

En Bloc Amendments to H.R. 2810

Subcommittee on Tactical Air and Land Forces En Bloc # 1

Log #	Sponsor	Description
008r1	Scott	Modifies existing E-8C directive report language to expound upon the phrase 'forward-operating location.'
016	Larsen	Directs ARDEC to brief on variety of explosives used in IEDs and research into multi-function explosive detection technology development.
027	Lamborn	Requires the Army to provide a briefing to HASC on wireless intercommunications systems evaluated during its Combined Arms Futures Integration Exercise (CAFIX) at the Maneuver Center of Excellence (MCoE).
064r1	Wilson	Directs the Secretary of the Army to review the potential for integrating and demonstrating a Next Generation Health Monitoring System (NGHMS) for UH-72 light utility helicopters.
072	O'Rourke	Modifies existing directive report language that addresses Army Network Integration Evaluations and Joint Warfighting Assessments.
079r1	Knight	Directs the Secretary of the Air Force to submit a plan that addresses Air Force Test Center challenges related to funding, infrastructure modernization, and workforce recruitment and retention.
103	Speier	Directs the SecDef, in coordination with the military services, to brief the defense committees on current commercial and government efforts to develop and deploy ring wheel drive technology.
143	Bishop	Requires the Air Force to report to Congress on what is required to modernize the Joint Pacific Alaska Range Complex (JPARC) to accommodate fifth generation, and beyond, weapons systems and fighter training.
196	Langevin	Requires the Secretary of the Army to submit a report to the congressional defense committees detailing potential options for the acceleration of procurement and fielding of the WIN-T Increment 2 program.
214	Coffman	Directs the Secretary of the Air Force to submit a report on the results of the OA-X experiment.

**Amendment to H.R. 2810
National Defense Authorization Act for Fiscal Year 2018**

Offered by: Rep. Austin Scott (GA-08)

In the portion of the report to accompany H.R. 2810 titled “[E-8C Joint Surveillance and Target Attack Radar System]”, strike the following text: “a basing construct that would allow E-8C aircraft to operate simultaneously, if needed, from three forward operating locations, similar to other Air Force aircraft like the RC-135 and E-3A”.

and insert the following new text “a forward-deployed basing construct that would enable E-8C aircraft to operate simultaneously while deployed, if needed, from three forward-deployed locations while on temporary duty supporting a combatant commander’s command and control or moving target indicator intelligence, surveillance, and reconnaissance requirements”.

Amendment to H.R. 2810 National Defense Authorization Act for Fiscal Year 2018

Offered by Mr. Larsen of Washington

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

Multi-function Explosive Material Detection Technology

The committee notes that deployed US military forces in the greater Middle East face a range of explosive threats from improvised explosive devices (IED), which vary based on geography, adversary technical expertise, and availability of different explosives. The committee is concerned that current explosive detection technology is limited to detecting a limited set of explosive materials. The committee is aware of research work conducted by the Joint Improvised Threat Defeat Organization and the Army in the area of multi-function detection technology between Fiscal Year 2012 and 2015 that had the potential of providing improved explosive material detection capability against certain threats. However, the committee was informed by the Army Armament Research, Development and Engineering Center (ARDEC) that there was no funding planned in Fiscal Years 2017 or 2018 to further pursue this technology due to a lack of a specific requirement. The committee is concerned that this potentially useful technology's development may be hindered as a result. Therefore, the committee directs the Director of the US Army Armament Research, Development and Engineering Center to provide a briefing not later than September 30, 2017, on the mix of explosive materials that could be used to target US forces with IEDs, the variety of explosive detection technologies available, the potential utility of multi-function explosive detection technology, and an estimate of the funding necessary to accelerate work on this technology to a level that would enable thorough testing in the future.

**Amendment to H.R. 2810
National Defense Authorization Act for Fiscal Year 2018**

Offered by: Mr. Lamborn of Colorado

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

**Report on Heavy and Stryker Brigade Combat Team Wireless
Intercommunication Systems**

The committee understands the Army's Training and Doctrine Command conducted a requirement capability gap trace in March 2016 on wireless intercommunication systems for heavy brigade combat teams and Stryker brigade combat teams, and subsequently identified and re-certified a capability gap and standing requirements. The committee is aware the Army is conducting a Combined Arms Futures Integrated Exercise (CAFIX) assessment at the Maneuver Center of Excellence (MCoE) to identify potential technology solutions. Additionally, the committee understands that the Program Executive Officer for Soldier (PEO Soldier) in coordination with the Army's Soldier Enhancement Program (SEP) is considering formal field user assessments of the wireless intercommunications systems evaluated by MCoE.

The committee directs the Secretary of the Army to provide a briefing to the House Armed Service Committees, by March 29, 2018 that describes the technologies evaluated by MCoE during the CAFIX assessment, as well as provides the results of the SEP field user assessments.

**Amendment to H.R. 2810
National Defense Authorization Act for Fiscal Year 2018**

Offered by: Mr. Wilson of South Carolina

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

Health and Usage Monitoring Systems

In the committee report (H. Rept. 113-446) accompanying the National Defense Authorization Act for Fiscal Year 2015, the committee directed the Secretary of the Army review the potential for integrating and demonstrating a Next Generation Health Monitoring System (NGHMS) for UH-72 light utility helicopters. The NGHMS could enable early warning for failing platform systems, reduce emergency maintenance demands, provide predictable platform maintenance schedules, reduce cost and should increase readiness.

The committee notes the Army is currently evaluating NGHMS systems and most recently conducted a critical design review in February 2017. The committee understands that preliminary test and evaluation have demonstrated promising results. Given these encouraging results with light utility rotorcraft, the committee believes there could be potential for integrating NGHMS on ground combat vehicles, in particular the Stryker Combat Vehicle, to help with improving maintenance and readiness.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 15, 2017, that provides the status and available results of the UH-72 NGHMS testing; the Army's plan for procuring and integrating NGHMS into the UH-72 fleet to include any detailed description of the planned changes to the UH-72 aircraft maintenance construct, expected efficiencies and estimated annual cost savings, as well as any potential for application on ground combat vehicles.

**Amendment to H.R. 2810
National Defense Authorization Act for Fiscal Year 2018**

Offered by: Mr. O'Rourke of Texas

In the portion of the report to accompany H.R. 2810 titled "Army Network Integration Evaluations and Joint Warfighting Assessments", insert after "The Committee also acknowledges the importance of the Joint Warfighting Assessments (JWA)," the following new text: "The committee recognizes NIE and JWA as critical cost saving measures since these exercises allow the Army to clarify program requirements and discontinue programs that do not meet Army needs. As a result, the Army has produced over \$1.8 billion in savings and cost avoidance since 2011."

In the portion of the report to accompany H.R. 2810 titled "Army Network Integration Evaluations and Joint Warfighting Assessments", insert after the paragraph ending with "The committee believes that these exercises help the Army to test emerging concepts, integrate new capabilities and technology, and promote interoperability between the military services and U.S. allies," the following new paragraph: "The committee also acknowledges the investments made in the Joint Modernization Command, located at Fort Bliss, and encourages the Army to continue NIE and JWA exercises at Fort Bliss whenever possible to utilize those investments as well as the unique space, terrain, and freedom of movement available at Fort Bliss and White Sands Missile Range. The committee also acknowledges that NIE and JWA events should be brigade-level exercises when practical to ensure any systems tested will be fully capable of deployment at the brigade level."

**Amendment to H.R. 2810
National Defense Authorization Act for Fiscal Year 2018**

Offered by: Rep. Knight

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

Assessment of Air Force Test Center

The committee acknowledges the importance of the Air Force Test Center (AFTC) and the invaluable developmental test and evaluation (DT&E) of air, space, and cyber systems conducted throughout the AFTC enterprise. The AFTC enterprise leverages its 31 locations across the U.S., 100-plus aircraft, and a workforce of 18,000 strong to carry out complex electronic warfare testing, airframe and avionics testing, propulsion testing, C4ISR testing, and weapons integration. The Committee notes that through the AFTC the Air Force has successfully tested equipment and aircraft in a realistic and cutting-edge environment, ensuring the U.S. maintenance of airpower superiority.

While the Committee believes that the AFTC should continue to serve as the cornerstone of Air Force's test and evaluation enterprise, the Committee understands that the AFTC faces unique challenges in carrying out its mission. These challenges include funding for critical sustainment, restoration, and modernization of test capabilities; development and growth of hypersonic infrastructure and testing capabilities; and increasing workforce recruitment and retention. The committee directs the Secretary of the Air Force to submit a report on its assessment of these challenges and plans to address such challenges to the House Committee on Armed Services by March 1, 2018.

Amendment to H.R. 2810 National Defense Authorization Act for Fiscal Year 2018

Offered by: Jackie Speier

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

Ring Wheel Drive

The committee is interested in advancements in power- and drivetrain systems and whether these systems could offer mechanical and electromechanical benefits to Department of Defense procurements. This includes new “hub-less” or “spoke-less” technology that has been described as a ring wheel drive. The committee directs the Secretary of Defense, in coordination with the military services, to brief the congressional defense committees by March 1, 2018, on current commercial and government efforts to develop and deploy ring wheel drive technology. In addition, the briefing should include an assessment of the applicability of ring wheel drive for military platforms, including the broad range of wheeled vehicles and rotorcraft where ring wheel drive technology might improve the efficiency of current power- and drivetrain systems.

AMENDMENT TO H.R. 2810
OFFERED BY MR. BISHOP OF UTAH

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

1 **SEC. 10** . **REPORT ON JOINT PACIFIC ALASKA RANGE**
2 **COMPLEX MODERNIZATION.**

3 (a) **REPORT REQUIRED.**—Not later than 120 days
4 after the date of the enactment of this Act, the Secretary
5 of the Air Force shall submit to the congressional defense
6 committees a report regarding proposed improvements to
7 the Joint Pacific Alaska Range Complex.

8 (b) **ELEMENTS.**—The report under subsection (a)
9 shall include the following:

10 (1) An analysis of existing JPARC infrastruc-
11 ture.

12 (2) A summary of improvements to the range
13 infrastructure the Secretary determines are nec-
14 essary—

15 (A) for fifth generation fighters to train at
16 maximum potential; and

17 (B) to provide a realistic air warfare envi-
18 ronment versus a near-peer adversary for—

- 1 (i) four squadrons of fifth generation
2 fighters;
3 (ii) annual Red Flag-Alaska exercises;
4 and
5 (iii) biannual Operation Northern
6 Edge exercises.



AMENDMENT TO H.R. 2810

OFFERED BY MR. LANGEVIN OF RHODE ISLAND

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

1 **SEC. 1___ . REPORT ON ACCELERATION OF INCREMENT 2**
2 **OF THE WARFIGHTER INFORMATION NET-**
3 **WORK-TACTICAL.**

4 (a) REPORT.—Not later than January 30, 2018, the
5 Secretary of the Army shall submit to the congressional
6 defense committees a report on options for the accelera-
7 tion of the procurement and fielding of Increment 2 of
8 the Warfighter Information Network-Tactical program of
9 the Army (referred to in this section as “WIN-T Incre-
10 ment 2”).

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

13 (1) An estimate of the level of funding required
14 to procure a sufficient quantity of WIN-T Increment
15 2 components to field thirty Brigade Combat Teams
16 or equivalent units in the period beginning with fis-
17 cal year 2018 and ending with fiscal year 2022.

18 (2) A plan for fielding WIN-T Increment 2 to
19 all Armored Brigade Combat Teams of the Army

1 and associated combat vehicles, including the Ar-
2 mored Multipurpose Vehicle.

3 (3) A plan for integrating WIN-T Increment 2
4 on the Stryker combat vehicles fielded to Stryker
5 Brigade Combat Teams of the Army.

6 (4) A list of potential upgrades to WIN-T In-
7 crement 2 that may improve program capabilities,
8 including size, weight, and complexity, and the im-
9 pact of these improvements on the cost of the pro-
10 gram.

11 (5) Options for fielding an Expeditionary Com-
12 mand Post capability that effectively integrates
13 WIN-T Increment 2 and command post infrastruc-
14 ture.

15 (6) A detailed plan for upgrading the existing
16 WIN-T Increment 1 system to the latest WIN-T In-
17 crement 2 configuration that includes—

18 (A) an estimate of the level of funding re-
19 quired to implement the plan; and

20 (B) the effect of the plan on the fielding
21 of mobile mission command to the reserve com-
22 ponents of the Army.

23 (7) Any other matters the Secretary determines
24 to be appropriate.



Amendment to H.R. 2816 National Defense Authorization Act for Fiscal Year 2018

Offered by: Representative Mike Coffman

In the appropriate place in the report to accompany H.R. 2810, insert the following new Directive Report Language:

Light Attack Aircraft Experiment Report

The committee is aware that the Air Force is conducting a Capability Assessment of Non-Developmental Light Attack Platforms run by the Air Force Strategic Development Planning and Experimentation Office with inexpensive, light attack aircraft to determine what missions such aircraft could perform, how well, and the efficacy of creating a 'high/low' aircraft capability mix within the Service. The committee supports service-wide efforts to explore innovative solutions that lower costs. The possibilities afforded by highly capable, low-cost, and low cost-per-flying-hour aircraft include: dramatically reducing the use of existing legacy and 5th Generation aircraft in low-threat insurgency-type environments, reducing the Service's yearly operations and support costs, offering increased joint training opportunities with ground forces, improving international partnerships and capacities, and helping to solve pilot absorption issues by dramatically increasing the amount of fighter mission flying time trained pilots receive every month. The committee does not believe that light attack aircraft can replace the high-end capabilities of aircraft such as the A-10 or F-35. The committee notes that these lower cost aircraft can be operated as supplement to, and thereby maximizing the life of, these important aircraft for the near-peer fight, were that to be necessary.

The committee directs the Secretary of the Air Force to submit a report to the House Committee on Armed Services by December 31, 2017, on the results of the OA-X experiment. If the Secretary has concluded that an OA-X program will effectively complement the existing force structure, reduce costs, and improve pilot training and proficiency, and that such a program should proceed expeditiously, the Secretary is encouraged to provide the Congress with a supplemental funding request and acquisition plan.