

En Bloc Amendments to H.R. 5515**Subcommittee on Strategic Forces
En Bloc #1**

| Log # | Sponsor | Description |
|--------------|----------------|--|
| 017 | DesJarlais | Directs NNSA Administrator to provide a brief to the committee on actions taken and recommended statutory changes that could be implemented to streamline security clearance investigations for the nuclear security enterprise. |
| 029 | Cooper | Designates lead to coordinate common solutions for M-code modernization, integration, testing and procurement efforts. Reports NLT March, 15 2019 and annually through 2021 on the modernization effort. |
| 069r1 | Larsen | Directs SecAF to brief on supply chain for in-space propulsion thrusters. |
| 201 | Larsen | Extends the required annual report on the nuclear weapons stockpile, nuclear weapons complex, nuclear weapons delivery systems, and nuclear weapons command and control (established in the FY12 NDAA) through FY 2022. |
| 242r2 | Hunter | Requires a briefing on currently deployed satellite communications terminals. |
| 307 | Norcross | Requires the Secretary of Defense to designate a component of DOD to be responsible for coordination of information relating to using commercially hosted payloads. |
| 348 | Knight | Requires the Administrator of NASA submit a report on acquisition strategy for Low Boom Flight Demonstrator. |
| 374 | Lamborn | Amends section 1601 of the bill to include training related to planning and executing warfighting missions and operations in space as part of the career progression for the civilian and military members of the Air Force's space cadre. |
| 392r1 | Lamborn | Emphasizes the importance of maintaining warfighter capabilities during commercial imagery transition. Specifies criteria of imagery to include reliability, capability, and cost to ensure quality support for operational needs. |

**Amendment to H.R. 5515
National Defense Authorization Act for Fiscal Year 2019**

Offered by: Dr. DesJarlais

In the appropriate place in the report to accompany H.R. 5515, insert the following new Directive Report Language:

Security Clearance Investigations for the Nuclear Security Enterprise

The committee notes that, while the Office of Personnel Management (OPM) has undertaken significant steps to improve the security clearance investigation process, the backlog of security clearance investigations continues to prevent the Federal Government, including the National Nuclear Security Administration's (NNSA) nuclear security enterprise, from hiring qualified personnel in a timely manner. This problem is particularly acute for NNSA as elements of the nuclear security enterprise continue to execute robust hiring plans to support the increased workload associated with the nation's nuclear modernization program. In a recent report on the state of the nuclear weapons stockpile, the director of one of national security laboratories highlighted this challenge, saying that for his laboratory, "1,011 staff were hired in 2016, and about 1,000 new hires are expected by the end of 2017. This hiring rate is expected to continue... However, technical mentoring, particularly by experienced senior staff who are on the verge of retiring, is virtually impossible if newly hired staff are unable to obtain a security clearance in a timely manner." The director further noted that 1,300 DOE "Q" clearances were awaiting approval.

The committee understands the complexity of this issue and continues to seek solutions that enable a robust background review but also timely completion. To enhance its oversight, the committee directs the Administrator for Nuclear Security, in consultation with the Director of the Office of Personnel Management, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2018, on efforts to streamline and improve the security clearance investigation and adjudication process for the nuclear security enterprise. Such briefing should include actions taken by NNSA and OPM, any planned actions, options for future action, and any recommendations of the Administrator regarding statutory changes or other Congressional action.

AMENDMENT TO H.R. 5515**OFFERED BY MR. COOPER OF TENNESSEE**

Add at the appropriate place in title XVI the following new section:

1 **SEC. 16__.** **DESIGNATION OF COMPONENT OF DEPART-**
2 **MENT OF DEFENSE RESPONSIBLE FOR CO-**
3 **ORDINATION OF MODERNIZATION EFFORTS**
4 **RELATING TO MILITARY-CODE CAPABLE GPS**
5 **RECEIVER CARDS.**

6 (a) DESIGNATION.—Not later than 30 days after the
7 date of the enactment of this Act, the Secretary of De-
8 fense, in coordination with the Secretaries of the military
9 departments and the heads of Defense Agencies the Sec-
10 retary determines appropriate, shall designate a compo-
11 nent of the Office of the Secretary of Defense to be re-
12 sponsible for coordinating common solutions for the M-
13 code modernization efforts among the military depart-
14 ments, Defense Agencies, and other appropriate elements
15 of the Department of Defense.

16 (b) ROLES AND RESPONSIBILITIES.—The roles and
17 responsibilities of the component selected under subsection
18 (a) shall include the following:

1 (1) Identify the elements of the Department of
2 Defense and the programs of the Department that
3 require M-code capable receiver cards and deter-
4 mine—

5 (A) the number of total receiver cards re-
6 quired by the Department, including the num-
7 ber required for each such element and pro-
8 gram and the military departments;

9 (B) the timeline, by fiscal year, for each
10 program of the Department conducting M-code
11 modernization efforts; and

12 (C) the projected cost for each such pro-
13 gram.

14 (2) Systematically collect integration test data,
15 lessons learned, and design solutions, and share such
16 information with other elements of the Department.

17 (3) Identify ways the Department can prevent
18 duplication in conducting M-code modernization ef-
19 forts, and identify, to the extent practicable, poten-
20 tial cost savings that could be realized by addressing
21 such duplication.

22 (4) Coordinate the integration, testing, and pro-
23 curement of M-code capable receiver cards to ensure
24 that the Department maximizes the buying power of

1 the Department, reduces duplication, and saves re-
2 sources, where possible.

3 (c) SUPPORT.—The Secretary of Defense shall ensure
4 the military departments, the Defense Agencies, and other
5 elements of the Department of Defense provide the compo-
6 nent selected under subsection (a) with the appropriate
7 support and resources needed to perform the roles and re-
8 sponsibilities under subsection (b).

9 (d) REPORTS.—Not later than March 15, 2019, and
10 annually thereafter through 2021, the Secretary of De-
11 fense shall provide to the congressional defense commit-
12 tees a report on M-code modernization efforts. Each re-
13 port shall include, with respect to the period covered by
14 the report, the following:

15 (1) The projected cost and schedule, by fiscal
16 year, for the Department to acquire M-code capable
17 receiver cards.

18 (2) The programs of the Department con-
19 ducting M-code modernization efforts.

20 (3) The number of M-code capable receiver
21 cards procured by the Department, the number of
22 such receiver cards yet to be procured, and the per-
23 centage of the M-code modernization efforts com-
24 pleted by each program identified under paragraph
25 (2).

1 (e) DEFINITIONS.—In this section:

2 (1) The term “M-code capable receiver card”
3 means a Global Positioning System receiver card
4 that is capable of receiving military code that pro-
5 vides enhanced positioning, navigation, and timing
6 capabilities and improved resistance to existing and
7 emerging threats, such as jamming.

8 (2) The term “M-code modernization efforts”
9 means the development, integration, testing, and
10 procurement programs of the Department of De-
11 fense relating to developing M-code capable receiver
12 cards.



**Amendment to H.R. 5515
National Defense Authorization Act for Fiscal Year 2019**

Offered by: Rep. Larsen

In the appropriate place in the report to accompany H.R. 5515, insert the following new Directive Report Language:

Briefing on Supply Chain for In-Space Propulsion Thrusters

The committee is aware that the Department of Defense and its suppliers rely on U.S., allied, and non-allied manufacturers for procurement of in-space propulsion thrusters. These thrusters are used on critical military satellites and the Committee is concerned that the presence of Russian-origin thrusters on these satellites may constitute a security risk, particularly as the Department of Defense shifts towards the use of commercial off the shelf satellites.

Therefore, the Committee directs the Secretary of the Air Force to provide a briefing on the supply chain for in-space propulsion thrusters, whether the presence of allied or non-allied thrusters increases risk, and if so how, options to mitigate any identified risks, and the cost implications of relying solely on U.S. sources to the House Committee on Armed Services by January 31, 2019.

AMENDMENT TO H.R. 5515
OFFERED BY MR. LARSEN OF WASHINGTON

Add at the appropriate place in title XVI the following new section:

1 **SEC. 16__ . EXTENSION OF ANNUAL REPORT ON THE PLAN**
2 **FOR THE NUCLEAR WEAPONS STOCKPILE,**
3 **NUCLEAR WEAPONS COMPLEX, NUCLEAR**
4 **WEAPONS DELIVERY SYSTEMS, AND NU-**
5 **CLEAR WEAPONS COMMAND AND CONTROL**
6 **SYSTEM.**

7 Section 1043(a)(1) of the National Defense Author-
8 ization Act for Fiscal Year 2012 (Public Law 112–81; 125
9 Stat. 1576) is amended by striking “2019” and inserting
10 “2022”.



**Amendment to H.R. 5515
National Defense Authorization Act for Fiscal Year 2019**

Offered by: Mr. Hunter

[For new Directive Report Language, please use the following:]

In the appropriate place in the report to accompany H.R. 5515, insert the following new Directive Report Language:

[Briefing on Deployed Satellite Communications Terminals]

[The committee notes that currently deployed satellite communications terminals may not meet the performance, the agility, timeliness, and weight requirements needed to provide secure satellite communications to naval and expeditionary forces. The committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by November 1, 2018, on the current validated requirements for the terminals and a plan, including applicability, operational capability and cost, for quickly fielding commercially available, secure, lightweight, satellite communications terminals, equipped with rapidly deployable antennas, in support of warfighter operations.]

AMENDMENT TO H.R. 5515
OFFERED BY MR. NORCROSS OF NEW JERSEY

Add at the appropriate place in title XVI the following new section:

1 **SEC. 16** __. **DESIGNATION OF COMPONENT OF DEPART-**
2 **MENT OF DEFENSE RESPONSIBLE FOR CO-**
3 **ORDINATION OF HOSTED PAYLOAD INFOR-**
4 **MATION.**

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

6 (1) Using commercially hosted payloads is an
7 option for the Department of Defense that should be
8 considered in analyses of alternatives, as it could in-
9 crease cost savings, speed up capability to orbit, and
10 contribute to resilience through the use of
11 disaggregated space systems by the Department.

12 (2) The use by the Department of commercially
13 hosted payloads has been limited so far, using com-
14 mercial satellites to host three experimental payloads
15 to date, though the use of hosted payloads could ex-
16 pand in the future.

17 (3) The Department does not have the knowl-
18 edge the Department needs to determine if commer-

1 cially hosted payloads are an acquisition approach
2 worth pursuing.

3 (4) The Department faces challenges in match-
4 ing payloads to commercial hosts, due to numerous
5 logistical challenges to matching payloads to hosts,
6 including coordinating the size, weight and power of
7 the payload with the commercial host, and aligning
8 acquisition and funding timelines between govern-
9 ment and commercial programs.

10 (5) The Comptroller General of the United
11 States in preliminary findings concluded that the
12 space acquisition culture of the Department lacks
13 sufficient knowledge, such as costs, technical param-
14 eters, and lessons learned, to determine the benefits
15 and address the challenges of using commercially
16 hosted payloads and that the existing knowledge is
17 fragmented across the Department without any
18 plans to consolidate it.

19 (6) Programs are not required to report data
20 on commercially hosted payloads to any centralized
21 office or database, and leveraging cost and technical
22 data from hosted payload efforts could inform future
23 interested programs and avoid duplication of efforts,
24 but currently no such comprehensive data source ex-
25 ists.

1 (b) DESIGNATION.—Not later than 30 days after the
2 date of the enactment of this Act, the Secretary of De-
3 fense, in coordination with the Secretary of the Air Force,
4 and other Secretaries of the military departments and the
5 heads of Defense Agencies the Secretary determines ap-
6 propriate, shall designate a component of the Department
7 of Defense or a military department to be responsible for
8 coordinating information, processes, and lessons learned
9 relating to using commercially hosted payloads across the
10 military departments, Defense Agencies, and other appro-
11 priate elements of the Department of Defense. The func-
12 tions of such designated component shall include, at a
13 minimum, the following:

14 (1) Systematically collecting information from
15 past and planned hosted payload arrangements to
16 inform future acquisition planning and space system
17 architecture design, including integration test data,
18 lessons learned, and design solutions.

19 (2) Creating a centralized database for cost,
20 technical data, and lessons learned on commercially
21 hosted payloads and sharing such information with
22 other elements of the Department.



AMENDMENT TO H.R. 5515

OFFERED BY MR. KNIGHT OF CALIFORNIA

At the appropriate place in title [x], insert the following new section:

1 SEC. REPORT ON LOW-BOOM FLIGHT DEMONSTRATION.

2 Not later than 90 days after the date of the enact-
3 ment of this Act, the Administrator of the National Aero-
4 nautics and Space Administration shall submit to the
5 Committee on Science, Space, and Technology of the
6 House of Representatives a report describing the progress
7 in development of the Low-Boom Flight Demonstration,
8 including—

9 (1) the plans of the Administrator to coordinate
10 with other executive agencies to ensure the avail-
11 ability of developmental and operational testing in-
12 frastructure for low-boom flight demonstrations by
13 2021; and

14 (2) the strategy of the Administration to ac-
15 quire chase aircrafts to ensure the availability of
16 such aircrafts for such demonstrations.



AMENDMENT TO H.R. 5515
OFFERED BY MR. LAMBORN OF COLORADO

In subsection (b)(1)(B)(i) of section 1601 (Log 67151)—

(1) redesignate subclauses (IV) and (V) as subclauses (V) and (VI), respectively; and

(2) insert after subclause (III) the following new subclause (IV):

- 1 (IV) training relating to planning
- 2 and executing warfighting missions
- 3 and operations in space;



**Amendment to H.R. 5515
National Defense Authorization Act for Fiscal Year 2019**

Offered by: Congressman Doug Lamborn, CO-05

In the portion of the report to accompany H.R. 5515 titled "Commercial Satellite Imagery", strike the following text:

"Acquisition of commercial imagery should take advantage of a broad swath of U.S. industry capabilities by contracting with several providers to leverage high resolution providers, global coverage, high revisit rates and cost effective services that are rapidly emerging within industry."

and insert the following new text

"As this transition occurs, the committee believes it is essential to maintain continuity of operations, quality of service, cost effective services, and capability for the warfighter and other user communities.

Acquisition of commercial imagery should contract with several providers to leverage U.S. industry providers of global, high-resolution, and cost-effective services, with high revisit rates, and reliable performance including those that have demonstrated proven capability and those that are rapidly emerging within industry. Commercial SAR imagery can also provide day, night, and all-weather imagery in highly cloud covered regions."