

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To limit the use of funds for the ground-based strategic deterrent program and the W87–1 warhead modification program until the Secretary of Defense provides to the appropriate congressional committees a certification and independent study regarding the technical feasibility of extending the life of Minuteman III intercontinental ballistic missiles until at least 2050.

**IN THE SENATE OF THE UNITED STATES—117th Cong., 1st Sess.**

**S. 2792**

To authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and  
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. MARKEY

Viz:

1 At the end of subtitle C of title XV, add the following:

2 **SEC. 1548. LIMITATION ON USE OF FUNDS FOR GROUND-**

3 **BASED STRATEGIC DETERRENT PROGRAM**

4 **AND W87-1 WARHEAD MODIFICATION PRO-**

5 **GRAM.**

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

1           (1) According to the Congressional Budget Of-  
2           fice, the projected cost to sustain and modernize the  
3           United States nuclear arsenal, as of 2017, “is \$1.2  
4           trillion in 2017 dollars over the 2017–2046 period:  
5           more than \$800 billion to operate and sustain (that  
6           is, incrementally upgrade) nuclear forces and about  
7           \$400 billion to modernize them”. With inflation, the  
8           cost rises to \$1,700,000,000,000 and does not in-  
9           clude the cost of the additional nuclear capabilities  
10          proposed in the 2018 Nuclear Posture Review.

11          (2) Maintaining and updating the current Min-  
12          uteman III intercontinental ballistic missiles is pos-  
13          sible for multiple decades and, according to the Con-  
14          gressional Budget Office, through 2036, this would  
15          cost \$37,000,000,000 less in 2017 dollars than de-  
16          veloping and deploying the ground-based strategic  
17          deterrent program.

18          (3) A public opinion poll conducted from Octo-  
19          ber 12 to 28, 2020, by ReThink Media and the Fed-  
20          eration of American Scientists found that only 26  
21          percent of registered voters in the United States pre-  
22          ferred replacing the Minuteman III intercontinental  
23          ballistic missile with the ground-based strategic de-  
24          terrent, as compared to 60 percent of registered vot-

1       ers who opposed replacing the Minuteman III mis-  
2       sile.

3       (b) LIMITATION ON USE OF FUNDS.—None of the  
4 funds authorized to be appropriated or otherwise made  
5 available for fiscal year 2022 may be obligated or ex-  
6 pended for the ground-based strategic deterrent program  
7 or the W87–1 warhead modification program until the  
8 later of—

9           (1) the date on which the Secretary of Defense  
10       submits to the appropriate congressional committees  
11       a certification that the operational life of Minuteman  
12       III intercontinental ballistic missiles cannot be safely  
13       extended through at least 2050; and

14           (2) the date on which the Secretary transmits  
15       to the appropriate congressional committees the re-  
16       port required by paragraph (3) of subsection (c), as  
17       required by paragraph (4) of that subsection.

18       (c) INDEPENDENT STUDY ON EXTENSION OF MIN-  
19 UTEMAN III INTERCONTINENTAL BALLISTIC MISSILES.—

20           (1) INDEPENDENT STUDY.—Not later than 30  
21       days after the date of the enactment of this Act, the  
22       Secretary of Defense shall seek to enter into a con-  
23       tract with the National Academy of Sciences to con-  
24       duct a study on extending the life of Minuteman III  
25       intercontinental ballistic missiles to 2050.

1           (2) MATTERS INCLUDED.—The study under  
2 paragraph (1) shall include the following:

3           (A) A comparison of the costs through  
4 2050 of—

5           (i) extending the life of Minuteman  
6 III intercontinental ballistic missiles; and

7           (ii) deploying the ground-based stra-  
8 tegic deterrent program.

9           (B) An analysis of opportunities to incor-  
10 porate technologies into the Minuteman III  
11 intercontinental ballistic missile program as  
12 part of a service life extension program that  
13 could also be incorporated in the future ground-  
14 based strategic deterrent program, including, at  
15 a minimum, opportunities to increase the resil-  
16 ience against adversary missile defenses.

17           (C) An analysis of the benefits and risks of  
18 incorporating sensors and nondestructive test-  
19 ing methods and technologies to reduce destruc-  
20 tive testing requirements and increase the serv-  
21 ice life and number of Minuteman III missiles  
22 through 2050.

23           (D) An analysis and validation of the  
24 methods used to estimate the operational serv-  
25 ice life of Minuteman II and Minuteman III

1 motors, taking into account the test and launch  
2 experience of motors retired after the oper-  
3 ational service life of such motors in the rocket  
4 systems launch program.

5 (E) An analysis of the risks and benefits  
6 of alternative methods of estimating the oper-  
7 ational service life of Minuteman III motors,  
8 such as those methods based on fundamental  
9 physical and chemical processes and non-  
10 destructive measurements of individual motor  
11 properties.

12 (F) An analysis of risks, benefits, and  
13 costs of configuring a Trident II D5 submarine  
14 launched ballistic missile for deployment in a  
15 Minuteman III silo.

16 (G) An analysis of the impacts of the esti-  
17 mated service life of the Minuteman III force  
18 associated with decreasing the deployed inter-  
19 continental ballistic missiles delivery vehicle  
20 force from 400 to 300.

21 (H) An assessment on the degree to which  
22 the Columbia class ballistic missile submarines  
23 will possess features that will enhance the cur-  
24 rent invulnerability of ballistic missile sub-

1 marines of the United States to future antisub-  
2 marine warfare threats.

3 (I) An analysis of the degree to which an  
4 extension of the Minuteman III would impact  
5 the decision of Russian Federation to target  
6 intercontinental ballistic missiles of the United  
7 States in a crisis, as compared to proceeding  
8 with the ground-based strategic deterrent.

9 (J) A best case estimate of what percent-  
10 age of the strategic forces of the United States  
11 would survive a counterforce strike from the  
12 Russian Federation, broken down by interconti-  
13 nental ballistic missiles, ballistic missile sub-  
14 marines, and heavy bomber aircraft.

15 (K) The benefits, risks, and costs of rely-  
16 ing on the W-78 warhead for either the Min-  
17 uteman III or a new ground-based strategic de-  
18 terrent missile as compared to proceeding with  
19 the W-87 life extension.

20 (L) The benefits, risks, and costs of add-  
21 ing additional launchers or uploading sub-  
22 marine-launched ballistic missiles with addi-  
23 tional warheads to compensate for a reduced  
24 deployment of intercontinental ballistic missiles  
25 of the United States.

1 (M) An analysis of whether designing and  
2 fielding a new intercontinental ballistic missile  
3 through at least 2070 is consistent with the ob-  
4 ligation of the United States under Article VI  
5 of the Treaty on the Non-Proliferation of Nu-  
6 clear Weapons done at Washington, London,  
7 and Moscow July 1, 1968 (21 UST 483) (com-  
8 monly referred to as the “Nuclear Non-Pro-  
9 liferation Treaty”) to “pursue negotiations in  
10 good faith on effective measures relating to ces-  
11 sation of the nuclear arms race at an early date  
12 and to nuclear disarmament”.

13 (3) SUBMISSION TO DEPARTMENT OF DE-  
14 FENSE.—Not later than 180 days after the date of  
15 the enactment of this Act, the National Academy of  
16 Sciences shall submit to the Secretary a report con-  
17 taining the findings of the study conducted under  
18 paragraph (1).

19 (4) SUBMISSION TO CONGRESS.—Not later than  
20 210 days after the date of the enactment of this Act,  
21 the Secretary shall transmit to the appropriate con-  
22 gressional committees the report required by para-  
23 graph (3), without change.

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

4           (d) APPROPRIATE CONGRESSIONAL COMMITTEES  
5 DEFINED.—In this section, the term “appropriate con-  
6 gressional committees” means—

7           (1) the Committee on Armed Services, the  
8           Committee on Foreign Relations, and the Committee  
9           on Appropriations of the Senate; and

10          (2) the Committee on Armed Services, the  
11          Committee on Foreign Affairs, and the Committee  
12          on Appropriations of the House of Representatives.