otherwise made available for any
of fiscal years 2017 through 2021 for the National Nu-

1	clear Security Administration may be obligated or ex-
2	pended to dismantle or dispose a W84 nuclear weapon.
3	(d) EXCEPTION.—The limitations in subsection (b)
4	and (c) shall not apply to the following:
5	(1) The dismantlement of a nuclear weapon not
6	covered by the Stockpile Stewardship and Manage-
7	ment Plan schedule if the Administrator for Nuclear
8	Security certifies, in writing, to the congressional de-
9	fense committees that—
10	(A) the components of the nuclear weapon
11	are directly required for the purposes of a cur-
12	rent life extension program; or
13	(B) such dismantlement is necessary to
14	conduct maintenance or surveillance of the nu-
15	clear weapons stockpile or to ensure the safety
16	or reliability of the nuclear weapons stockpile.
17	(2) The dismantlement of a nuclear weapon if
18	the President certifies, in writing, to the congres-
19	sional defense committees that—
20	(A) such dismantlement is being carried
21	out pursuant to a nuclear arms reduction treaty
22	or similar international agreement that requires
23	such dismantlement; and
24	(B) such treaty or similar international
25	agreement—

1	(i) has entered into force after the
2	date of the enactment of this Act; and
3	(ii) was approved—
4	(I) with the advice and consent
5	of the Senate pursuant to Article II,
6	section 2, clause 2 of the Constitution
7	after the date of the enactment of this
8	Act; or
9	(II) by an Act of Congress, as
10	described in section 303(b) of the
11	Arms Control and Disarmament Act
12	(22 U.S.C. 2573(b)).
13	(e) Stockpile Stewardship and Management
14	PLAN SCHEDULE DEFINED.—In this section, the term
15	"Stockpile Stewardship and Management Plan schedule"
16	means the schedule described in table $2-7$ of the annex
17	of the report titled "Fiscal Year 2016 Stockpile Steward-
18	ship and Management Plan'' submitted in March 2015 by
19	the Administrator for Nuclear Security to the congres-
20	sional defense committees under section $4203(b)(2)$ of the
21	Atomic Energy Defense Act (50 U.S.C. 2523(b)(2)).

1SEC. 3120.Log63780ANNUALCERTIFICATIONOFSHIP-2MENTS TO WASTE ISOLATION PILOT PLANT.

3 (a) ANNUAL CERTIFICATION.—During the five-year
4 period beginning on the date of the enactment of this Act,
5 not later than February 1 of each year, the Secretary of
6 Energy shall certify to the congressional defense commit7 tees the following, with respect to the year covered by the
8 certification:

9 (1) The covered contractors have certified to 10 the Administrator for Nuclear Security that the cov-11 ered contractors are aware of the contents of each 12 container shipped by the covered contractors to the 13 Waste Isolation Pilot Plant, Carlsbad, New Mexico, 14 in sufficient detail to ensure that the container is 15 handled properly to prevent the release of radiation 16 or contamination.

17 (2) The Administrator is aware of the contents
18 of each container shipped by the Administrator or
19 covered contractors to the Waste Isolation Pilot
20 Plant, Carlsbad, New Mexico, in such sufficient de21 tail.

(3) The Assistant Secretary of Energy for Environmental Management is aware of the contents of
each container shipped from a clean-up site to the
Waste Isolation Pilot Plant in such sufficient detail.

(b) COVERED CONTRACTORS DEFINED.—In this sec tion, the term "covered contractors" means each manage ment and operating contractor of a national security lab oratory or nuclear weapons production facility (as such
 terms are defined in section 4002 of the Atomic Energy
 Defense Act (50 U.S.C. 2501) that ships materials to the
 Waste Isolation Pilot Plant, Carlsbad, New Mexico.

Subtitle C—Plans and Reports

2 SEC. 3131. Log 62687 CLARIFICATION OF ANNUAL REPORT 3 AND CERTIFICATION ON STATUS OF SECU-4 RITY OF ATOMIC ENERGY DEFENSE FACILI-5 TIES. 6 Section 4506(b)(1)(B) of the Atomic Energy Defense Act (50 U.S.C. 2657) is amended to read as follows: 7 "(B) written certification that such facilities are 8 9 secure and that the security measures at such facili-10 ties meet the security standards and requirements of

11 the Department of Energy.".

29

1 SEC. 3133.Log 62917 REPEAL OF CERTAIN REPORTING RE-2 **QUIREMENTS.** 3 (a) Reports on Plan to Protect Against Inad-4 VERTENT RELEASE OF RESTRICTED DATA AND FOR-5 MERLY RESTRICTED DATA.—Section 4522 of the Atomic 6 Energy Defense Act (50 U.S.C. 2672) is amended— 7 (1) by striking subsection (e); and 8 (2) by redesignating subsection (f) as sub-9 section (e). 10 (b) GAO REPORT ON PROGRAM ON SCIENTIFIC EN-GAGEMENT FOR NONPROLIFERATION.—Section 3122 of 11 the National Defense Authorization Act for Fiscal Year 12 2013 (Public Law 112–239; 50 U.S.C. 2571 note), as 13 14 amended by section 3125 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66; 127 15 Stat. 1063), is further amended— 16 17 (1) in subsection (b)(1), by striking ", and to 18 the Comptroller General of the United States,"; 19 (2) by striking subsection (e); and 20 (3) by redesignating subsections (f) and (g) as 21 subsections (e) and (f), respectively.

30

1	SEC. 3134.Log 62846 INDEPENDENT ASSESSMENT OF TECH-
2	NOLOGY DEVELOPMENT UNDER DEFENSE
3	ENVIRONMENTAL CLEANUP PROGRAM.

4 (a) ASSESSMENT.—Not later than 60 days after the 5 date of the enactment of this Act, the Secretary of Energy 6 shall seek to enter into an agreement with the National 7 Academy of Sciences to conduct an independent assess-8 ment of the technology development efforts of the defense 9 environmental cleanup program of the Department of En-10 ergy.

(b) ELEMENTS.—The assessment under subsection(a) shall include the following:

(1) A review of the technology development efforts of the defense environmental cleanup program
of the Department of Energy, including an assessment of the process by which the Secretary identifies
and chooses technologies to pursue under the program.

(2) A comprehensive review and assessment of
technologies or alternative approaches to defense environmental cleanup efforts that could—

22 (A) reduce the long-term costs of such ef-23 forts;

24 (B) accelerate schedules for carrying out
25 such efforts;

31

1	(C) mitigate uncertainties, vulnerabilities,
2	or risks relating to such efforts; or
3	(D) otherwise significantly improve the de-
4	fense environmental cleanup program.
5	(c) SUBMISSION.—Not later than September 30,
6	2017, the National Academy of Sciences shall submit to
7	the congressional defense committees and the Secretary
8	a report on the assessment under subsection (a).

1 TITLE XXXII—DEFENSE NU-

2 CLEAR FACILITIES SAFETY 3 BOARD

Sec. 3201. [Log 62685] Authorization.

4 SEC. 3201. [Log 62685] AUTHORIZATION.

There are authorized to be appropriated for fiscal
year 2017, \$31,000,000 for the operation of the Defense
Nuclear Facilities Safety Board under chapter 21 of the
Atomic Energy Act of 1954 (42 U.S.C. 2286 et seq.).

DIRECTIVE REPORT LANGUAGE

Table Of Contents

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND

INTELLIGENCE MATTERS

ITEMS OF SPECIAL INTEREST

Briefing on B61-12 Deployment Plans and Costs for Modifying Dual-Capable Aircraft

Command and Control of National Security Space Assets

Comptroller General Review of Software-Intensive Space Acquisition Programs Comptroller General Review of the Space Acquisition Workforce

Department of Defense Equities on Approval of the Galilieo Precision, Navigation, and Timing System

Department of Defense Requirements for National Reconnaissance Office Programs

Ensuring Technical Expertise for Sustainment of the Nuclear Command and Control System

Evaluation of Department of Defense Use of Non-Allied Global Navigation Satellite Systems

Expeditionary Large Data Object Repository for Analytics in Deployed Operations

Ground Based Strategic Deterrent

Interagency Collaboration on Physical Security for Nuclear Weapons

Intermediate-Range Ground-Launched Missiles

Joint Interagency Combined Space Operations Center

Minimum Essential Emergency Communications Network

Next Generation Operational Control Segment

Nuclear Weapons Security Forces Standards

Plan for Strengthening Outer Space Cooperation with Japan

Quarterly Briefings on Strategic Forces

Report on Long-Range Standoff Weapon

Satellite Ground Control Systems

Space Defense and Protection

Spaceports

Streamlining Missile Defense Oversight

Supply Chain Security of Strategic Capabilities

Sustainment and Modernization of the Cobra Dane Radar Weather Forecasting Model

DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

ITEMS OF SPECIAL INTEREST

NATIONAL NUCLEAR SECURITY ADMINISTRATION
Weapons Activities

Attraction and retention of personnel within the nuclear security enterprise
Domestic uranium enrichment program
Strategic commodities

Defense Nuclear Nonproliferation

Comptroller General assessment of project management processes and systems
for defense nuclear nonproliferation programs

Federal Salaries and Expenses

Briefing on contracting strategy and plan
Briefing on damage assessment of improper disposal of sensitive information

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND INTELLIGENCE MATTERS

ITEMS OF SPECIAL INTEREST

Briefing on B61-12 Deployment Plans and Costs for Modifying Dual-Capable Aircraft

The committee supports the joint efforts of the Department of Defense and the Department of Energy to develop and deploy the B61-12 nuclear gravity bomb. The committee believes this modernized B61 weapon is a central component of both our own strategic deterrent as well as the extended deterrent provided to allies, and the committee believes that sustaining the ability to forward deploy B61 bombs on U.S. and allied aircraft provides important deterrence and assurance value.

To better understand the Department of Defense's plans for deployment of B61-12 bombs, the committee directs the Secretary of Defense to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by November 1, 2016, on the Secretary's intended plans for deploying B61-12 bombs. Such briefing should include the planned deployment locations or areas, the schedule and cost for swapping out currently deployed B61 bombs, the U.S. and foreign dual-capable aircraft that the B61-12 will be deployed on, and the estimated cost of modifying existing dual-capable aircraft to carry the bombs.

Command and Control of National Security Space Assets

The committee is concerned with the growing and serious threats to U.S. national security space systems. As noted in a House Subcommittee on Strategic

Forces hearing on the fiscal year 2017 budget request for national security space, a senior military commander offered in the statement for the record that, "simply stated, there isn't a single aspect of our space architecture, to include the ground architecture, that isn't at risk." The committee believes it is important to understand the operational implications of this risk and the challenges to command and control of national security space assets in potential situations in which conflict extends to space.

Therefore, the committee directs the Commander of U.S. Strategic Command, in coordination with each of the combatant commanders, to provide a briefing to the congressional defense committees and the congressional intelligence committees by November 1, 2016, on the importance of and reliance on military and national reconnaissance space systems in operational military campaigns; the military operational challenges regarding the defense and protection of these systems in a potential conflict with the current and projected future foreign threats; and complications or problems observed in war games, exercises, and experiments regarding chain of command or other aspects of operational authority.

The committee also directs the Director of the National Reconnaissance Office to separately provide a briefing to the congressional defense committees and the congressional intelligence committees by November 1, 2016, on the Director's views as they relate to complications or problems observed in war games, exercises, and experiments, if any, regarding chain of command or other aspects of operational authority.

Comptroller General Review of Software-Intensive Space Acquisition Programs

Given the importance of space acquisition programs to national security, as well as the technical complexity, large investments, and increasing cyber threats, it is imperative that Department of Defense's space acquisitions incorporate leading government and industry practices in order to develop robust systems that meet warfighter needs on a timely basis. The delays, including urgently needed capabilities being years behind schedule, and cost growth in acquiring softwareintensive, cyber-hardened, military space systems, such as the Global Positioning System Next Generation Operational Control System (OCX) and the Joint Space Operations Center Mission System (JMS), may indicate that the Department's acquisition policies, processes, and oversight are not adequately structured to deliver critical capabilities in a timely and cost effective manner.

Therefore, the committee directs the Comptroller General of the United States to conduct a review of the Department's software-intensive military space system acquisitions. The committee further directs the Comptroller General to deliver a report of the review to the congressional defense committees by July 1, 2017. The review should address the extent to which the Department:

(1) Aligns software development efforts for space systems with systems engineering and acquisition decision-making processes;

(2) Understands, establishes, implements, and properly manages changes in a consistent manner for cybersecurity requirements for space systems;

(3) Applies applicable industry best practices;

(4) Has appropriately trained technical personnel managing and supporting these software-intensive activities;

(5) Appropriately leverages independent review teams.

The Comptroller General may include any other applicable items and shall offer recommendations as appropriate.

Comptroller General Review of the Space Acquisition Workforce

The committee is aware that many Department of Defense military space system acquisition efforts continue to experience significant cost, schedule, and performance challenges. Given the technical complexity and billions of dollars of investment these efforts involve, it is imperative that acquisition program offices have adequate numbers of personnel, from program managers and systems engineers to contracting officers and cost estimators, with the right mix of skills and abilities to effectively manage these efforts.

Therefore, the committee directs the Comptroller General of the United States to conduct a review of the state of the Department's military space system acquisition workforce. This review is not intended to include the space acquisition workforce of the National Reconnaissance Office. The committee further directs the Comptroller General to provide a report to the congressional defense committees by February 1, 2017, on the review, including any recommendations as appropriate that would help ensure the Department is well-positioned to manage its space acquisitions with better results. The review should include consideration for the numbers and types of personnel positions authorized; the extent to which the positions have been filled; the expertise level of the military and civilian personnel such as seniority, experience, training, technical knowledge, and length of tenure; opportunities for personal training and development; and the extent to which federally funded research and development centers and support contractors are relied upon to provide program office expertise and continuity of knowledge.

Elsewhere in this report, the committee directs the Comptroller General of the United States to conduct a comprehensive study on acquisition manager career paths. The committee expects the Comptroller General to ensure the studies are conducted in complementary manner.

Department of Defense Equities on Approval of the Galilieo Precision, Navigation, and Timing System

The committee is aware that the National Space Policy of the United States of America directed the United States to "engage with foreign GNSS [global navigation satellite system] providers to encourage compatibility and interoperability, promote transparency in civil service provision, and enable market access for U.S. industry." The committee is also aware that the European Commission has requested the approval of its Galileo GNSS system by the Federal Communications Commission (FCC) in October of 2013. The committee believes approval of such an allied precision, navigation, and timing system could meet important national security goals, including the goals outlined in the National Space Policy. The committee is also aware that the National Telecommunications and Information Administration (NTIA) has concluded that the Galileo system and the European Commission request "meets the criteria NTIA previously established to grant the waiver."

Therefore, the committee directs the Secretary of Defense, in coordination with the Chairman of the Joint Chiefs of Staff, to submit a report to the congressional defense committees not later than July 1, 2016, outlining the national security benefits that the Department of Defense would expect to derive from a decision by the FCC to approve the European Commission request for the Galileo GNSS system and any other matters they deem relevant.

Department of Defense Requirements for National Reconnaissance Office Programs

The committee is aware that the National Reconnaissance Office (NRO) provides critical support to both the Department of Defense and the Intelligence Community. As the NRO develops acquisition programs, it works to meet the necessary national security requirements while appropriately balancing cost and schedule constraints. The committee believes that when NRO programs are being established or modified, the Department of Defense, along with other national security customers, should clearly articulate their requirements. The committee is concerned that the Department's process for identifying and articulating its priority intelligence requirements to the NRO, and the Intelligence Community functional managers, is not well defined or done in a timely manner.

Therefore, the committee directs the Chairman of the Joint Chiefs of Staff, jointly with the Under Secretary of Defense for Intelligence, to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence by December 1, 2016, on the process to assess, identify, and prioritize in a timely manner Department of Defense requirements to inform NRO programs, as well as identification of specific upcoming programs and milestones that will go through such process.

Ensuring Technical Expertise for Sustainment of the Nuclear Command and Control System

The committee is encouraged by the Department of Defense's recent attention on modernization of the nation's nuclear command and control (NC2) system. The committee supports this modernization effort and believes the credibility of the nation's nuclear deterrent is only as robust as the NC2 system upon which it relies. During its oversight, it has come to the committee's attention that many of the agencies responsible for parts of the disparate NC2 system are encountering similar difficulties in attracting, hiring, and retaining highly skilled technical personnel to steward the NC2 system into the future. The ability of these organizations to quickly hire and appropriately compensate civilian employees to carry out the systems engineering and other complex tasks required within the NC2 system is exacerbated by the highly classified and highly technical nature of the work, as well as Federal employment structures. The committee believes the Department must coordinate across organizational stovepipes and seek creative solutions to this problem.

Therefore, the committee directs the Chairman of the Council on Oversight of the National Leadership Command, Control, and Communications System established by section 171a of title 10, United States Code, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2016, regarding a pilot program for improving the ability of all organizations with NC2 responsibilities within the Department to attract, hire, retain, and compensate highly skilled technical personnel to support NC2 modernization efforts. Such briefing should include efforts by the Department to work with or support university programs that could develop necessary skills and provide a student pipeline in critical areas.

Evaluation of Department of Defense Use of Non-Allied Global Navigation Satellite Systems

The committee is concerned about the potential reliance of the Department of Defense on non-allied precision, navigation, and timing systems, and systems that use such systems. Therefore, elsewhere in this Act, the committee includes a provision that would prohibit the use of such systems starting in fiscal year 2017 and would require the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the Director of National Intelligence to submit an assessment of the risks of using such systems to certain congressional committees. In order to further inform the committee's position on this matter, the committee directs the Chief Information Officer of the Department of Defense to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives not later than July 1, 2016, on the extent to which the Department uses either the Russian Federation's Glonass or the People's Republic of China's Beidou Global Navigation Satellite System or telecommunications systems that rely on them, and potential impacts of prohibiting use of such systems.

Expeditionary Large Data Object Repository for Analytics in Deployed Operations

The committee supports the National Geospatial-Intelligence Agency program called Expeditionary Large Data Object Repository for Analytics in Deployed Operations (ELDORADO). The committee is aware that this is a capability designed to gather, analyze, manage, and store large amounts of intelligence, surveillance, and reconnaissance (ISR) data from remote sources in order to, among other objectives, facilitate rapid access to theater and continental United States analysts, while at the same time reducing storage and analytical access costs. The committee is aware that there may be opportunities to establish additional nodes in the continental United States to ensure that large data objects are readily available to analysts to improve the intelligence analysis and exploitation for the warfighter.

Therefore, the committee directs the Director of the National Geospatial-Intelligence Agency, in coordination with the Under Secretary of Defense for Intelligence, to provide a briefing to the congressional defense committees and the congressional intelligence committees by December 1, 2016, on the costs, value, and impacts to the Department of Defense and Intelligence Community of establishing home nodes for ELDORADO at existing facilities in the continental United States that are co-located with complementary ISR exploitation and analysis missions, such as the services' intelligence centers.

Ground Based Strategic Deterrent

As the Air Force moves into the technology maturation and risk reduction (TMRR) phase of the Ground Based Strategic Deterrent (GBSD) program in fiscal year 2017, the committee continues its oversight of this important program to recapitalize a leg of the nation's nuclear triad. The committee believes the decision by the Air Force and the Department of Defense to consolidate the missile flight system and related ground-based infrastructure and equipment into a single integrated "weapon system" is the correct decision and will facilitate both acquisition and long-term sustainment of the components that comprise and enable the intercontinental ballistic missile (ICBM) capability. However, the committee cautions that the complexity, challenge, importance, cost, and visibility of the combined GBSD program is significant and expects the Air Force to provide it the leadership attention and general officer-level program management it therefore requires.

The committee understands and appreciates the Air Force's decision to award two TMRR contracts to develop preliminary designs, mature technologies, and reduce risk for the GBSD program. As it has expressed in the past, the committee expects the Air Force to carefully consider the impacts of the GBSD program and its acquisition strategy on the industrial base for subsystems and components through the TMRR phase and beyond. In particular, due to the volume of rocket motors likely to be procured, the Air Force's acquisition strategy for GBSD will have lasting impacts on the health and vitality of this key element of the U.S. industrial base. Full and open competition will help ensure innovation, cost efficiency, and contractor performance.

Finally, while the committee supports the GBSD program and efforts to recapitalize the full triad, the committee believes the Air Force, U.S. Strategic Command, and the Department of Defense in general must provide Congress and the public improved information and transparency regarding why it is pursuing GBSD. To ensure sustained congressional and public support for this important program, the Department must, to the extent possible without compromising national security, be transparent in the requirements for GBSD, what factors are driving those requirements, and why it has decided development and acquisition of a new ICBM system is required.

To enable its continued oversight, the committee directs the Secretary of the Air Force, in coordination with the Under Secretary of Defense for Acquisition, Technology, and Logistics, and the Commander of U.S. Strategic Command, to submit a report to the congressional defense committees by September 30, 2016, on the GBSD program. Such report should include the following:

(1) The results of the analysis of alternatives (AOA) on GBSD, in particular cost and effectiveness comparisons of various options including life extension or upgrading of the Minuteman III system until 2045 and the implications for test assets;

(2) The costs associated with sustaining Minuteman III until the GBSD system is deployed;

(3) The military requirements for GBSD and the rationale and drivers for those requirements, including how those requirements have changed from those of Minuteman III and the ability of various options considered within the AOA to meet those requirements; and

(4) The Air Force's acquisition strategy and contract structure for GBSD, including how it expects to manage industrial base risks throughout the program.

Interagency Collaboration on Physical Security for Nuclear Weapons

The committee continues to believe that the Department of Defense and the National Nuclear Security Administration can better leverage expertise, resources, and lessons learned between themselves to more effectively and efficiently safeguard the nation's nuclear weapons. The successful development and use of the Joint Integrated Lifecycle Surety (JILS) analysis and decision-support tool is one recent example of successful interagency efforts to understand and improve nuclear weapons security. The committee believes much more can and should be done to enhance collaboration on security across the two agencies to drive down costs and improve effectiveness.

Therefore, the committee directs the Administrator for Nuclear Security, in coordination with the Chairman of the Nuclear Weapons Council, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by November 30, 2016, on specific collaborative opportunities and joint actions they will carry out to improve the effectiveness and efficiency of providing security for nuclear weapons and defense nuclear facilities. The opportunities and actions should include:

(1) Comprehensive examination and cross-walking of security policies, processes, and procedures to seek harmonization and share lessons learned where

appropriate, including with regard to insider threat mitigation and security infrastructure sustainment and recapitalization planning;

(2) Joint development or adoption of analysis, training, or testing tools and methods;

(3) Implementation of common standards and processes for each organization to utilize physical security technology tested and approved for general use in nuclear weapon security environments;

(4) Joint development, testing, and procurement of security technologies and equipment;

(5) Implementation of a shared interagency program for conducting forceon-force exercises; and

(6) Such other opportunities or actions that the Administrator or the Chairman determine appropriate.

Intermediate-Range Ground-Launched Missiles

The committee is concerned that strategic competitors have fielded large numbers of theater ballistic missiles and ground-launched land-attack cruise missiles. The People's Liberation Army (PLA) of the People's Republic of China (PRC), in particular, possesses a large and growing inventory of these long-range ground-launched weapons that enables the PRC to hold targets at risk throughout a broad expanse of the Western Pacific. The PRC's possession of these missiles compels the United States and its allies and partners to confront the prospect that the PLA could strike a large set of targets with high value, including critical bases and infrastructure, with very little warning. The committee notes that the PRC's possession of these missile capabilities has resulted in the United States and its partners devoting a great deal of energy and resources to ballistic and cruise missile defense.

The committee notes that the United States, by contrast, is prohibited from fielding such systems by the 1987 Intermediate Nuclear Forces (INF) Treaty with the Russian Federation and several other former Soviet Republics, which prohibits the parties from fielding surface-to-surface ballistic and cruise missiles with ranges between 500 and 5,500 kilometers (330-3,400 miles). The committee also notes that prior to the ratification of this treaty, the U.S. military possessed two medium-range surface-to-surface missile systems: the Army's MGM-31 Pershing II medium range ballistic missile (MRBM), and the Air Force's BGM-109G Gryphon ground-launched cruise missile (GLCM), a variant of the Navy's ship-launched Tomahawk.

The committee is interested in ascertaining whether conventional landbased surface-to-surface missiles would have military value to the United States, or to its allies, as a means of promptly striking time-sensitive and other high-value targets, as well as denying enemy use of adjacent waters. The committee believes that the possession of such capabilities by the United States could impose upon potential aggressors defensive costs, including those associated with developing and deploying ballistic and cruise missile defenses and suppressing and deterring missile launch, thereby helping the United States to improve its position in potential long-term military competitions. In addition, while the committee is mindful of the potential implications of these systems for regional stability, the committee also believes that Russian violations of the INF Treaty cannot be allowed to continue indefinitely without implications for the long-term viability of the treaty if only the United States abides by it. Lastly, the committee notes that research and development of such systems is not prohibited by the INF treaty.

The committee therefore directs the Commanding General of the U.S. Army Training and Doctrine Command to conduct a study on the potential military benefits of conventional ground-launched ballistic and cruise missiles with ranges between 500 and 5,500 kilometers and to provide the results to the congressional defense committees by not later than April 1, 2017. Such study shall address the following:

(1) Whether such systems could contribute to more effective offense and defense, assurance and deterrence, against major powers in Europe, the Middle East and in the Western Pacific, including by evaluating the roles that medium and intermediate-range ground-launched fires played prior to U.S. ratification of the INF treaty;

(2) The role of such systems in land-attack (including left-of-launch ballistic and cruise missile defense) and anti-ship capability;

(3) How such systems could contribute to "cross domain operations" as described in the U.S. Army Operating Concept (TRADOC Palm 525-3-1): "Future Army forces will support Joint Force freedom of movement and action through the projection of power from land across the maritime, air, space, and cyberspace domains."

(4) The estimated cost of developing and procuring such systems.

(5) The potential force structure that would be required to deploy such systems, with and without long-range fires being strictly associated with ground maneuver units; and

(6) The relative costs and benefits of potential INF-compliant long-range strike systems, such as boost-glide weapons, in comparison to systems prohibited by the INF Treaty.

The committee further directs that this study shall be resourceunconstrained and should not assume that resources would be provided at the expense of current or projected Total Obligational Authority for the U.S. Army. The Commander shall submit this report in unclassified form, with a classified annex if necessary.

The committee notes that elsewhere in the Act accompanying this report, it has recommended an increase in resources for the conventional prompt global strike development program, and it recommends a legislative provision regarding potential near-term limited operational capability for a conventional prompt strike system.

Joint Interagency Combined Space Operations Center

The Joint Interagency Combined Space Operations Center (JICSpOC) is a joint Department of Defense and Intelligence Community activity to facilitate information sharing and data fusion to develop, test, validate, and integrate new space system tactics, techniques, and procedures for national security space systems. The committee supports the integrated interagency efforts to protect and defend critical national space capabilities in response to increasing counterspace threats from potential foreign adversaries.

The committee is also aware that the completion of the initial series of experiments is expected by the end of 2016 and there is no defined strategy for the future the JICSpOC or its capabilities. Therefore, the committee directs the Secretary of Defense, in coordination with the Director of National Intelligence, to provide a briefing to the congressional defense committees and the congressional intelligence committees by January 15, 2017, on the future objectives, strategy, and resources planned for the JICSpOC and how these activities will be complementary or appropriately integrated with U.S. Strategic Command's Joint Space Operations Center and the National Reconnaissance Operations Center. The Secretary shall also review the costs and benefits of maintaining a separate JSpOC and JICSpOC as well as the optimal location to perform the related activities.

Lastly, the committee is aware of the Department of Defense and Intelligence Community's review of the data protection and security classification standards and guidance for commercial space situational awareness and battle management command and control capabilities. The committee further directs the Secretary to address in the aforementioned briefing how this review ensures national security information is protected and how the warfighter will benefit from this commercial capability. The briefing should also include the decision timeline related to the review of the data protection and security classification standards.

Minimum Essential Emergency Communications Network

The Air Force's Minimum Essential Emergency Communications Network (MEECN) program is developing and procuring new equipment to improve the nuclear command and control system within the United States. Within the umbrella of MEECN, efforts include upgrades to Advanced Extremely High Frequency (AEHF) capability for intercontinental ballistic missile launch control centers and command posts as well as improved very low frequency or low frequency capability for airborne and ground nodes of the nuclear command and control system.

While MEECN is appropriately focused on systems within the United States, the committee is aware of the need to recapitalize portions of the nuclear command and control system that are located outside the United States within geographic combatant commands. The committee believes an opportunity may exist to leverage MEECN technologies and programs to accelerate this recapitalization. Therefore, the committee directs the Secretary of the Air Force, in coordination with the Commander of U.S. Strategic Command and the commanders of appropriate geographic combatant commands, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by September 1, 2016, on potential application of MEECN technologies and programs to nuclear command and control nodes outside the United States.

Next Generation Operational Control Segment

The committee supports the Global Positioning System Next Generation Operational Control Segment (GPS/OCX) program, however, is concerned with the significant technical challenges, cost increases, and schedule delays that the program is experiencing. The committee recognizes the key capabilities that the program is designed to address, including rigorous information assurance requirements to ensure the ground system is secure from adversary threats; ground control for the GPS block III satellites; and ground control of the enhanced anti-jam military code signal. The committee supports the Department of Defense's close oversight to minimize further cost growth and schedule delays. The committee believes that the Secretary of the Air Force should have the appropriate contingency plans and back-up capabilities for the GPS/OCX program in place in the event of further challenges with the GPS/OCX program.

Therefore, the committee directs the Secretary of the Air Force, in coordination with the Secretary of Defense, to provide a briefing to the congressional defense committees by December 1, 2016, on the contingency plans and capabilities for the GPS/OCX program to ensure that warfighter requirements will be met and the program risk will be appropriately managed.

Nuclear Weapons Security Forces Standards

The committee is aware that, following the Department of Defense's Nuclear Enterprise Review, the Air Force has begun shifting away from the Personnel Reliability Program (PRP) and toward an Arming and Use of Force (AUF) standard for qualifying security personnel responsible for protecting nuclear weapons. The committee is also aware that the Navy has opted to continue utilizing the PRP for its nuclear weapon security personnel. The Air Force has described to the committee why it chose to move to AUF and why it believes the newly enhanced AUF standards and process provide equivalent screening and personnel reliability. The committee notes that the Air Force's transition to AUF has greatly increased the pool of available security personnel qualified to guard nuclear weapons and therefore is concerned that the new AUF standard may not be as rigorous as the former PRP standard. The committee believes that custody and security of nuclear weapons is a special responsibility and requires the highest level of attention and performance. The committee also notes serious lapses in performance in Air Force personnel involved in the nuclear deterrence mission over the past several years.

The committee directs the Comptroller General of the United States to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2017, containing an assessment and comparison of the Air Force's new AUF standard and the PRP. Such assessment should evaluate the similarities and differences between AUF and PRP, the amount of information available under both standards to determine whether security personnel are able to perform their job effectively and reliably, the administrative and other burden on personnel and commanders involved with AUF and PRP, how many additional Air Force personnel became available to guard nuclear weapons under the new standard and why, and the reasons why the Navy continues using PRP and why the Air Force chose to shift to the AUF standard.

Plan for Strengthening Outer Space Cooperation with Japan

The committee is aware that the Guidelines for Defense Cooperation between the United States and the Government of Japan issued in April 2015 included important openness to cooperation in several areas, including those utilizing outer space.

Therefore, the committee directs the Secretary of Defense, jointly with the Chairman of the Joint Chiefs of Staff, in coordination with the Secretary of State and the Director of National Intelligence, to submit a report to the congressional defense committees, the House Committee on Foreign Affairs, and the Senate Committee on Foreign Relations, not later than April 1, 2017, outlining the opportunities to improve U.S.-Japan cooperation in outer space including in maritime domain awareness; counterproliferation; missile warning and missile defense; position, navigation, and timing; command, control, and communication; meteorological observation; space situational awareness; and such other matters they deem appropriate.

Quarterly Briefings on Strategic Forces

The committee desires to continue to improve the timing and content of notifications it receives.

Consistent with the direction in the committee report (H. Rept. 114-102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee directs the Chairman of the Joint Chiefs of Staff to provide quarterly briefings to the Senate Committee on Armed Services and the House Committee on Armed Services, starting June 1, 2016, and continuing through September 30, 2017, detailing the following:

(1) Readiness and disposition of ballistic missile defense assets, including interceptors (including Patriot, Terminal High Altitude Area Defense, Aegis Ballistic Missile Defense ships and ashore sites, Army/Navy Transportable Radar Surveillance radars), as well as any matters related to the cybersecurity of the ballistic missile defense system, including data held by contractors who support the same;

(2) Readiness and disposition of assets and personnel in the nuclear triad (including ballistic missile submarines, intercontinental ballistic missiles, nuclear certified heavy bombers, and systems and components of the nuclear command and control system), as well as any matters related to the cybersecurity of these systems, including data held by contractors who support the same, and the results of readiness, security, and surety investigations; and

(3) Readiness of national security space systems of the Department of Defense, as well as any matters related to the cybersecurity of these systems, including data held by contractors who support the same.

Report on Long-Range Standoff Weapon

The committee notes that section 1657 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) requires the Secretary of Defense to submit a report to the congressional defense committees by March 24, 2016 on the justification for the number of planned nuclear-armed cruise missiles, known as the long-range standoff (LRSO) weapon, that will be acquired. The committee further notes that section 1663 of Public Law 114-92 requires the Secretary to submit a report to the congressional defense committees by May 31, 2016, on the outcome of the Milestone A decision for the long-range standoff weapon. The committee notes that has received the report required by section 1657 of Public Law 114-92 and still awaits submission of the report required by section 1663. The committee believes the capability provided by LRSO is important to the long-term credibility of the nation's nuclear deterrent and seeks to ensure the development and acquisition program stays on cost and schedule.

In continuance of its ongoing and robust oversight of this program, the committee directs the Secretary of Defense, in coordination with the Secretary of the Air Force and the Commander of U.S. Strategic Command, to submit a report to the congressional defense committees by September 1, 2016, containing additional information with respect to the LRSO program. Such report should include details on the analysis of alternatives that was carried out with respect to LRSO; an assessment of any comparative ability of conventionally armed, long-range cruise missiles to meet deterrence requirements; the military requirements for LRSO and ability for LRSO to hold targets at risk as compared to nuclear gravity bombs and other aspects of the nuclear triad; the capabilities and reliability of LRSO as compared to the current AGM-86 cruise missile; and a description of the number of LRSOs to be procured for operational needs, spares, and test assets and how this compares to the number of AGM-86s originally procured.

Satellite Ground Control Systems

The committee is aware of the critical role that the Air Force Satellite Control Network (AFSCN) has regarding the command and control of national security space satellites. The Air Force is currently fielding modifications to increase reliability and decrease sustainment costs of the current system. Additionally, the Air Force engaged in a study of the viability of using commercial facilities and operations for the tracking, telemetry and command (TT&C) of government satellites. Section 822 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66) contained a requirement for the Secretary of Defense to develop a long-term plan for satellite ground control systems, including the Air Force Satellite Control Network, and to brief the plan to the congressional defense committees. The committee is aware that due to the breadth of the plan it took additional time to complete; however, the committee has yet to receive the required briefing. Therefore, the committee directs the Secretary of Defense to provide the required briefing no later than July 1, 2016, and also address the viability, costs, benefits, and security considerations of leveraging commercial facilities and operations for the TT&C of government satellites.

Space Defense and Protection

In accordance with section 912 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66), the National Research Council (NRC) completed a study in December 2015 and provided findings and recommendations regarding the national security space defense and protection options and strategies to address the near-term and long-term counterspace threats to U.S. space systems.

The committee remains concerned about the growing and serious risk that foreign counterspace threats pose to our national security posture, and the committee believes the NRC offered useful guidance in addressing this challenge. The committee is also aware of the coordination and interagency work that is progressing to address this new threat, and recognizes the value of ongoing dialogue and updates as policy and acquisition strategies are developed. Therefore, the committee directs the Secretary of Defense and the Director of National Intelligence to provide a briefing to the congressional defense committees and the congressional intelligence committees by December 1, 2016, on the perspectives and actions, as applicable, being taken in response to the NRC findings and recommendations.

Spaceports

The committee is aware that state-owned spaceports have supported certain national security launch and missile defense activities. The committee believes that these facilities may be able to provide additional flexibility and resilience to the Department of Defense launch infrastructure, particularly as the Department evaluates concepts such as reconstitution of small satellites to address the growing foreign counterspace threat. However, the committee is also aware of the significant cost to maintain and modernize the East and West coast ranges and the priority for the Air Force to maintain those capabilities. The committee directs the Secretary of Defense, in consultation with the Secretary of the Air Force and the Director of the Missile Defense Agency, to provide a briefing to the House Committee on Armed Services by December 1, 2016, on the opportunities to enhance the capability of these state-owned spaceports to support national security.

Streamlining Missile Defense Oversight

The committee is aware of significant streamlining and staffing reductions underway in the Department of Defense as a result of legislative direction and internal efficiency improvement efforts.

The committee is also aware of the significant staffing and resources oversight in the ballistic missile defense enterprise across the Department, including by U.S. Strategic Command (STRATCOM), U.S. Northern Command (NORTHCOM), the Joint Staff, Joint Functional Component Command-Integrated Missile Defense (JFCC-IMD), and the Joint Integrated Air and Missile Defense Organization (JIAMDO). The committee is also aware that while STRATCOM is the combatant command "owner" of ballistic missile defense under the Unified Command Plan (UCP), it assigns missile defense to other combatant commands for operational purposes. In the case of homeland ballistic missile defense, the committee is not aware of these forces being assigned to an operator other than the commander of NORTHCOM. The committee understands that the assignment of other military forces to combatant commands is ordinarily performed by the Joint Staff as opposed to a specific combatant command. The committee believes this oversight structure and UCP assignment could benefit from a reassessment to ensure the best possible allocation of staffing resources, especially as significant streamlining and staffing reduction efforts are underway.

Therefore, the committee directs the Chairman of the Joint Chiefs of Staff to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives not later than April 1, 2017, on any changes to the UCP regarding ballistic missile defense he deems efficient and expedient, and his assessment of the benefits and costs of the current division of responsibility between the multiplicity of organizations including the combatant commands, the Joint Staff, JFCC-IMD, and JIAMDO. As part of this assessment, the commander of STRATCOM should recommend to the Chairman of the Joint Chiefs of Staff whether the Joint Forces Component Command (JFCC) structure at his command is the optimal and most efficient structure for division of his varied military responsibilities under the UCP or if there is an alternate structure with as good or greater benefits at reduced cost.

Supply Chain Security of Strategic Capabilities

The committee is aware of the report submitted by the Government Accountability Office (GAO), "DOD Needs to Improve Reporting and Oversight to Reduce Supply Chain Risk," (GAO-16-236) in February 2016. The committee noted the finding that, "DOD contractors rely on thousands of subcontractors and suppliers, including the original component manufacturers that assemble microcircuits and the mid-level manufacturers subcontracted to develop the individual subsystems that make up a complete system or supply."

The committee is concerned that, as a practical matter, it appears that the Department possesses very little real data about the supply chain associated with certain critical systems. It also appears that the Department largely relies on assurances it receives from prime contractors, but oftentimes those prime contractors rely on subcontractors and others for information regarding supply chains and there may be little or no actual data on which to base their assurances to the Department.

Furthermore, the committee is aware that the Department recently promulgated DFARS Subpart 239.73 ("Requirements For Information Relating To Supply Chain Risk"), but the committee is concerned that there has been little practical progress in implementing these regulations. Moreover, even when implemented, an approach that relies primarily (or exclusively) on simply analyzing threat intelligence in Government databases will almost certainly not generate sufficient data about actual hardware and software components and subcomponents necessary to understand critical supply chains.

Therefore, the committee directs the Inspector General of the Department of Defense to conduct an audit to evaluate the supply chain security and assurance of one network or system deemed critical in each of the Missile Defense Agency, Air Force Space Command, the nuclear command and control system, and a delivery system or platform for U.S. nuclear weapons. Furthermore, the committee directs the Inspector General to submit a final report to the Committees on Armed Services of the Senate and the House of Representatives not later than May 1, 2017, on the supply chain security and assurance evaluation of such networks or systems. The committee further directs the Inspector General to provide an interim briefing to the House Committee on Armed Services not later than July 1, 2016, on the manner in which it intends to conduct this evaluation. As part of the Inspector General's assessment, the following matters should be addressed:

(1) Does the defense agency or military service responsible for the particular system or network conduct actual forensic evaluations of the supply chain associated with the system or network? Does the agency or service rely on the representations of U.S. suppliers or does it perform independent verification and validation of the source of supply for each critical component and subcomponent of U.S.-branded products or systems?

(2) For software, firmware, and chip design that is deemed by the command or agency to be critical to the reliability and performance of the designated network or system, can the service or agency (or its suppliers) identify by name and nationality the developers involved?

(3) How much diligence has been performed by the service or agency on second- and third-tier suppliers?

Sustainment and Modernization of the Cobra Dane Radar

The committee continues to be concerned about the lack of a plan for the long-term sustainment and modernization of the Cobra Dane radar at Shemya, Alaska, despite its critical role in exclusively meeting certain warfighter requirements. The Joint Explanatory Statement to Accompany S. 1356, the National Defense Authorization Act for Fiscal Year 2016 (Committee Print No. 2) directed the Commander of U.S. Northern Command, jointly with the Commander of U.S. Air Force Space Command, the Director of the Missile Defense Agency, and the Director of National Intelligence, to provide a briefing to the congressional defense committees not later than April 1, 2016, on the plan for the Cobra Dane radar and the military requirements it serves and whether those requirements continue to justify a material capability solution. The committee has since received that briefing, and appreciates U.S. Northern Command's timely response.

The committee notes the finding that, "programmed architecture enhancements through 2022 in both SSA [Space Situational Awareness] and BMD [Ballistic Missile Defense] have capability gaps, currently covered by Cobra Dane. Cobra Dane is crucial until all requirements can be fulfilled with system level improvements." However, the committee is also aware that although there is no dispute that increased funding is required to sustain Cobra Dane beyond 2022, the budget request contained no modernization funding for fiscal year 2017, nor was there any in the fiscal year 2016 request.

Therefore, the committee directs the Commander of U.S. Northern Command, jointly with with the Commander of U.S. Air Force Space Command, the Director of the Missile Defense Agency, and the Commander of U.S. Strategic Command, to provide a briefing to the Senate Committee on Armed Services and the House Committee on Armed Services not later than December 1, 2016, on the cost, schedule, and program plans to provide the system-level upgrades for the BMD and SSA architectures to render Cobra Dane no longer needed to meet requirements for BMD and SSA. This briefing should also address the costs (broken out by service or defense agency), schedules, and system and parts obsolescence concerns required to maintain Cobra Dane until the aforementioned system-level upgrades are complete.

Further, the committee expects that the Secretary of Defense will not take irreversible action concerning the Cobra Dane radar without first notifying the congressional defense committees.

Weather Forecasting Model

The committee is aware that the Air Force Weather Agency provides critical weather forecasts for military operations around the world. The committee is also aware that the Air Force plans to change its numerical weather modeling approach from the current weather research and forecasting model to a United Kingdom-based system. The committee is concerned that the Air Force may not have conducted a complete analysis of alternatives, including the appropriate coordination with other military stakeholders.

Therefore, the committee directs the Secretary of the Air Force, in coordination with with the Secretary of the Army and the Secretary of the Navy, to provide a briefing to the congressional defense committees by December 1, 2016, on the strategic approach and plan to provide weather forecasting in a manner that meets the military requirements, the options that were considered to include market research of commercial capabilities, and the costs and considerations of each option that was evaluated.

DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

ITEMS OF SPECIAL INTEREST

NATIONAL NUCLEAR SECURITY ADMINISTRATION

Weapons Activities

Attraction and retention of personnel within the nuclear security enterprise

The committee is aware of growing concerns across the nuclear security enterprise regarding the ability to attract and retain first-class technical, administrative, and managerial talent. As the laboratories and plants of the enterprise have undertaken cost cutting measures, for example moving from defined-benefit pension plans to defined-contribution 401(k) plans, as well as adjustments to salaries and benefits to align with federal regulations and market standards, the National Nuclear Security Administration (NNSA) may have eliminated several factors that incentivized top performing personnel to start or continue a career at NNSA. In addition, as the timelines for being granted a security clearance have lengthened, recent graduates or mid-career officials may be unwilling to wait a year or more to begin doing substantive, classified work. Furthermore, NNSA and its laboratories and plants must develop strategies for carrying out their long-term mission even with a much more mobile workforce.

While the committee supports, and in fact has mandated, efficiency measures at NNSA, the committee believes NNSA must not lose sight of the need to attract and retain the Nation's most talented workers. The laboratories and plants will continue to rely heavily on the unique and exciting nature of their national security work to attract and retain employees, but must have other tools at their disposal. Creative thinking and robust understanding of the incentives driving the current and future workforce is required.

To facilitate this effort, the committee directs the Administrator for Nuclear Security, together with the members of the National Nuclear Security Administration Council established by section 4102(b) of the Atomic Energy Defense Act (50 U.S.C. 2512(b)) to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by October 31, 2016, regarding ongoing or potential actions and options for improving the attraction and retention of high-performing employees across the nuclear enterprise. The committee encourages the Administrator and the council to think creatively and interview high-performing current, new, and potential employees for their views. The committee further encourages examination of options that:

(1) Allow for mobility but encourage staying within or returning to the NNSA system;

(2) Enable and incentivize unique opportunities such as sabbaticals, higher education, personnel loans or temporary assignments, and rotations among Federal service and partner organizations;

(3) Provide opportunities for mid-career workers to join the enterprise and directly contribute their outside experiences to its improvement;

(4) Provide meaningful work and training opportunities to employees waiting on approval of security clearances;

(5) Such other options as the Administrator or members of the Council consider appropriate.

Domestic uranium enrichment program

The committee notes the Department of Energy's October 2015 report on "Tritium and Enriched Uranium Management Plan Through 2060" and the Department's subsequent decision to modify its plans to enrich uranium to create unencumbered enriched uranium for defense purposes. Instead of building out an enrichment capability over the next 10 years, the Department now proposes to conduct near-term, smaller-scale research and development activities while developing its longer-term strategy. The committee notes that these actions have been enabled by the Department's identification of stocks of existing unencumbered uranium that it believes can be repurposed and used for tritium production and other defense needs. The Department states this modification would save \$1.30 billion through fiscal year 2021, but may result in larger long-term costs. The committee is also aware that the National Nuclear Security Administration's Director for Cost Estimating and Program Evaluation intends to review costs and plans for domestic uranium enrichment.

The committee also notes the Government Accountability Office's (GAO) October 2014 report on "Interagency Review Needed to Update U.S. Position on Enriched Uranium That Can Be Used for Tritium Production," and GAO's significant oversight activities and expertise on these matters. The committee believes an independent GAO review and assessment would ensure the Department's actions are appropriate and its plans to meet defense requirements for enriched uranium are credible. Therefore, the committee directs the Comptroller General of the United States to provide a briefing to the Senate Committee on Armed Services and the House Committee on Armed Services by January 31, 2017, on a review and assessment of Department of Energy's October 2015 report, its subsequent actions, its plans for domestic uranium enrichment, and how the Department of Energy has addressed GAO's previous relevant recommendations. In particular, such review and assessment should examine the assumptions used by the Department in developing its plans; the alternatives considered by the Department, including the timelines, costs, and cost-savings related to such alternatives; the ability of the Department under its plan to meet defense requirements for enriched uranium into the future; and such other matters related to domestic uranium enrichment that the Comptroller General determines appropriate.

Strategic commodities

The committee notes that the National Nuclear Security Administration (NNSA) has begun re-organizing its previously disparate programs related to critical nuclear material commodities such as uranium, plutonium, tritium, and lithium. Each of these strategic commodities is essential to sustainment and modernization of the nuclear weapons stockpile and each will require significant investment in infrastructure and technologies in the coming decade. Some of these programs are funded through multiple NNSA budget elements and activities are conducted at multiple sites around the nuclear security enterprise.

The committee believes that the success of these strategic commodity programs is dependent on the establishment and validation of key requirements for program customers, such as life extension programs and other stockpile programs, as well as careful coordination and integration to ensure that program requirements are met in a timely and cost effective way. Both tasks are impossible without the leadership and management of an individual or organization that is equipped with the right skills and authorities. To its credit, NNSA recognizes this challenge and has appointed what it calls commodity managers to execute these complex and multifaceted programs. The committee is encouraged by NNSA's actions and seeks to reinforce and/or further improve NNSA's use of commodity managers. Accordingly, the committee directs the Comptroller General of the United States to provide a briefing to the the Senate Committee on Armed Services and the House Committee on Armed Services by January 15, 2017, containing an evaluation of NNSA's use of commodity managers. This review should:

(1) Identify roles, responsibilities, and qualifications for commodity managers, if any, as identified in Department of Energy and NNSA directives, policies, or other relevant guidance;

(2) Evaluate the process used by commodity managers to identify, validate, and track program requirements in terms of comprehensiveness, completeness, and risk management practices; (3) Where possible, identify specific cases in which commodity managers have met with success or faced challenges in integrating program requirements with new capabilities, such as new facilities or technologies.

(4) Assess NNSA's efforts to document the role of its commodity managers as well as incorporate and share important lessons learned across the various commodity manager portfolios; and

(5) Include such other matters related to commodity managers as the Comptroller General determines appropriate.

Defense Nuclear Nonproliferation

Comptroller General assessment of project management processes and systems for defense nuclear nonproliferation programs

The National Nuclear Security Administration's (NNSA) Office of Defense Nuclear Nonproliferation (DNN) consists of four major operating programs: DNN Research and Development, Material Management and Minimization, Global Material Security, and Nonproliferation and Arms Control. The combined budget for these four programs is approximately \$1.20 billion and the activities supported are widely varied and geographically dispersed. While a much smaller portion of NNSA's total budget than Weapons Activities, the committee believes some of the lessons learned from efforts to improve program management practices within Weapons Activities may have applications within DNN. For instance, the ability of major programs to track performance against concrete baseline goals, set and track schedule milestones and deliverables, and manage costs and resources.

With this goal, the committee directs the Comptroller General of the United States to provide a briefing to the congressional defense committees by February 28, 2017, that reviews and assesses the project and program management processes and systems used by the DNN operating programs and DNN senior leaders. In particular, the briefing should examine:

(1) The DNN, NNSA, and Department of Energy requirements, directives, and guidance that govern the processes and systems used by DNN for project and program management purposes and their key characteristics, attributes, and effectiveness;

(2) How DNN program managers use information and tools to make decisions, track important information and milestones, and whether the systems used are effective in allowing NNSA to manage project and program costs, schedules, deliverables, and results against established baselines;

(3) The transparency among DNN, the partners and contractors carrying out its work, NNSA and Department of Energy senior leadership, and Congress regarding costs, schedules, deliverables, and results;

(4) How DNN program management compares to Weapons Activities programs and what can be learned from efforts to improve program management practices within Weapons Activities; and (5) Any other aspects of the DNN program and project management processes and systems the Comptroller General determines appropriate.

Federal Salaries and Expenses

Briefing on contracting strategy and plan

The committee notes that the Administrator for Nuclear Security has announced an intention to compete several of the management and operating (M&O) contracts of the nuclear security enterprise in the coming years. The committee also notes that several of the current M&O contracts have been granted 1-year extensions as the National Nuclear Security Administration (NNSA) manages the workload anticipated from conducting concurrent competitions.

The committee continues to believe, as first articulated in section 3157 of H.R. 4310, the National Defense Authorization Act for Fiscal Year 2013, as passed by the House, that competition of M&O contracts has resulted in significant increases in fees paid by the Federal Government and the Administrator should seek to minimize these fees when possible; that competition can be an important mechanism to help realize savings, improve performance, and hold contractors accountable; and that, when appropriate, the Administrator should carry out a competition, while also recognizing the unique nature of federally funded research and development centers intend a long-term and close relationship between the Government and such contractors.

The committee believes its ability to conduct oversight of contract competitions and NNSA's broader contracting strategy is vital to ensuring competitions are appropriately leveraged and the costs and benefits adequately weighed. Section 3121 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112-239), as amended, is a critical tool in this regard. To continue its oversight, the committee directs the Administrator to provide a briefing to the House Committee on Armed Services by December 1, 2016, on NNSA's contracting strategy and any plans for competition of M&O contracts in the next 2 years. Such briefing should include discussion of the matters covered by section 3121 of Public Law 112-239, as amended.

Briefing on damage assessment of improper disposal of sensitive information

The committee notes reports that sensitive information relating to nuclear weapons components was disposed of improperly, possibly over the course of many years, at the Y-12 National Security Complex. The committee emphasizes the importance of protecting such information and is concerned that such a security lapse could have endured for so many years without coming to light and without corrective action.

The committee understands that the Administrator for Nuclear Security has requested a damage assessment to examine the implications of the improper disposal. The committee directs the Administrator for Nuclear Security to provide a briefing to the House Committee on Armed Services by September 30, 2016, on the results of this damage assessment. This briefing should include an assessment of the information that may have been compromised; any potential consequences of unauthorized persons gaining access to this information; the extent to which uncertainty about what information may have been exposed remains; and a description of measures put in place to prevent such a lapse from reoccurring.