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(Original Signature of Member)

114TH CONGRESS
1ST SESSION

H. R. _____

To require the Secretary of Defense to establish a backup for the global positioning system, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. GARAMENDI introduced the following bill; which was referred to the Committee on _____

A BILL

To require the Secretary of Defense to establish a backup for the global positioning system, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Positioning,
5 Navigation, and Timing Resilience and Security Act of
6 2015”.

7 **SEC. 2. FINDINGS.**

8 Congress finds the following:

1 (1) Global Positioning System (GPS) satellite
2 signals are used by all critical infrastructure sectors
3 in the United States and are crucial to the reliable
4 and secure operation of defense systems operated by
5 the United States Armed Forces.

6 (2) Use and dependence on GPS signals in the
7 United States continues to grow.

8 (3) GPS signals are relatively weak and con-
9 sequently unable to reach many indoor environments
10 or underground installations, which limits their use
11 for first responders, law enforcement, the Armed
12 Forces, and other users.

13 (4) Due to the relative weakness of GPS sig-
14 nals, such signals can be easily corrupted, degraded,
15 or denied access to.

16 (5) There is an increasing use of inexpensive
17 and widely available GPS jammers by organized
18 crime syndicates and rogue states.

19 (6) A prolonged disruption of GPS signals
20 caused by jamming or other cyber security threats
21 would cause serious national security, intelligence,
22 and economic disruption for the United States.

23 (7) Since 2004, the Federal Government has
24 recognized that the absence of a reliable backup sys-
25 tem for GPS is a glaring economic and security

1 threat to the United States, and has reaffirmed its
2 interest in developing an enhanced long-range navi-
3 gation system (LORAN), or eLORAN, as a reliable
4 land-based backup for GPS signals.

5 (8) The establishment of a land-based posi-
6 tioning, navigation, and timing backup system to
7 complement GPS as soon as practicable is essential
8 to secure the economic and national security inter-
9 ests of the United States.

10 **SEC. 3. BACKUP GLOBAL POSITIONING SYSTEM.**

11 (a) ESTABLISHMENT.—Section 2281 of title 10,
12 United States Code, is amended by—

13 (1) redesignating subsection (d) as subsection
14 (e); and

15 (2) by inserting after subsection (c) the fol-
16 lowing new subsection:

17 “(d) LAND-BASED COMPLEMENTARY AND BACKUP
18 SYSTEM.—

19 “(1) IN GENERAL.—The Secretary of Defense,
20 in consultation with the Commandant of the Coast
21 Guard and the Secretary of Transportation, shall
22 provide for the establishment, sustainment, and op-
23 eration of a reliable land-based positioning, naviga-
24 tion, and timing system to provide a complement to
25 and backup for GPS to ensure the availability of

1 uncorrupted or non-degraded positioning, navigation,
2 and timing signals for military and civilian users if
3 GPS signals are corrupted, degraded, unreliable, or
4 otherwise unavailable.

5 “(2) REQUIREMENTS.—The system established
6 under paragraph (1) shall—

7 “(A) be wireless, terrestrial, and wide-area;

8 “(B) provide a precise, high-power 100
9 kilohertz signal;

10 “(C) be resilient and extremely difficult to
11 disrupt or degrade;

12 “(D) be able to penetrate underground and
13 inside buildings;

14 “(E) take full advantage of existing, un-
15 used government long-range navigation system
16 (commonly known as ‘LORAN’) infrastructure;

17 “(F) incorporate the expertise and con-
18 tributions of the private sector to quickly estab-
19 lish a system architecture, build, and operate a
20 land-based GPS back-up system; and

21 “(G) work in concert with and complement
22 any other similar positioning, navigation, and
23 timing systems, including enhanced long-range
24 navigation systems (commonly known as
25 ‘eLORAN’).”.

1 (b) IMPLEMENTATION DATE.—The Secretary of De-
2 fense, in consultation with the Commandant of the Coast
3 Guard and the Secretary of Transportation, shall ensure
4 that the system required under subsection (d) of section
5 2281 of title 10, United States Code, as inserted by sub-
6 section (a) of this section, is fully operational not later
7 than three years after the date of the enactment of this
8 Act.