

LOG ID	REV	MEMBER	MARKUP LOC	DESCRIPTION	MARKUP ACT
2590	1	Banks, Jim	CIT	Directs the DOD Chief Information Officer to report on DOD's use of open-source software and its mitigation strategies for any risks associated with its use.	EB 1
2673	1	Wittman, Robert	CIT	Requires the DOD to assess current and potential cooperative efforts to invest in and develop innovative technologies.	EB 1
2679	0	Scott, Austin	CIT	Strikes 10 USC 8024 (Naval Research Advisory Committee) since it was disestablished in 2019 per the Office of Naval Research's website.	EB 1
2707	1	Jackson (TX), Ronny	CIT	DRL on enhancement of modeling and simulation activities at the Army's Ground Vehicle Systems Center.	EB 1
2750	0	Gallagher, Mike	CIT	Would require a study on the occupational resiliency of the cyber mission force	EB 1
2766	2	Waltz, Michael	CIT	Expands the DRL language to have the Army survey the commercial market	EB 1
2795	1	Bacon, Don	CIT	Sensor Open System Architecture	EB 1
2819	1	Gallego, Ruben	CIT	Would require a briefing on the national security implications related to the introduction of 5G communications networks within allied and partner nations in the Middle East.	EB 1
2834	1	Stefanik, Elise	CIT	Requires a briefing on current requirements for training electronic warfare in support of multi-domain operations and requests recommendations on how to streamline these approval processes.	EB 1
2847	2	McCormick, Richard	CIT	Directs the service departments to report to HASC and SASC on efforts being taken to expand the use of proven, secure, commercially available, and open-source collaboration tools to enhance coordination for technical and mission-focused operational teams.	EB 1
2853	1	Luttrell, Morgan	CIT	This amendment would add report language that requires DoD to provide a briefing around how they do tagging for the data they produce. Specifically this amendment is focused on how data integration layers are being utilized to ensure data is tagged for consumption.	EB 1
2883	1	Strong, Dale W.	CIT	Directs the Secretary of Defense to provide a brief on Department of Defense plans to deploy digital transformation acquisition capabilities into classified programs.	EB 1
2921	0	LaLota, Nick	CIT	Technical Corrections Related to the Chief Digital & Artificial Intelligence Officer	EB 1

LOG ID	REV	MEMBER	MARKUP LOC	DESCRIPTION	MARKUP ACT
2922	0	Kim, Andy	CIT	Would require a Congressional briefing if any changes are made to the Department of Defense directive 3000.09 on legal autonomous weapons systems.	EB 1
2923	0	LaLota, Nick	CIT	Modifies Section 1640 of FY20 NDAA aiming to reduce de-confliction requirements between colors of money for small cyberspace operations-peculiar projects.	EB 1
2933	0	Fallon, Pat	CIT	The amendment would create a pilot program and subsequent report on the pilot to HASC/SASC. The premise of the pilot is to use AI to optimize data computation and refuel operation(s) planning/resourcing to support contested aerial logistics.	EB 1
2965	0	Bacon, Don	CIT	Cyber Protection for Certain Department of Defense Personnel	EB 1
2986	0	Golden, Jared F.	CIT	DRL directing the Under Secretary of Defense for Research and Engineering to submit a report to HASC regarding DoD's collaboration with biomedical research non-profit organizations.	EB 1
2989	1	Golden, Jared F.	CIT	Directs the Undersecretary of Defense for Research and Engineering to provide a report to HASC on additive manufacturing involving metals and composites.	EB 1
2998	0	Gallagher, Mike	CIT	Would codify and elevate the Defense Innovation Unit, and other purposes	EB 1
3012	1	Jacobs, Sara	CIT	Direct the Secretary to develop and report on process for reporting and remediation of AI deemed not responsible	EB 1
3019	2	Johnson, Mike	CIT	Requires a report from the Army Corps of Engineers regarding USACE's strategy to implement cloud computing into its operations.	EB 1
3045	1	Vasquez, Gabe	CIT	Report language to encourage DOD to continue building a research and training environment/facility where they can replicate many aspects of multi-domain operations like integrated cyberspace operations, surveillance, and reconnaissance.	EB 1
3063	1	Luttrell, Morgan	CIT	This amendment would expand the executive agent for department wide procurement of cyber data responsibilities to include the consideration of AI based cyber threat detection on an network that does not necessarily rely on an active internet connection.	EB 1
3099	1	Golden, Jared F.	CIT	DRL directing SECNAV to submit a report to HASC on the potential vulnerability of U.S. private and public shipyards to cyberattacks.	EB 1
3111	1	Turner, Michael	CIT	Report language directing the Secretary of Defense to detail current language translator capabilities and the technologies being used to augment them.	EB 1

LOG ID	REV	MEMBER	MARKUP LOC	DESCRIPTION	MARKUP ACT
3118	1	Ryan, Patrick	CIT	Directs the Principal Cyber Advisor of the United States Army to provide a report to the House Committee on Armed Services accessing the feasibility of an Army Cyber Auxiliary Force.	EB 1
3119	1	Turner, Michael	CIT	Report language directing the Secretary of the Air Force to provide a briefing on Air Force efforts to maximize utilization of the Air Force Studies Board.	EB 1
3187	1	Strickland, Marilyn	CIT	Leveraging Edge-Compute Platform Data for Comprehensive Artificial-Intelligence Enabled Training	EB 1
3189	1	Turner, Michael	CIT	Bill language which authorizes the Commander of U.S. Cyber Command to integrate dark web and deep web analysis tools into existing toolkits.	EB 1
3197	1	Scott, Austin	CIT	Requires a report on the resources needed to modernize the U.S. Army's modeling and simulation infrastructure.	EB 1
3297	2	Kim, Andy	CIT	The legal implications of lethal autonomy DRL.	EB 1
3313	1	Sewell, Terri A.	CIT	Directs the Secretary of the Air Force to provide a briefing on partnership plans in STEM fields.	EB 1
3314	0	Strong, Dale W.	CIT	Directs the Secretary of the Army to brief HASC on the status of existing efforts for cyber-peculiar test & evaluation environments.	EB 1
3326	1	LaLota, Nick	CIT	Directs DISA to submit a report on DISA's NG9-1-1 implementation plan and timeline across all military installations.	EB 1
3395	3	Strong, Dale W.	CIT	Assessment of Defensive and Offensive Cybersecurity Capabilities in 5G/NextG Environments	EB 1
3415	1	Lamborn, Doug	CIT	Directs DoD to report on investments in Spectral Beam Combining (SBC) and Coherent Beam Combining (CBC) lasers, and to provide a briefing on R&D efforts in to both technologies and partnerships with allies for air defense options.	EB 1
3435	1	Jackson (TX), Ronny	CIT	Requires a briefing on material development for personal protection systems and collaboration with academic partners.	EB 1
3440	1	Jackson (TX), Ronny	CIT	Require a briefing from AFRL on additive manufacturing for hypersonic thermal protection systems.	EB 1

LOG ID	REV	MEMBER	MARKUP LOC	DESCRIPTION	MARKUP ACT
3441	1	Horsford, Steven	CIT	Digital Cross Domain Solution Policy	EB 1
3460	0	Sherrill, Mikie	CIT	Updates the FY2021 NDAA to have the DoD report more specific investment data on their designated 14 "critical technology areas supportive of the national security strategy," and lengthens the reporting from 2025 to 2029.	EB 1
3491	1	Luttrell, Morgan	CIT	Hypersonic Test Bed direct report language.	EB 1
3509	4	Wittman, Robert	CIT	Analysis of human-machine interface technologies to support the integration of autonomous systems into military operations.	EB 1
3515	1	Bacon, Don	CIT	Electromagnetic Pulse and Geomagnetic Disturbances	EB 1
3522	2	Strong, Dale W.	CIT	Report on U.S. Space Force program information technology infrastructure.	EB 1
3550	1	Horsford, Steven	CIT	Digital Literacy at Air Force	EB 1
3563	0	Wittman, Robert	CIT	Comptroller General Review of the Functions of the Office of the Under Secretary of Defense for Research and Engineering.	EB 1
3574	0	Houlahan, Chrissy	CIT	Transition to commercial system for DoD end-to-end travel management.	EB 1
3630	0	Strong, Dale W.	CIT	Extends the requirements for Joint All-Domain Command and Control (JADC2) quarterly briefings from 2024 to 2028.	EB 1
3633	0	Jackson (NC), Jeff	CIT	Would require a report on artificial intelligence capabilities of foreign adversaries and the associated national security implications	EB 1
3635	0	Luttrell, Morgan	CIT	Changes responsibilities for cyber security infrastructure responsibilities to Section 1724 of the FY21 NDAA.	EB 1
3645	0	Gallagher, Mike	CIT	Technical correction for Sec. 901: Science and Innovation Integration	EB 1

LOG ID	REV	MEMBER	MARKUP LOC	DESCRIPTION	MARKUP ACT
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Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Banks_____

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Department Use of Open-Source Software

The committee supports the Department's use of open-source software (OSS), which continues to positively impact how the Department designs, develops, and deploys software-based systems. OSS offers many benefits, including cost and time savings that enable the Department to develop and field software systems on operationally relevant timelines.

However, the committee is aware of concerns that program offices may contract with federal systems integrators to build features on top of OSS provided by developers that otherwise offer those same features in enterprise versions of the software. Such an approach may result in a lack of system interoperability, inability of the OSS developer to push critical cybersecurity updates, and additional support costs.

Therefore, the committee directs the Department of Defense Chief Information Officer to provide a report to the House Committee on Armed Services, no later than March 1, 2024, on the Department's use of OSS and its mitigation strategies for any risks associated with its use.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Wittman

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Department of Defense and Intelligence Community Innovation Coordination

The committee notes the efforts made by the Department of Defense to expedite innovative technology investment and development, particularly through the Defense Innovation Unit (DIU). The committee is concerned, however, that disjointed investment efforts in innovative technologies by the Department and the Intelligence Community (IC) are leading to inefficient investments that come at a higher cost. Investments made by DIU and other entities within the Department of Defense often overlap with the priorities and activities of the IC. The committee also notes that the National Defense Strategy identifies the People's Republic of China (PRC) as the pacing challenge for the Department. Accordingly, the committee directs the Secretary of Defense no later than February 1, 2024, to brief the House Armed Services Committee on attempts to coordinate investments, development, and other efforts related to innovative technologies as part of the Department's focus on the pacing challenge presented by the PRC.

AMENDMENT TO H.R. 2670
OFFERED BY MR. AUSTIN SCOTT OF GEORGIA

At the appropriate place in title IX, insert the following new section:

1 **SEC. 9 ____ . REPEAL OF AUTHORITY TO APPOINT A NAVAL**
2 **RESEARCH ADVISORY COMMITTEE.**

3 Section 8024 of title 10, United States Code, is re-
4 pealed.



Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Jackson of Texas

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Enhancement of Modeling and Simulation Activities

The committee recognizes the importance of modeling and simulation (M&S) activities in combat vehicle development and believes the Army should continue its use to ensure success. The committee believes using M&S tools in the early stages of vehicle development prior to prototype manufacturing and subsequent unit production may assist in rapidly fielding technology with a clear understanding of operational capability, which reduces development cost and physical prototyping time in early phases and throughout the lifecycle.

The committee also notes continued adoption and development of modern M&S tools may support the advanced development of next generation combat vehicles. Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than January 17, 2024, on the use and enhancement of M&S technologies at the United States Army's Combat Capabilities Development Command's Ground Vehicle Systems Center (GVSC) for rapid fielding of emerging technologies. The briefing shall include:

1. An overview of current M&S efforts underway at the GVSC;
2. A detailed analysis of how M&S tools improve the development of prototypes and production;
3. An assessment of how M&S tools inform requirements for subsystems to brigade combat team formations; and
4. Methods for how GVSC will continue to develop and advance M&S tools.

AMENDMENT TO H.R. 2670
OFFERED BY MR. GALLAGHER OF WISCONSIN

At the appropriate place in title XV, insert the following new section:

1 **SEC. 15 ____ . STUDY ON OCCUPATIONAL RESILIENCY OF**
2 **CYBER MISSION FORCE.**

3 (a) STUDY.—Not later than 180 days after the date
4 of the enactment of this Act, the Principal Cyber Advisor
5 of the Department of Defense and the Undersecretary of
6 Defense for Personnel and Readiness, in coordination with
7 the principal cyber advisors of the military departments
8 and the Commander of the United States Cyber Com-
9 mand, shall conduct a study on the personnel and re-
10 sources required to enhance and support the occupational
11 resiliency of the Cyber Mission Force.

12 (b) ELEMENTS.—The study under subsection (a)
13 shall include the following:

14 (1) An inventory of the resources and programs
15 available to personnel assigned to the Cyber Mission
16 Force, disaggregated by Armed Force and location.

17 (2) An assessment of the risk to the occupa-
18 tional resiliency of such personnel relative to the re-
19 spective operational work role within the Cyber Mis-

1 sion Force (as defined by the Commander of the
2 United States Cyber Command) and the number of
3 such personnel available to perform operations in
4 each such category of operational work role.

5 (3) An evaluation of the extent to which per-
6 sonnel assigned to the Cyber Mission Force have
7 been made aware of the resources and programs re-
8 ferred to in paragraph (1), and of measures required
9 to improve such awareness.

10 (4) A determination by the Commander of the
11 United States Cyber Command regarding the ade-
12 quacy and accessibility of such resources and pro-
13 grams for personnel assigned to the Cyber Mission
14 Force.

15 (5) Such other matters as may be determined
16 necessary by the Principal Cyber Advisor of the De-
17 partment of Defense and the Undersecretary of De-
18 fense for Personnel and Readiness.

19 (c) SUBMISSION TO CONGRESS.—Upon completing
20 the study under subsection (a), the Principal Cyber Advi-
21 sor of the Department of Defense and the Undersecretary
22 of Defense for Personnel and Readiness shall submit to
23 the congressional defense committees a report containing
24 the results of such study.

1 (d) OCCUPATIONAL RESILIENCY DEFINED.—In this
2 section, the term “occupational resiliency” means, with re-
3 spect to personnel assigned to the Cyber Mission Force,
4 the ability of such personnel to mitigate the unique psy-
5 chological factors that contribute to the degradation of
6 mental health and job performance under such assign-
7 ment.



Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Waltz

In the portion of the report to accompany H.R. 2670 titled “*Next generation hybrid and electric vertical take-off and landing vehicles for Army Modernization*”, strike the following text: “(2) an overview of current and future research efforts focused on hybrid and electric VTOL battery sources, including ongoing efforts to improve the size, weight, power, and cost of future VTOL systems and power sources;”

and insert the following new text: “(2) an overview of current and future research efforts focused on hybrid and electric VTOL energy sources, including ongoing efforts to improve the size, weight, power, and cost of future VTOL systems and power sources as well as Army efforts to date to survey what hybrid electric propulsion systems are currently available in the commercial sector using conventional fuel;”.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by Mr. Bacon of Nebraska

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Sensor Open Systems Architecture

The committee supports the Department of Defense's adoption of modular open systems architecture software and hardware standards for military electronics, communications, and integrated intelligence sensors. The committee commends the United States Air Force for adopting the Sensor Open Systems Architecture (SOSA) standard across an increasing number of air and space platforms. The committee continues to encourage cooperation between the military services to implement SOSA across all domains and believes that adoption of the SOSA standard will allow NATO and other international partners to integrate and operate with the joint force more efficiently and effectively. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than December 29, 2023 identifying all Air Force programs currently compliant with the SOSA standard and programs projected to be compliant by 2033. The brief shall also include estimated cost for manpower to support SOSA compliance and sustainment for the listed platforms over the same 10 year period.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Gallego of Arizona

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Allies' and Partners' Telecommunications Networks in the Middle East

The committee recognizes the value of fifth-generation (5G) technologies to telecommunications networks, including inherent commercial and security benefits. The committee also recognizes that the potential exists for foreign strategic competitors to exploit communications technology through a variety of mechanisms.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than March 1, 2024, on the national security implications of deployment and expanded use of 5G within allied and partner nations in the Middle East. The briefing shall include:

- (1) a description of existing Department of Defense cooperation with Middle Eastern allies and partners to address national security concerns related to 5G communications networks;
- (2) a description of the risks to Department of Defense operations and activities stemming from ally and partner 5G communications networks, including a description of the change in risk from legacy systems;
- (3) opportunities to apply lessons learned from allies and partners undertaking similar efforts in Europe and South America; and
- (4) such other information as the Secretary deems appropriate.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Ms. Stefanik

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Brief on Current Requirements for Electromagnetic Spectrum Training in Support of Multi-Domain Operations (MDO)

The committee believes that competency in the electromagnetic spectrum (EMS), including electronic warfare (EW), will be essential to future conflicts. The committee is concerned, therefore, that highly restrictive training environments and necessary administrative coordination may restrict efforts to train the Joint Force and integrate EW into training events.

Therefore, the committee directs the Secretary of Defense to deliver a briefing to the Committee on Armed Services in the House of Representatives not later than March 1, 2024, outlining the current process and requirements for units to schedule and conduct exercises and training activities that include significant EMS activities. The brief shall include:

- (1) information on the process and timeline for planning EW, EMS-intensive, or multi-domain operations training, including coordination with external agencies;
- (2) elucidation of classes of training activities that incur more significant administrative requirements;
- (3) examples of units that have proven able to successfully and repeatably conduct multi-domain operation training events at home installations and recommendations on how to replicate their success across the military services;
- (4) recommendations for creating an enduring approval process for preapproved frequencies reserved for military use; and
- (5) recommendations for the creation of permissive parameters to conduct routine multi-domain operations training such that external approvals are either not required or significantly reduced.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. McCormick

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Report on Collaboration Technologies for Military Operations

The committee is encouraged by the efforts of Air Mobility Command, Space Systems Command, and other agencies in adopting proven, secure, commercially available, and open-source collaboration tools to enhance coordination for technical and mission-focused operational teams. The committee notes that, when architected properly, these tools may accelerate interagency decision-making for contingency operations in contested environments and provide numerous benefits, such as reducing risk, supporting critical mission functions, and increasing flexibility of collaboration at different security levels. The committee believes that secure collaboration is a mission essential function for the Department of Defense (DOD), and efforts should be made to promote the widespread adoption of these open-source collaboration tools throughout the Department. Therefore, the committee directs the Chief Information Officer (CIO) of the Department of the Air Force in coordination with the CIOs of the Departments of the Army and Navy to submit a cumulative report to the congressional defense committees by March 1, 2024, on the efforts that are being taken to expand the use of these tools.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Luttrell

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Ensuring Generation of High-Quality Labeled Data

The committee recognizes the Department of Defense's continuing efforts, such as the Global Information Dominance Experiments (GIDE), to develop a high-quality data integration layer that will enable the seamless use of artificial intelligence tools across the enterprise. These data streams play a critical role in the development of a high-quality data layer accessible by human and machine consumers at the tactical edge.

However, while the committee supports the Department's efforts to implement a high-quality data integration layer, data generated by software applications in use across the Department may not contain adequate attribute-level metadata tags and machine-readable labels. This information can ensure data streams may distribute information to the correct users based on criteria such as classification level or the purpose of the data.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by June 1, 2024, on the Department's strategy to ensure enterprise efforts for artificial intelligence are able to absorb and incorporate data with the correct attributes and tags.

**Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024**

Offered by: Mr. Strong

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Digital Transformation for Multi-Level Secure Programs

The committee recognizes the benefits of digital engineering and model-based systems engineering in complex development programs, and believes digital transformation concepts and agile culture, if properly implemented and deployed, could reduce schedule risk and enable simultaneous efforts at multiple levels of classification. Therefore, the committee directs the Secretary of Defense to provide a briefing to the congressional defense committees by March 1, 2024, on the efforts of the Department to deploy digital transformation acquisition capabilities into classified programs, including those that require multi-level security systems.

AMENDMENT TO H.R. 2670
OFFERED BY MR. LALOTA OF NEW YORK

At the appropriate place in subtitle B of title VIII,
insert the following:

1 **SEC. 8 ____ . MODIFICATION TO ACQUISITION AUTHORITY OF**
2 **THE SENIOR OFFICIAL WITH PRINCIPAL RE-**
3 **SPONSIBILITY FOR ARTIFICIAL INTEL-**
4 **LIGENCE AND MACHINE LEARNING.**

5 Section 808 of the William M. (Mac) Thornberry Na-
6 tional Defense Authorization Act for Fiscal Year 2021 (10
7 U.S.C. 4001 note) is amended—

8 (1) in subsection (d)—

9 (A) by striking “\$75,000,000” and insert-
10 ing “\$125,000,000”; and

11 (B) by striking “in each of fiscal years
12 2021, 2022, 2023, 2024, and 2025” and insert-
13 ing “in each of fiscal years 2024 through
14 2029”; and

15 (2) in subsection (f), by striking “October 1,
16 2025” and inserting “October 1, 2029”.



AMENDMENT TO H.R. 2670
OFFERED BY MR. KIM OF NEW JERSEY

At the appropriate place in title II, insert the following new section:

1 **SEC. 2 __ . CONGRESSIONAL NOTIFICATION OF CHANGES**
2 **TO DEPARTMENT OF DEFENSE POLICY ON**
3 **AUTONOMY IN WEAPON SYSTEMS.**

4 Not later than 30 days after making a modification
5 to Department of Defense Directive 3000.09 (relating to
6 autonomy in weapon systems) the Secretary of Defense
7 shall provide to the congressional defense committees a
8 briefing that includes—

- 9 (1) a description of the modification; and
10 (2) an explanation of the reasons for the modi-
11 fication.



AMENDMENT TO H.R. 2670
OFFERED BY MR. LALOTA OF NEW YORK

At the appropriate place in subtitle D of title XVI,
insert the following:

1 **SEC. 16 __ . MODIFICATION TO AUTHORITY TO USE OPER-**
2 **ATION AND MAINTENANCE FUNDS FOR**
3 **CYBER OPERATIONS-PECULIAR CAPABILITY**
4 **DEVELOPMENT PROJECTS.**

5 Section 1640 of the National Defense Authorization
6 Act for Fiscal Year 2020 (Public Law 116-92) is amend-
7 ed—

8 (1) in subsection (a)—

9 (A) by striking “ and each Secretary of the
10 military departments concerned”;

11 (B) by striking “per use” and inserting
12 “per project”; and

13 (C) by striking “through 2025” and insert-
14 ing “through 2028”;

15 (2) by amending subsection (b) to read as fol-
16 lows:

17 “(b) LIMITATION.—Each fiscal year, the Commander
18 of the United States Cyber Command may obligate and

1 expend under subsection (a) not more than
2 \$16,000,000.”;

3 (3) in subsection (c)—

4 (A) by striking “\$500,000” and inserting
5 “\$1,000,000”; and

6 (B) by striking “the Secretary of Defense,
7 or his designee, and each Secretary of the mili-
8 tary departments concerned, or their des-
9 ignees,” and inserting “the Secretary of De-
10 fense (or a designee)”; and

11 (4) in subsection (d), by striking “2025” and
12 inserting “2028”.



AMENDMENT TO H.R. 2670
OFFERED BY MR. FALLON OF TEXAS

At the appropriate place in title III, insert the following new section:

1 **SEC. 3 ____ . PILOT PROGRAM ON OPTIMIZATION OF AERIAL**
2 **REFUELING AND FUEL MANAGEMENT IN**
3 **CONTESTED LOGISTICS ENVIRONMENTS**
4 **THROUGH USE OF ARTIFICIAL INTEL-**
5 **LIGENCE.**

6 (a) PILOT PROGRAM.—Not later than 90 days after
7 the date of the enactment of this Act, the Chief Digital
8 and Artificial Intelligence Officer of the Department of
9 Defense, in collaboration with the Under Secretary of De-
10 fense for Acquisition and Sustainment and the Chief of
11 Staff of the Air Force, shall commence a pilot program
12 to optimize the logistics of aerial refueling and fuel man-
13 agement in the context of contested logistics environments
14 through the use of advanced digital technologies and arti-
15 ficial intelligence.

16 (b) OBJECTIVES.—The objectives of the pilot pro-
17 gram under subsection (a) shall include the following:

18 (1) Assessing the feasibility and effectiveness of
19 artificial intelligence-driven approaches in enhancing

1 aerial refueling operations and fuel management
2 processes.

3 (2) Identifying opportunities to reduce fuel con-
4 sumption, decrease operational costs, and minimize
5 the environmental impact of fuel management while
6 maintaining military readiness.

7 (3) Evaluating the interoperability and compat-
8 ibility of artificial intelligence-enabled systems with
9 the existing logistics infrastructure of the Depart-
10 ment of Defense.

11 (4) Enhancing situational awareness and deci-
12 sion-making capabilities through real-time data anal-
13 ysis and predictive modeling.

14 (5) Addressing potential challenges and risks
15 associated with the integration of artificial intel-
16 ligence and other advanced digital technologies, in-
17 cluding challenges and risks involving cybersecurity
18 concerns.

19 (c) COORDINATION AND CONSULTATION.—In car-
20 rying out the pilot program under subsection (a), the Chief
21 Digital and Artificial Intelligence Officer shall—

22 (1) coordinate the activities carried out under
23 such pilot program with the Commander of the
24 United States Transportation Command and the
25 Commander of the United States Indo-Pacific Com-

1 mand, to ensure such pilot program aligns with ex-
2 isting operational requirements; and

3 (2) seek to consult with relevant experts in the
4 fields of artificial intelligence, logistics, aviation, and
5 fuel management.

6 (d) REPORT.—Not later than 270 days after the date
7 of the enactment of this Act, the Chief Digital and Artifi-
8 cial Intelligence Officer shall submit to the Committees on
9 Armed Services of the House of Representatives and the
10 Senate a report on the initial findings and planned future
11 activities of the pilot program under subsection (a). Such
12 report shall include an assessment of the potential oper-
13 ational efficiencies and benefits derived from the artificial
14 intelligence-driven approaches employed under such pilot
15 program.

16 (e) TERMINATION.—The authority to conduct the
17 pilot program under subsection (a) shall terminate on Jan-
18 uary 1, 2027.



Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by Mr. Bacon of Nebraska

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Cyber Protection for Certain Department of Defense Personnel

The committee is aware that adversarial advances in ubiquitous technical surveillance, especially of commercial telecommunications networks, put at risk Department personnel that are deployed on sensitive operations or in contested environments. The committee notes that the Department has an authority, established in section 1645 of the National Defense Authorization Act (NDAA) for Fiscal Year 2017 (Public Law 114–328), to provide cyber protection support for certain personnel highly vulnerable to cyber attack. The committee encourages the Department to utilize such authority to the greatest extent practicable to provide cyber support to secure the mobile networks and devices of at-risk personnel.

To ensure that the aforementioned authority is being utilized effectively, the committee directs the Department of Defense Chief Information Officer to provide a briefing to the House Committee on Armed Services by December 1, 2023, on the Department's efforts to provide cyber protection support to at-risk personnel. The briefing shall include, at a minimum:

- (1) a description of the support offered to date, using the authority provided by the FY2017 NDAA, to protect personnel's mobile networks and devices from ubiquitous technical surveillance; and
- (2) a list of any barriers to implementing the authority provided by the FY2017 NDAA.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Golden of Maine

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Biomedical Research with Animal Models

The committee notes that the Department of Defense plays an important role in protecting the United States from biological threats. The committee further understands the value of animal models and studies, including those with laboratory mice, towards the safe development of new biodefense diagnostic tools and treatments. The increased need for biosafety, biosecurity, and pandemic preparedness and response amplifies the importance of research conducted with these precision models.

Therefore, the committee directs the Under Secretary of Defense for Research and Engineering to submit a report to the House Committee on Armed Services, not later than December 31, 2023 regarding the Department's collaboration with biomedical research non-profit organizations. At a minimum, the report should examine:

(1) how such partnerships can create and utilize precision animal models to advance basic research discoveries; and

(2) how the expertise of biomedical research non-profit organizations may enhance the Department's bio-defense capabilities and protect the health of the Armed Forces.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Golden of Maine

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Additive Manufacturing involving Metals and Composites

The committee notes that additive manufacturing plays an increasingly important role in the development of novel industrial base processes that support the National Defense Strategy. In particular, the committee notes that additive manufacturing involving metals, as well as composites and plastics, have important national security applications. The committee believes that the production of additive manufacturing capability that incorporates both metallic as well as composite materials holds significant promise for the development of emerging defense capabilities.

Therefore, the committee directs the Under Secretary of Defense for Research and Engineering to provide a report to the House Committee on Armed Services, not later than December 31, 2023, on the potential of additive manufacturing that incorporates both metallic as well as composite materials, including plastics.

AMENDMENT TO H.R. 2670
OFFERED BY MR. GALLAGHER

Strike section 9 ____ **[Log 77410]** and insert the following:

1 **SEC. 9 ____ . CODIFICATION OF THE DEFENSE INNOVATION**
2 **UNIT AND ESTABLISHMENT OF THE NON-**
3 **TRADITIONAL INNOVATION FIELDING ENTER-**
4 **PRISE.**

5 (a) CODIFICATION OF DEFENSE INNOVATION
6 UNIT.—

7 (1) IN GENERAL.—Chapter 303 of title 10,
8 United States Code, is amended by adding at the
9 end the following new section:

10 **“§ 4127. Defense Innovation Unit**

11 “(a) ESTABLISHMENT.—There is established in the
12 Department of Defense a Defense Innovation Unit (re-
13 ferred to in this section as the ‘Unit’).

14 “(b) DIRECTOR AND DEPUTY DIRECTOR.—There is
15 a Director and a Deputy Director of the Unit, each of
16 whom shall be appointed by the Secretary of Defense from
17 among persons with substantial experience in innovation
18 and commercial technology, as determined by the Sec-
19 retary.

1 “(c) AUTHORITY OF DIRECTOR.—The Director is the
2 head of the Unit. The Director—

3 “(1) shall serve as a principal staff assistant to
4 the Secretary on matters within the responsibility of
5 the Unit;

6 “(2) shall report directly to the Secretary of
7 Defense without intervening authority; and

8 “(3) may communicate views on matters within
9 the responsibility of the Unit directly to the Sec-
10 retary without obtaining the approval or concurrence
11 of any other official within the Department of De-
12 fense.

13 “(d) RESPONSIBILITIES.—The Unit shall have the
14 following responsibilities:

15 “(1) Seek out, identify, and support the devel-
16 opment of commercial technologies that have the po-
17 tential to be implemented within the Department.

18 “(2) Accelerate the adoption of commercial
19 technologies within the Department of Defense to
20 transform military capacity and capabilities.

21 “(3) Serve as the principal liaison between the
22 Department of Defense and individuals and entities
23 in the national security innovation base, including,
24 entrepreneurs, startups, commercial technology com-
25 panies, and venture capital sources.

1 “(4) Carry out programs, projects, and other
2 activities to strengthen the national security innova-
3 tion base.

4 “(5) Coordinate the activities of other organiza-
5 tions and elements of the Department of Defense on
6 matters relating to commercial technologies, dual
7 use technologies, and the innovation of such tech-
8 nologies.

9 “(6) Coordinate and oversee the nontraditional
10 defense innovation fielding enterprise established
11 under section 4063 of this title.

12 “(7) Carry out such other activities as the Sec-
13 retary of Defense determines appropriate.”.

14 (2) MODIFICATION OF AUTHORITY TO CARRY
15 OUT CERTAIN PROTOTYPE PROJECTS.—Section 4022
16 of title 10, United States Code, is amended—

17 (A) in subsection (a)—

18 (i) in paragraph (1), by inserting “the
19 Director of the Defense Innovation Unit,”
20 after “Defense Advanced Research
21 Projects Agency,”;

22 (ii) in paragraph (2)(A), by inserting
23 “, the Defense Innovation Unit,” after
24 “Defense Advanced Research Projects
25 Agency”; and

1 (iii) in paragraph (3), by inserting “,
2 Defense Innovation Unit,” after “Defense
3 Advanced Research Projects Agency”; and
4 (B) in subsection (e)(1)—

5 (i) by redesignating subparagraphs
6 (C) through (E) as subparagraphs (D)
7 through (F), respectively; and

8 (ii) by inserting after subparagraph
9 (B) the following new subparagraph:

10 “(C) the Director of the Defense Innova-
11 tion Unit;”.

12 (3) MODIFICATION OF OTHER TRANSACTION
13 AUTHORITY.—Section 4021 of title 10, United
14 States Code, is amended—

15 (A) in subsection (b), by inserting “, the
16 Defense Innovation Unit,” after “Defense Ad-
17 vanced Research Projects Agency”; and

18 (B) in subsection (f), by striking “and the
19 Defense Advanced Research Projects Agency”
20 and inserting “, the Defense Innovation Unit,
21 and the Defense Advanced Research Projects
22 Agency”.

23 (4) CONFORMING AMENDMENTS.—Section 1766
24 of title 10, United States Code, is amended—

1 (A) in subsection (b), by striking “as de-
2 termined by the Under Secretary of Defense for
3 Research and Engineering” and inserting “as
4 determined by the Secretary of Defense”; and

5 (B) in subsection (c)(3), by striking “as di-
6 rected by the Under Secretary of Defense for
7 Research and Engineering” and inserting “as
8 directed by the Secretary of Defense”.

9 (b) ESTABLISHMENT OF NONTRADITIONAL INNOVA-
10 TION FIELDING ENTERPRISE.—Subchapter I of chapter
11 303 of title 10, United States Code, is amended by insert-
12 ing after section 4062 the following new section:

13 **“§ 4063. Nontraditional innovation fielding enterprise**

14 “(a) ESTABLISHMENT.—The Secretary of Defense
15 shall designate within the Department of Defense a group
16 of organizations to be known, collectively, as the ‘nontradi-
17 tional innovation fielding enterprise’ (referred to in this
18 section as the ‘NIFE’). The purpose of the NIFE is to
19 streamline coordination and minimize duplication of ef-
20 forts among elements of the Department of Defense on
21 matters relating to the development, procurement, and
22 fielding of nontraditional capabilities.

23 “(b) COMPOSITION.—The NIFE shall consist of—

24 “(1) the Defense Innovation Unit; and

1 “(2) each organization designated as a service-
2 level NIFE lead under subsection (c).

3 “(c) DESIGNATION OF SERVICE-LEVEL NIFE
4 LEADS.—

5 “(1) Not later than 120 days after the effective
6 date of this section, each Secretary of a military de-
7 partment, in consultation with the Director of the
8 Defense Innovation Unit, shall designate a single or-
9 ganization within each armed force under the juris-
10 diction of such Secretary to serve as the lead organi-
11 zation within that armed force on matters within the
12 responsibility of the NIFE. Each organization so
13 designated shall be known as a ‘service-level NIFE
14 lead’.

15 “(2) An organization designated under para-
16 graph (1) shall be an organization of an armed force
17 that—

18 “(A) exists as of the effective date of this
19 section; and

20 “(B) has a demonstrated ability to engage
21 at scale with nontraditional defense contractors,
22 as determined by the Secretary concerned.

23 “(d) LEADERSHIP.—

24 “(1) HEAD OF NIFE.—Subject to the authority,
25 direction, and control of the Secretary of Defense,

1 the Director of the Defense Innovation Unit shall
2 serve as the head of the NIFE and, in such capac-
3 ity, shall be responsible for the overall oversight and
4 coordination of the NIFE.

5 “(2) SERVICE-LEVEL LEADS.—Each head of an
6 organization of an armed force designated as a serv-
7 ice-level NIFE lead under subsection (c) shall serve
8 as the head of the NIFE within that armed force
9 and, in such capacity, shall be responsible for the
10 oversight and coordination of the activities of the
11 NIFE within that armed force.

12 “(e) DUTIES.—The Director of the Defense Innova-
13 tion Unit shall carry out the following activities in support
14 of the NIFE:

15 “(1) Coordinate with the Joint Staff and the
16 commanders of the combatant commands to identify
17 operational challenges that have the potential to be
18 addressed through the use of nontraditional capabili-
19 ties, including dual-use technologies, that are being
20 developed and financed in the commercial sector.

21 “(2) Using funds made available to the Defense
22 Innovation Unit for the activities of the NIFE—

23 “(A) select projects to be carried out by
24 one or more of the service-level NIFE leads;

1 “(B) allocate funds to service-level NIFE
2 leads to carry out such projects; and

3 “(C) monitor the execution of such
4 projects by the service-level NIFE leads.

5 “(3) On a semiannual basis, submit to the Sec-
6 retary of Defense and the congressional defense
7 committees a report on the progress of the projects
8 described in paragraph (2). Each such report shall
9 identify any gaps in resources or authorities that
10 have the potential to disrupt the progress of such
11 projects.

12 “(4) Serve as Chair of the NIFE Resource Ad-
13 visory Board under subsection (f).

14 “(5) Serve as the principal liaison between the
15 Department of Defense, nontraditional defense con-
16 tractors, investors in nontraditional defense compa-
17 nies, and departments and agencies of the Federal
18 Government pursuing nontraditional capabilities simi-
19 lar to those pursued by the Department.

20 “(6) Lead engagement with industry, academia,
21 and other non-government entities to develop—

22 “(A) domestic capacity with respect to in-
23 novative, commercial, and dual-use technologies
24 and the use of nontraditional defense contrac-
25 tors; and

1 “(B) the capacity of international allies
2 and partners of the United States with respect
3 to such technologies and the use of such con-
4 tractors.

5 “(f) NIFE RESOURCE ADVISORY BOARD.—

6 “(1) ESTABLISHMENT.—There is established in
7 the Department of Defense an advisory board to be
8 known as the ‘NIFE Resource Advisory Board’ (re-
9 ferred to in this subsection as the ‘Board’).

10 “(2) MEMBERS.—The Board shall be composed
11 of the following members—

12 “(A) The Director of the Defense Innova-
13 tion Unit.

14 “(B) The head of each service-level NIFE
15 lead.

16 “(C) The Director of the Joint Staff.

17 “(D) The Chief Digital and Artificial Intel-
18 ligence Officer of the Department of Defense.

19 “(E) The Director of the Office of Stra-
20 tegic Capital of the Department of Defense.

21 “(3) CHAIR.—The Director of the Defense In-
22 novation Unit shall serve as Chair of the Board.

23 “(4) MEETINGS.—The Board shall meet annu-
24 ally and may meet more frequently at the call of the
25 Chair.

1 “(5) RESPONSIBILITIES.—On an annual basis
2 the Board shall—

3 “(A) identify not fewer than 10 objectives
4 of the Department of Defense that have the po-
5 tential to be supported using nontraditional ca-
6 pabilities that are capable of being fielded at
7 scale within a period of three years; and

8 “(B) for each objective identified under
9 subparagraph (A)—

10 “(i) develop a specific set of require-
11 ments and a budget for the development
12 and fielding of nontraditional capabilities
13 to support such objective; and

14 “(ii) based on such budget and re-
15 quirements, solicit proposals from public
16 and private sector entities for providing
17 such capabilities.

18 “(6) NONAPPLICABILITY OF CERTAIN REQUIRE-
19 MENTS.—Section 1013(a)(2) of title 5 (relating to
20 the termination of advisory committees) shall not
21 apply to the Board.

22 “(g) DEFINITIONS.—In this section:

23 “(1) The term ‘nontraditional capability’ means
24 a solution to an operational challenge that can sig-
25 nificantly leverage commercial innovation or external

1 capital with minimal dependencies on fielded sys-
2 tems.

3 “(2) The term ‘nontraditional defense con-
4 tractor’ has the meaning given that term in section
5 3014 of this title.”.

6 (c) EFFECTIVE DATE AND IMPLEMENTATION.—

7 (1) EFFECTIVE DATE.—The amendments made
8 by subsections (a) and (b) shall take effect 180 days
9 after the date of the enactment of this Act.

10 (2) IMPLEMENTATION.—Not later than the ef-
11 fective date specified in paragraph (1), the Secretary
12 of Defense shall issue or modify any rules, regula-
13 tions, policies, or other guidance necessary to imple-
14 ment the amendments made by subsections (a) and
15 (b).

16 (d) MANPOWER SUFFICIENCY EVALUATION.—

17 (1) EVALUATION.—The Secretary of Defense
18 shall evaluate the staffing levels of the Defense In-
19 novation Unit as of the date of the enactment of this
20 Act to determine if the Unit is sufficiently staffed to
21 achieve the responsibilities of the Unit under sec-
22 tions 4063 and 4127 of title 10, United States Code,
23 as added by subsections (a) and (b) of this section.

24 (2) REPORT.—Not later than the effective date
25 specified in subsection (c)(1), the Secretary of De-

1 fense shall submit to the Committees on Armed
2 Services of the Senate and the House of Representa-
3 tives a report on the results of the evaluation under
4 paragraph (1). The report shall include a plan—

5 (A) to address any staffing shortfalls iden-
6 tified as a part of the assessment; and

7 (B) for funding any activities necessary to
8 address such shortfalls.



AMENDMENT TO H.R. 2670
OFFERED BY MS. JACOBS OF CALIFORNIA

At the appropriate place in title II, insert the following new section:

1 **SEC. 2 __ . PROCESS TO ENSURE THE RESPONSIBLE DE-**
2 **VELOPMENT AND USE OF ARTIFICIAL INTEL-**
3 **LIGENCE.**

4 (a) **PROCESS REQUIRED.**—The Secretary of Defense,
5 acting through the Chief Digital and Artificial Intelligence
6 Officer, shall develop and implement a process—

7 (1) to assess whether an artificial intelligence
8 technology used by the Department of Defense is
9 functioning responsibly;

10 (2) to report and remediate any artificial intel-
11 ligence technology that is determined not to be func-
12 tioning responsibly; and

13 (3) in a case in which efforts to remediate such
14 technology have been unsuccessful, to discontinue
15 the use of the technology until effective remediation
16 is achievable.

17 (b) **ADDITIONAL REQUIREMENTS.**—In developing
18 and implementing the process required under subsection
19 (a), the Secretary of Defense shall—

1 (1) develop clear criteria to determine if an ar-
2 tificial intelligence technology is functioning respon-
3 sibly, which shall include consideration of such cri-
4 teria previously developed by the Department of De-
5 fense;

6 (2) take steps to integrate such process across
7 the organizations and elements of the Department of
8 Defense, including the combatant commands; and

9 (3) provide information on such process to rel-
10 evant personnel of the Department of Defense in-
11 cluding—

12 (A) personnel responsible for developing
13 and deploying artificial intelligence technologies;

14 (B) end users of such technologies, includ-
15 ing members of the Army, Navy, Air Force,
16 Marine Corps, and Space Force who use such
17 technologies in military operations; and

18 (C) such other personnel as the Secretary
19 determines appropriate.

20 (c) DEADLINES FOR IMPLEMENTATION.—The Sec-
21 retary of Defense shall—

22 (1) commence the implementation of the proc-
23 ess required under subsection (a) not later than 120
24 days after the date of the enactment of this Act; and

1 (2) fully implement such process not later than
2 one year after such date of enactment.

3 (d) INTERIM BRIEFING.—Not later than 160 days
4 after the date of the enactment of this Act, the Secretary
5 of Defense shall provide to the Committees on Armed
6 Services of the Senate and the House of Representatives
7 a briefing on the progress of the Secretary in developing
8 and implementing the process required under subsection
9 (a). At a minimum, such briefing shall include an expla-
10 nation of the criteria developed by the Secretary under
11 subsection (b)(1).

12 (e) FINAL REPORT.—Not later than one year after
13 the date of the enactment of this Act, the Secretary of
14 Defense shall submit to the Committees on Armed Serv-
15 ices of the Senate and the House of Representatives a re-
16 port on the progress of the Secretary in developing and
17 implementing the process required under subsection (a),
18 including the progress of the Secretary with respect to
19 each element specified in subsection (b).



Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024
Offered by: Mr. Johnson

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Report on Cloud Computing Strategy for the United States Army Corps of
Engineers

The committee supports the U.S. Army Corps of Engineers' (USACE) efforts to expand deployment of cloud computing in its operations. Due to the unique nature of the USACE, the diversity of the mission, and geographic challenges, the committee believes that continued incorporation of cloud technology into the USACE's operations has the potential to yield significant benefits. Therefore, the committee directs the Commanding General of the U.S. Army Corps of Engineers to submit a briefing to the House Committee on Armed Services not later than December 31, 2023 outlining the U.S. Army Corps of Engineers' current operational state with regard to cloud-based information technology and operational technology.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Vasquez

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Cyber Kinetic Combat Environment

The committee is encouraged by the progress made in addressing development, training, and evaluation requirements associated with multi-domain operations. The committee is aware of Air Force efforts to build out research and training environments capable of replicating vignettes of multi-domain operations that integrate cyberspace operations, cyber physical sensing, electromagnetic spectrum operations, and intelligence, surveillance, and reconnaissance activities. The committee believes that continued effort is required in order to keep pace with potential adversaries who seek to degrade U.S. advantages in multi-domain operations, and that such efforts will require concerted efforts by government, industry, and academia. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services, not later than March 1, 2024, on opportunities for the Air Force to partner with academic institutions to provide additional capabilities to facilitate continued development, testing, training, and evaluation in multi-domain activities.

AMENDMENT TO H.R. 2670
OFFERED BY MR. LUTTRELL OF TEXAS

At the appropriate place in title XV, insert the following new section:

1 **SEC. 15 ____ . MODIFICATION TO DEPARTMENT OF DEFENSE**
2 **ENTERPRISE-WIDE PROCUREMENT OF CYBER**
3 **DATA PRODUCTS AND SERVICES.**

4 Section 1521(a) of the National Defense Authoriza-
5 tion Act for Fiscal Year 2022 (Public Law 117–81; 10
6 U.S.C. 2224 note) is amended—

7 (1) by redesignating paragraph (6) as para-
8 graph (7);

9 (2) in paragraph (7), as so redesignated, by
10 striking “(1) through (5)” and inserting “(1)
11 through (6)”;

12 (3) by inserting after paragraph (5) the fol-
13 lowing new paragraph:

14 “(6) Evaluating emerging cyber technologies,
15 such as artificial intelligence-enabled security tools,
16 for efficacy and applicability to the requirements of
17 the Department of Defense.”.



Amendment to H.R. 2670

National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Golden of Maine

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Shipyard Cybersecurity

The committee notes that the shipbuilding and repair industrial base constitutes an essential component of U.S. national security. As noted in the Navy's report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2024, current national security threats demonstrate "the need for a larger, more capable Navy..." and that "[T]imely industrial base delivery of systems and platforms within cost estimates is a key consideration as it quickly enhances warfighting performance and controls cost growth."

The committee is concerned that potential private and public shipyard vulnerability to cyberattacks puts at risk the shipbuilding industrial base's ability to construct and maintain naval systems and platforms in a timely and efficient manner.

Therefore, the committee directs the Secretary of the Navy to submit a report to the House Committee on Armed Services, not later than December 31, 2023, on the potential vulnerability of U.S. private and public shipyards to cyberattacks. The report should include:

- (1) an analysis of current or potential cyber threats to the nation's public and private shipyards, including from both state and non-state actors;
- (2) an analysis regarding potential vulnerabilities of the nation's shipyards to cyber attack, and any constraints or limitations encountered in the analysis of potential vulnerabilities;
- (3) an analysis of the potential impact of a cyberattack upon public and private shipyards to the Navy's fleet maintenance and procurement requirements;
- (4) a comparison of the Navy's visibility into the networks and security posture of public shipyards versus private shipyards;
- (5) a comprehensive evaluation of the delineation in responsibilities for cybersecurity between Navy Cyber Defense Operations Command, Naval Sea Systems Command, and any localized shipyard cybersecurity elements separate from either of the aforementioned commands; and
- (6) identification of any gaps in coverage from the preceding evaluation of the delineation in responsibilities.

The report should be submitted in an unclassified form but may include a classified annex.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Turner

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Augment Foreign Language Translation with Technology

The committee is encouraged by actions to complement existing national security translator capabilities with commercially available adaptive neural machine learning translation technologies to boost translators' efficiency and output. The committee is concerned there is a significant volume and backlog of critical foreign language material with national security implications.

Therefore, the committee encourages the Department of Defense to further adopt commercially available adaptive neural machine learning translation technologies to supplement existing trained linguists and analysts to explore a department-wide strategy to address the backlog of critical foreign language material. Accordingly, the Committee directs the Secretary of Defense to provide a report to the House and Senate Armed Services Committees, by December 31, 2023, that details current translator capabilities and the technology being used to augment them. The report shall, at a minimum, include the following:

1. An analysis of the shortfalls of critical linguists and the impact of those shortfalls on Department requirements;
2. A survey of the backlog of critical foreign language material with national security implications that remains untranslated;
3. A survey of commercial capabilities currently utilized by DOD that are available to assist in adaptive neural machine learning translation;
4. A cost estimate for implementing such program(s); and

The report shall be unclassified and may include a classified annex if necessary.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Ryan

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Army Cyber Auxiliary Utilization

The committee believes that in a globally and technologically complex environment, the Department of Defense requires adaptability to leverage skills and knowledge where and when available. In April 2019 the United States Marine Corps established a Marine Corps Cyber Auxiliary, a volunteer organization of highly talented cyber experts who train, educate, assist, and mentor Marines to keep pace with constantly evolving cyber challenges. This is a novel approach that the committee recognizes, while also acknowledging the need to address statutory limitations.

In the face of a shortage in qualified cyber-focused professionals to serve and protect our nation's critical infrastructure, the committee believes that the creation of a cyber auxiliary force may provide a cost-effective means to tap into industry expertise and supplement each services' cyber forces.

Therefore, the committee directs the Principal Cyber Advisor of the United States Army to provide a report to the House Committee on Armed Services not later than March 1, 2024 assessing the feasibility of an Army Cyber Auxiliary Force. The report should include information on funding requirements and statutory barriers that exist in the creation of a cyber auxiliary force as well as any other information the Advisor deems appropriate.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Turner

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Briefing on Air Force Studies Board

The committee notes the Air Force Studies Board's (AFSB) important role in bringing together leading experts to discuss topics related to the development of science and technology (S&T) within the U.S. Air Force and the integration of cutting edge S&T for future airpower applications. The committee is aware the AFSB is responsible for connecting the Department of the Air Force and the National Academies on issues relating to science, technology, engineering, and acquisition in support of both Air Force and Space Force mission sets. As next-generation technology continues to play an important role in national security and future warfighting concepts, the committee believes the Department of the Air Force can better leverage and utilize the expertise and resources provided by the AFSB.

Accordingly, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than February 1, 2024, on the Department of the Air Force's efforts to maximize utilization of the Air Force Studies Board. The briefing shall include, but not be limited to, the following:

- (1). An overview of the scope of capabilities offered by the Air Force Studies Board;
- (2). Current rate of utilization of the Air Force Studies Board by the Department of the Air Force and its components;
- (3). A strategy to better integrate the Air Force Studies Board into the broader Air Force S&T ecosystem; and
- (4). Costs, benefits, and potential savings associated with leveraging the AFSB for studies as compared to alternative extramural research methods.

**Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024**

Offered by: Ms. Strickland

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

**Leveraging Edge-Compute Platform Data for Comprehensive Artificial-Intelligence
Enabled Training**

The committee is aware of efforts by the Department of Defense to implement applications that meet and monitor the completion of training goals, including those training activities undertaken via emergent technologies such as virtual reality, augmented reality, and mixed reality. The committee is also aware that such training shows the potential to improve readiness, resilience, and quality of life for trainees through advanced analytics and other data-enabled capabilities. Accordingly, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than March 1, 2024, that outlines the Department's plan to further implement such applications and training across the services.

AMENDMENT TO H.R. 2670
OFFERED BY MR. TURNER OF OHIO

At the appropriate place in title XV, insert the following new section:

1 **SEC. 15__ . AUTHORITY TO ESTABLISH PROGRAM OF**
2 **UNITED STATES CYBER COMMAND ON DARK**
3 **WEB AND DEEP WEB ANALYSIS TOOLS.**

4 (a) IN GENERAL.—The Commander of the United
5 States Cyber Command, pursuant to the authority pro-
6 vided under section 167b(d) of title 10, United States
7 Code, may establish within such Command a program, or
8 augment an existing such program, to integrate into the
9 packages of tools distributed to the combatant commands
10 tools for the analysis of information from locations on the
11 Internet referred to as the “dark web” and “deep web”.

12 (b) ELEMENTS.—Under the program established or
13 augmented under subsection (a), the Commander may—

14 (1) develop a comprehensive and tailored ap-
15 proach to the use of open-source intelligence tools
16 for the analysis and distribution of information col-
17 lected from the locations on the Internet described
18 in subsection (a);

1 (2) develop and validate technical requirements
2 relating to such collection, analysis, and distribution,
3 including with respect to data fidelity and data prov-
4 enance;

5 (3) assess and acquire technologies to—

6 (A) collect information from the locations
7 specified in paragraph (1); and

8 (B) analyze and, as appropriate, distribute
9 such information; and

10 (4) enable the cross-organizational sharing of
11 such information across the Department of Defense.

12 (c) ROLE OF ASSISTANT SECRETARY OF DEFENSE
13 FOR CYBER POLICY.—Consistent with section 167b(d) of
14 such title, the Commander shall implement this section
15 subject to the authority, direction, and control of the As-
16 sistant Secretary of Defense for Cyber Policy.



Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Austin Scott of Georgia

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

U.S. Army Modeling and Simulation Infrastructure

The committee notes the Army's modeling and simulation infrastructure is antiquated and unable to evaluate modernization programs. The committee understands that many, if not most, acquisition programs rely upon modeling and simulation during key development milestones, however the committee is concerned the U.S. Army may not have the capability to capture, curate, and reuse modeling and simulation data generated information during the acquisition process. The committee directs the Secretary of the Army, not later than December 31, 2023, to provide a report to the congressional defense committees on the resources needed to modernize the U.S. Army's modeling and simulation infrastructure.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Andy Kim

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Legal Implications of Lethal Autonomy

The committee recognizes the work of the Department of Defense in updating the policy framework surrounding advancements in weapons system autonomy, including through the issuance of updates to DoD Directive 3000.09. The committee further recognizes that the pace of advancements in this field create challenges for the legal and policy underpinnings of military operations and is concerned that the legal implications of lethal autonomy may require stricter scrutiny. The committee believes such insights could prove valuable in ensuring that the uses of artificial intelligence (AI) or autonomous systems comply with international norms of behavior.

Accordingly, the committee directs the Under Secretary of Defense for Policy to submit a report to the Senate Committee on Armed Services and the House Committee on Armed Services not later than January 31, 2024, addressing:

- Current legal frameworks governing the approval and utilization of autonomous systems with lethal capabilities;
- Current legal frameworks governing the design and engineering of AI and autonomy systems with potential lethal capabilities;
- The manner in which the use of force through lethal autonomous means would fall under existing legal frameworks governing accountability and the use of force;
- The effects of unintended bias, deception capabilities, and other deleterious effects on AI decision-making tools with regard to governance of lethal autonomous capabilities; and
- Such other information as the Under Secretary may wish to include.

This report shall be unclassified, but may contain a classified annex.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Ms. Sewell

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

STEM Partnership Expansion

The Department of Defense faces challenges recruiting and retaining a workforce skilled in science, technology, engineering, and mathematics (STEM). The Committee supports the efforts of the Department of Defense to grow the STEM workforce pipeline, particularly for women and under-represented minorities in the areas of cybersecurity, artificial intelligence, augmented reality, and Additive Manufacturing.

The Committee directs the Secretary of the Air Force to provide a briefing to the House Armed Services Committee by December 30, 2023 on how it plans to partner with Historically Black Colleges and Universities to leverage their expertise in the aforementioned research areas to inform future requirements while building the next generation of STEM leaders.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Strong

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Cyber-peculiar Test & Evaluation Environments

The committee is aware of the Department of the Army's efforts to build environments which are intended to emulate an adversary's offensive cyber capabilities, specifically against U.S. weapon systems. The capability to assess, experiment, and test is a critical component of ensuring military supremacy in a potential future conflict. Additionally, the data resulting from simulated environments can have immense potential for future use. Therefore, the committee directs the Secretary of the Army to brief the House Committee on Armed Services not later than March 31, 2024, on the status of existing efforts for cyber-peculiar test & evaluation environments, and any benefits resulting from these efforts.

**Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024**

Offered by: Mr. LaLota

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Next Generation 9-1-1 Implementation

The Committee notes the Defense Information Systems Agency's (DISA) intent to lead the Department's transition to Next Generation 9-1-1. Some reports indicate that this effort lags behind the civilian NG9-1-1 rollout, which may create disparity for servicemembers and their families compared to those residing in civilian communities. The Committee notes this delay has the potential to leave installations with reduced interoperability with state and local governments and other emergency services agencies.

The committee directs a briefing from the Director of the Defense Information Systems Agency no later than April 1, 2024 on the activities related to Next Generation 9-1-1.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Strong

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

**Assessment of Defensive and Offensive Cybersecurity Capabilities in 5G/NextG
Environments**

The committee is supportive of efforts to expand 5G and NextG technology into missile and aviation weapon systems, military installations, and tactical operations. Therefore, the committee directs the Secretary of Defense to submit a briefing to the House Committee on Armed Services not later than March 31, 2024, to assess the cybersecurity risks inherent in 5G/NextG technology and adversarial abilities to exploit those vulnerabilities.

The briefing should include: (1) use cases for 5G/NextG for weapon systems and operational and prototype deployments; (2) the ability of adversaries of the United States to deny or degrade U.S. military 5G/NextG communications capabilities; (3) an assessment of Department of Defense cybersecurity vulnerabilities in 5G / NextG infrastructure; and (4) plans to establish tools, tactics, and procedures to defend military 5G / NextG infrastructure.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Lamborn

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Coherent Beam Combining Directed Energy

The committee is encouraged by the progress being made in the Department of Defense on development and incorporation of directed energy technology. The committee understands that the Department has focused on Spectral Beam Combining (SBC) lasers for its high energy laser air defense solutions, but is aware that Coherent Beam Combining (CBC) lasers have had some success. The Committee is concerned that the Department has committed too heavily to one technological approach. Therefore, the Committee directs the Undersecretary of Defense for Research and Engineering, in coordination with each Service Secretary, to provide a briefing to the House Armed Services Committee by February 1, 2024 on the Department's investments into SBC and CBC, including a breakdown by type. This briefing shall include an overview of CBC cooperative research and development efforts.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Jackson of Texas

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Material Development for Personal Protection Systems

The committee recognizes the benefit of collaboration with academic partners for increasing support for computational and simulation research to advance ballistic materials, technologies, and methodologies to enhance lethality and survivability of military personnel. Therefore, the committee directs the Commander, U.S. Army Futures Command, to provide a briefing to the House Committee on Armed Services not later than April 1, 2024, that details ongoing work with academic partners to advance computational and simulation research for advanced ballistic materials and technologies, as well as efforts to advance design and development methodologies and models.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Jackson of Texas

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Advanced Manufacturing for Hypersonic Systems

The committee believes that hypersonic systems will provide an essential set of capabilities for the Department of Defense, and that advancements in structure and materials, including manufacturing processes, will be essential to the continued advancement of this class of systems. Therefore, the committee directs the Commander, Air Force Research Laboratory, to provide a briefing to the House Committee on Armed Services not later than April 1, 2024, that details the Air Force's efforts to develop the next generation of advanced thermal protection systems (TPS), including multifunctional and integrated approaches, in order to enable the next generation of hypersonic systems. The briefing shall include information related to the development of advanced manufacturing techniques essential to next-generation TPS.

**Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024**

Offered by: Mr. Horsford

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Digital Cross Domain Solution Policy

The committee recognizes the need for the Department of Defense information systems to have real-time cross domain capabilities that are coupled with updated processes and polices that keep pace with evolving requirements for mission owners. Therefore, the committee directs the Director, Defense Information Systems Agency (DISA), to provide a briefing to the House Committee on Armed Services no later than March 1, 2024, updating the committee on current and planned efforts to provide and enable a real-time cross domain solution, including potential process and policy changes.

AMENDMENT TO H.R. 2670
OFFERED BY MS. SHERRILL OF NEW JERSEY

At the appropriate place in title II, insert the following new section:

1 **SEC. 2 ____ . MODIFICATION TO ANNUAL REPORTS ON CRIT-**
2 **ICAL TECHNOLOGY AREAS SUPPORTIVE OF**
3 **THE NATIONAL DEFENSE STRATEGY.**

4 Section 217(c)(1) of the William M. (Mac) Thorn-
5 berry National Defense Authorization Act for Fiscal Year
6 2021 (Public Law 116–283; 10 U.S.C. 4001 note) is
7 amended—

8 (1) by striking “2025” and inserting “2029”;

9 (2) by redesignating subparagraphs (A) through
10 (D) as clauses (i) through (iv), respectively;

11 (3) by striking “including a description” and
12 inserting “including—

13 “(A) a description”;

14 (4) by striking the period at the end and insert-
15 ing a semicolon; and

16 (5) by adding at the end the following new sub-
17 paragraphs:

18 “(B) for each technology area identified
19 under subsection (a)(1)—

1 “(i) a list of each program element
2 that funds research, development, test, and
3 evaluation activities within that area; and

4 “(ii) for each such program element—

5 “(I) identification of the total
6 amount of funds obligated or ex-
7 pended for research, development,
8 test, and evaluation under that pro-
9 gram element in support of the tech-
10 nology area in the fiscal year pre-
11 ceding the date of the report;

12 “(II) an estimate of the total
13 amount of funds expected to be obli-
14 gated or expended for research, devel-
15 opment, test, and evaluation under
16 that program element in support of
17 the technology area for the fiscal year
18 in which the report is submitted and
19 each of the following two fiscal years;
20 and

21 “(III) an explanation of the rea-
22 sons for such funding allocations; and

23 “(C) an assessment of any policies, proc-
24 esses, or systems of the Department of Defense
25 that have been modified, or that are expected to

1 be modified, as a result of the Department’s in-
2 vestments and other efforts in the technology
3 areas identified under subsection (a)(1) to com-
4 pete in an era of strategic competition, with an
5 emphasis on those policies, processes, or sys-
6 tems involved in transitioning technologies from
7 the research and development phase to formal
8 acquisition programs or operational use within
9 the Department.”.



**Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024**

Offered by: Mr. Luttrell

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Hypersonic Test Bed Investment Plan

The committee recognizes the need for affordable and reusable hypersonic test beds in order to enable early, persistent, and operationally realistic flight testing in support of hypersonic technology roadmaps, requirements development for future systems and capabilities, and early technical demonstrations and experiments. The committee is aware of available commercial hypersonic testbeds and believes they can be leveraged to increase operational test and evaluation activities. Therefore, the committee directs the Secretary of Defense to deliver a briefing to the House Armed Services Committee no later than February 1, 2024, its plan to invest, through its Central Test and Evaluation Investment Program, in the utilization of commercially available hypersonic test beds to support its Test and Evaluation needs across the hypersonic enterprise.

Amendment to H.R. 2670

National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Wittman

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Report on human-machine interface technologies to integrate autonomous systems into military operations

The committee observes that an effective human-machine interface is necessary for successful manned-unmanned teaming, and the responsible integration of autonomous systems into military operations. Human-machine interface shortfalls can result in increased operational, training, and sustainment burdens on service members and budgets. The committee is aware of the cognitive burden placed on service members operating unmanned systems while concurrently executing other demanding tasks such as conducting an infantry patrol, flying an aircraft, or operating multiple unmanned systems simultaneously. Available human-machine interface capabilities continue to mature rapidly with the integration of natural language understanding and speech recognition technologies. The committee encourages the Department to explore the application of these technologies to enhance the human-machine interface for unmanned systems and test their application to relevant systems currently in development or procurement.

Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services no later than March 1, 2024, on human-machine interface technologies that have the potential to enhance the integration of autonomous systems into military operations. The briefing should, at a minimum, include the following:

- (1) a list of autonomous and semi-autonomous systems where the Department is funding, or considering funding, continued development of human-machine interface enhancements such as natural language understanding;
- (2) a survey of government and commercial entities currently focused on enhancing human-machine interfaces for autonomous systems; and
- (3) an identification of the impediments to the procurement of enhanced human-machine interface capabilities for integration into current systems, including funding or policy constraints.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by Mr. Bacon of Nebraska

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Electromagnetic Pulses and Geomagnetic Disturbances

The committee remains concerned about the potential threat to Department of Defense missions posed by electromagnetic pulses (EMP) and geomagnetic disturbances (GMD). The committee notes the guidance on risk assessment and mitigation contained in National Defense Authorization Act of Fiscal Year 2020 (Public Law 116-92) and believes more must be done to ensure the protection and resilience of Department of Defense systems and infrastructure from EMP and GMD threats. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by March 26, 2024 summarizing the Department's strategy for protection against EMP and GMD threats. This briefing shall include:

- (1) a current risk assessment of EMP and GMD threats to the successful execution of Department of Defense missions;
- (2) a summary of priority defense missions, systems and infrastructure requiring protection from EMP and GMD threats;
- (3) a summary of actions taken by the Department of Defense since 2020 to protect critical defense missions, systems, and infrastructure from EMP and GMD threats; and
- (4) a description of technologies, resources, and additional actions required to ensure the defense of critical mission, systems, and infrastructure from EMP and GMD threats.

Amendment to H.R. 2670
National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Strong

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Report on U.S. Space Force program information technology infrastructure

The committee supports U.S. Space Force's vision of becoming the world first digital service. Achieving the United States' space objectives requires a technological maturity and advantage over any potential adversary. Therefore, the committee directs the Chief Information Officer of the Department of the Air Force, in coordination with the Senior Cyber Officer of the United States Space Force to provide a briefing to the House Committee on Armed Services not later than a briefing April 1, 2024, on the U.S. Space Force's plan to leverage commercial cloud technologies that can provide mission benefit, improve acquisition process, and contribute to cost savings in digital infrastructure modernization and sustainment.

Amendment to H.R. 2670 National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Horsford

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Digital Literacy at Air Force

The committee is aware of and supports efforts undertaken by the Secretary of the Air Force to provide digital literacy training for the Air Force and Space Force servicemembers, government civilians, and contractors in advanced technologies, such as cyber, artificial intelligence and machine learning (AI/ML), and cloud computing. The committee encourages the Air Force and Space Force to leverage government owned training platforms with curricula informed by private sector expertise to accelerate learning and career path development.

To that end, the committee encourages the Secretary of the Air Force to expand existing mobile enabled platforms to train and develop the cyber workforce of Air Force and Space Force. To better understand how the Air Force and Space Force are providing digital literacy to its components, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services no later than March 1, 2024, on current digital literacy training platforms in use within the service. The report, at a minimum, should include the following:

1. a list of current mobile enabled cyber training platforms in use and the number of users enrolled by service component;
2. an explanation of the cyber, AI/ML, cloud computing, and other training courses being offered on the platforms listed in (1);
3. a list of current cyber, AI/ML, and cloud computing literacy requirements;
4. an explanation of each training platform's capability to (i) assess servicemember proficiency, (ii) customize a servicemember's path to facilitate continuous learning; and (iii) track training progress and servicemember's feedback; and
5. a description of how the training platform integrates into the services' MyLearning system or equivalent.

Amendment to H.R. 2670

National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Wittman

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Comptroller General Review of the Functions of the Office of the Under Secretary of Defense for Research and Engineering

In the National Defense Authorization Act for Fiscal Year 2017, Congress called for the Department of Defense (DOD) to establish the position of Under Secretary of Defense for Research and Engineering [USD(R&E)] to serve as DOD's Chief Technology Officer and elevate and enhance the mission of defense technological innovation. The Act required that the new office take a larger role than its predecessor office in establishing policies to overcome challenges DOD has faced in promoting innovation. The USD(R&E) was also charged with responsibility for the allocation of resources for defense research and engineering, including unifying these efforts across DOD.

In July 2020, DOD issued a directive establishing the position, responsibilities and functions, relationships, and authorities of the USD(R&E). Among other things, the directive requires USD(R&E), in coordination with the Secretary of Defense, to identify and define DOD's modernization priorities, establish timelines for delivering future capabilities, and develop roadmaps for investing in modernization priority areas. Importantly, the directive charges USD(R&E) with recommending investments that advance these goals and identifying activities across DOD that run counter to the modernization roadmaps for potential resource allocation.

The committee is concerned that the Office of the USD(R&E) has neither fully nor sufficiently executed the authorities granted to it under statute and in policy for managing, overseeing, and improving innovation-related investments across DOD. The committee is also concerned the Department of Defense may be missing opportunities to fully collaborate science and technology efforts within and across all components for maximum efficiency and effectiveness. The mix of investments that military components and defense agencies make in disruptive and incremental technology development remains unknown and unassessed. Further, new technologies continue to get bogged down in long, linear development structured defense acquisition programs that delay their delivery to the warfighters who need them. And most importantly, innovation progress continues to lag competitor states in certain key defense technology areas—the primary impetus that led Congress to legislate establishment of a USD(R&E).

Weapon systems annual assessments and defense science and technology reports issued by the Comptroller General have identified similar concerns with DOD's innovation performance and resource management. Accordingly, the committee directs the Comptroller General to review the functions of the Office of the USD(R&E) and report out its findings to the congressional defense committees not later than February 23, 2024. As part of this review, the committee requests that the Comptroller General recommend any policy and statutory changes needed to better position the Office of the USD(R&E) to manage, oversee, and improve DOD's innovation investments and outcomes.

AMENDMENT TO H.R. 2670
OFFERED BY MS. HOULAHAN OF
PENNSYLVANIA

At the appropriate place in title III, insert the following new section:

1 **SEC. 3___.** **IMPROVEMENTS RELATING TO END-TO-END**
2 **TRAVEL MANAGEMENT SYSTEM OF THE DE-**
3 **PARTMENT OF DEFENSE.**

4 (a) **TERMINATION AND REPLACEMENT OF DEFENSE**
5 **TRAVEL SYSTEM.**—Except as provided in subsection (b)—

6 (1) the Secretary of Defense shall—

7 (A) terminate the end-to-end travel man-
8 agement system of the Department of Defense
9 known as the “Defense Travel System” on De-
10 cember 31, 2025; and

11 (B) establish and maintain a program to
12 replace the system specified in subparagraph
13 (A) with a new system for end-to-end travel
14 management of the Department of Defense (in-
15 cluding the management of travel related ex-
16 pense processes) that is a fully integrated com-
17 mercial system, for the purpose of improving ef-

1 iciency and customer satisfaction with respect
2 to Department travel; and

3 (2) not later than December 21, 2025, the Sec-
4 retary of each military department shall complete
5 the transition to the replacement system specified in
6 paragraph (1)(B), including by ensuring the enter-
7 prise resource planning system of that military de-
8 partment is integrated into such replacement system
9 by such date.

10 (b) WAIVER.—The Secretary of Defense may issue
11 a waiver for the termination and transition deadlines
12 under subsection (a) if the Secretary—

13 (1) determines such waiver necessary; and

14 (2) submits to the Committees on Armed Serv-
15 ices of the House of Representatives and the Senate
16 a notification and justification of such determina-
17 tion.

18 (c) BRIEFINGS.—Not later than 180 days after the
19 date of the enactment of this Act, and every 180 days
20 thereafter until the date on which the respective require-
21 ment has been completed—

22 (1) the Secretary of Defense shall provide to
23 the Committees on Armed Services of the House of
24 Representatives and the Senate a briefing on the ef-
25 forts and progress of the Department of Defense

1 with respect to the requirements under subsection
2 (a)(1); and

3 (2) the Secretary of each military department
4 shall provide to such committees a briefing on the
5 efforts and progress of that military department
6 with respect to the requirements under subsection
7 (a)(2).

8 (d) LIMITATION ON AVAILABILITY OF FUNDS PEND-
9 ING BRIEFING.—Of the funds authorized to be appro-
10 priated by this Act or otherwise made available for fiscal
11 year 2024 for the Defense Travel Management Office, not
12 more than 20 percent may be obligated or expended until
13 the date on which the Secretary of Defense provides to
14 the Committees on Armed Services of the House of Rep-
15 resentatives and the Senate a briefing on the plan of the
16 Secretary to complete the requirements under subsection
17 (a)(1).



AMENDMENT TO H.R. 2670
OFFERED BY MR. STRONG OF ALABAMA

At the appropriate place in title X, insert the following:

1 **SEC. 10 ____ . QUARTERLY BRIEFINGS ON JOINT ALL DOMAIN**

2 **COMMAND AND CONTROL EFFORT.**

3 Section 1076(a) of the National Defense Authoriza-
4 tion Act for Fiscal Year 2021 (Public Law 116–283; 134
5 Stat. 3866) is amended—

6 (1) by striking “October 1, 2024” and inserting
7 “October 1, 2028, the Deputy Secretary of De-
8 fense”; and

9 (2) by striking “the Chief Information Officer
10 of the Department of Defense,”



Amendment to H.R. 2670

National Defense Authorization Act for Fiscal Year 2024

Offered by: Mr. Jeff Jackson

In the appropriate place in the report to accompany H.R. 2670, insert the following new Directive Report Language:

Artificial Intelligence Capabilities of Foreign Adversaries

The committee continues to recognize that artificial intelligence (AI) and machine learning technologies are critical to the national security interests of the United States. Additionally, the committee notes that similar tools are currently being developed and utilized by potential adversaries, including the government of the People's Republic of China. The committee commends the export controls issued by the U.S. Government to limit the export of advanced semiconductors and supercomputer components used to create large language models and artificial intelligence capabilities. However, the committee is concerned by reports of efforts by potential adversaries to expand their AI capabilities and believes that further efforts may be needed to secure elements of the supply chain, including the software supply chain, for these and other related technologies.

Therefore, the committee directs the Secretary of Defense, in coordination with relevant agencies, to submit a report to the congressional defense committees not later than December 1, 2023, on national security challenges associated with recent developments in the artificial intelligence and machine learning capabilities of foreign adversaries. The report should include the following information:

- (1) new or continued national security implications of commercially available artificial intelligence technologies in the commercial and military sectors by the United States and foreign adversaries;
- (2) efforts by strategic adversaries to circumvent export controls relating to components used to develop large language models; and
- (3) efforts by strategic adversaries to access or develop new advanced artificial intelligence technologies.

AMENDMENT TO H.R. 2670
OFFERED BY MR. LUTTRELL OF TEXAS

At the appropriate place in title XV, insert the following:

1 **SEC. 15 ____ . RESPONSIBILITY FOR CYBERSECURITY AND**
2 **CRITICAL INFRASTRUCTURE PROTECTION**
3 **OF THE DEFENSE INDUSTRIAL BASE.**

4 Section 1724 of the National Defense Authorization
5 Act for Fiscal Year 2021 (116–283; 10 U.S.C. 2224 note)
6 is amended—

7 (1) in subsection (b), by striking “The Sec-
8 retary of Defense shall designate the Principal Cyber
9 Advisor of the Department of Defense” and insert-
10 ing “Not later than 30 days after the date of the en-
11 actment of the National Defense Authorization Act
12 for Fiscal Year 2024, the Secretary of Defense shall
13 designate a principal staff assistant from within the
14 Office of the Secretary of Defense who shall serve”;

15 (2) in subsection (c)—

16 (A) in the matter preceding paragraph (1),
17 by striking “the Principal Cyber Advisor of the
18 Department of Defense” and inserting “the

1 principal staff assistant designed under sub-
2 section (b)”; and

3 (B) in paragraph (1), by striking “Sector
4 Specific Agency” and inserting “Sector Risk
5 Management Agency”;

6 (3) in subsection (d), by striking “Principal
7 Cyber Advisor of the Department of Defense” and
8 inserting “principal staff assistant designated under
9 subsection (b)”; and

10 (4) in subsection (e)—

11 (A) in the matter preceding paragraph (1),
12 by striking “this Act” and inserting “the Na-
13 tional Defense Authorization Act for Fiscal
14 Year 2024”;

15 (B) in paragraph (2), by striking “Sector
16 Specific Agency functions under Presidential
17 Policy Directive-21 from non-cybersecurity Sec-
18 tor Specific Agency functions” and inserting
19 “functions of a Sector Risk Management Agen-
20 cy pursuant to section 9002 of the National De-
21 fense Authorization Act for Fiscal Year 2021 (6
22 U.S.C. 652a) from non-cybersecurity functions
23 of a Sector Risk Management Agency”; and

24 (C) by striking paragraph (3).



AMENDMENT TO H.R. 2670
OFFERED BY MR. GALLAGHER OF WISCONSIN

In section 901 **[Log 77614]**, strike “Under Secretary of Defense for Technology Integration and Innovation” each place it appears (including in headings and quoted matter) and insert “Under Secretary of Defense for Science and Innovation Integration”.

