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114TH CONGRESS
1ST SESSION

H. R. 1678

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

IN THE HOUSE OF REPRESENTATIVES

MARCH 26, 2015

Mr. GARAMENDI (for himself, Mr. HUNTER, Mr. DEFAZIO, and Mr. LOBIONDO) introduced the following bill; which was referred to the Committee on Armed Services

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A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''National Positioning, Navigation, and Timing Resilience and Security Act of 2015''.

SEC. 2. FINDINGS.

Congress finds the following:

(1) Global Positioning System (GPS) satellite signals are used by all critical infrastructure sectors

in the United States and are crucial to the reliable and secure operation of defense systems operated by the United States Armed Forces.

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

(3) GPS signals are relatively weak and consequently unable to reach many indoor environments or underground installations, which limits their use for first responders, law enforcement, the Armed Forces, and other users.

(4) Due to the relative weakness of GPS signals, such signals can be easily corrupted, degraded, or denied access to.

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

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

(7) Since 2004, the Federal Government has recognized that the absence of a reliable backup system for GPS is a glaring economic and security threat to the United States, and has reaffirmed its interest in developing an enhanced long-range navi-

gation system (LORAN), or eLORAN, as a reliable land-based backup for GPS signals.

(8) The establishment of a land-based positioning, navigation, and timing backup system to complement GPS as soon as practicable is essential to secure the economic and national security interests of the United States.

SEC. 3. BACKUP GLOBAL POSITIONING SYSTEM.

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

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

(2) by inserting after subsection (c) the following new subsection:

''(d) LAND-BASED COMPLEMENTARY AND BACKUP SYSTEM.—

''(1) IN GENERAL.—The Secretary of Defense, in consultation with the Commandant of the Coast Guard and the Secretary of Transportation, shall provide for the establishment, sustainment, and operation of a reliable land-based positioning, navigation, and timing system to provide a complement to and backup for GPS to ensure the availability of uncorrupted or non-degraded positioning, navigation, and timing signals for military and civilian users if

GPS signals are corrupted, degraded, unreliable, or otherwise unavailable.

''(2) REQUIREMENTS.—The system established under paragraph (1) shall—

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

''(B) provide a precise, high-power 100 kilohertz signal;

''(C) be resilient and extremely difficult to disrupt or degrade;

''(D) be able to penetrate underground and inside buildings;

''(E) take full advantage of existing, unused government long-range navigation system (commonly known as 'LORAN') infrastructure;

''(F) incorporate the expertise and contributions of the private sector to quickly establish a system architecture, build, and operate a land-based GPS back-up system; and

''(G) work in concert with and complement any other similar positioning, navigation, and timing systems, including enhanced long-range navigation systems (commonly known as 'eLORAN').''.

(b) IMPLEMENTATION DATE.—The Secretary of Defense, in consultation with the Commandant of the Coast

Guard and the Secretary of Transportation, shall ensure that the system required under subsection (d) of section 2281 of title 10, United States Code, as inserted by subsection (a) of this section, is fully operational not later than three years after the date of the enactment of this Act.

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