

116TH CONGRESS  
1ST SESSION

# H. R. 1795

To authorize the Secretary of Defense, upon request of the Ministry of Defense of Israel and with the concurrence of the Secretary of State, to carry out research, development, test, and evaluation activities, on a joint basis with Israel, to establish directed energy capabilities that address threats to the United States, deployed forces of the United States, or Israel, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 14, 2019

Mr. TED LIEU of California (for himself and Ms. STEFANIK) introduced the following bill; which was referred to the Committee on Armed Services, and in addition to the Committee on Foreign Affairs, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To authorize the Secretary of Defense, upon request of the Ministry of Defense of Israel and with the concurrence of the Secretary of State, to carry out research, development, test, and evaluation activities, on a joint basis with Israel, to establish directed energy capabilities that address threats to the United States, deployed forces of the United States, or Israel, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “United States-Israel  
3 Directed Energy Cooperation Act”.

4 **SEC. 2. FINDINGS.**

5 Congress finds the following:

6 (1) Directed energy platforms are electro-  
7 magnetic systems capable of converting chemical or  
8 electrical energy to radiated energy and focusing it  
9 on a target, resulting in physical damage that de-  
10 grades or neutralizes an adversarial capability.

11 These systems include high-energy lasers that emit  
12 photons and high-power microwaves that release ra-  
13 diofrequency waves.

14 (2) Directed energy platforms hold enormous  
15 potential for non-lethal, defensive capabilities, in-  
16 cluding protection against advanced missiles and  
17 swarms of unmanned aerial systems.

18 (3) At a fraction of the per-use cost of kinetic  
19 defense platforms, directed energy capabilities could  
20 greatly enhance the deterrence posture of the United  
21 States and protect against emerging threats such as  
22 hypersonic and maneuverable missiles.

23 (4) The United States and Israel successfully  
24 partnered on directed energy capabilities during the  
25 1990s and early 2000s based on earlier-generation

1 chemical laser technology, including the Tactical  
2 High Energy Laser (THEL).

3 (5) In response to technological advances and  
4 emerging threats, the United States has increased  
5 investments in next-generation directed energy capa-  
6 bilities and is exploring the potential for boost-phase  
7 ballistic missile defense with the Low-Power Laser  
8 Demonstrator program. Existing programs within  
9 each service branch are developing technologies to  
10 protect members of the Armed Forces from rocket,  
11 artillery, mortar, and unmanned aerial systems.

12 (6) Since 2014, Israel has been developing Iron  
13 Beam, a laser platform to intercept mortars. In re-  
14 sponse to a growing missile threat, Israel’s Ministry  
15 of Defense has increased investments in directed en-  
16 ergy capabilities in recent years.

17 (7) In 2017, the Department of Defense issued  
18 a report to Congress on the merits of renewed  
19 United States-Israel cooperation on directed energy,  
20 concluding that, “The United States should pursue  
21 joint collaboration with Israel on directed energy ca-  
22 pabilities.”.

23 (8) In 2018, while offering remarks at the Di-  
24 rected Energy Summit, Undersecretary of Defense  
25 for Research and Engineering Michael Griffin ex-

1       pressed support for the United States partnering  
2       with allies to develop directed energy technologies.

3               (9) In 2019, the U.S. Missile Defense Review  
4       highlighted the promise that high-powered laser  
5       technology holds for boost-phase ballistic missile de-  
6       fense.

7       **SEC. 3. UNITED STATES-ISRAEL DIRECTED ENERGY CAPA-**  
8               **BILITIES COOPERATION.**

9       (a) AUTHORITY.—

10               (1) IN GENERAL.—The Secretary of Defense,  
11       upon request of the Ministry of Defense of Israel  
12       and with the concurrence of the Secretary of State,  
13       is authorized to carry out research, development,  
14       test, and evaluation activities, on a joint basis with  
15       Israel, to establish directed energy capabilities that  
16       address threats to the United States, deployed forces  
17       of the United States, or Israel. Any activities carried  
18       out pursuant to such authority shall be conducted in  
19       a manner that appropriately protects sensitive infor-  
20       mation and the national security interests of the  
21       United States and the national security interests of  
22       Israel.

23               (2) REPORT.—The activities described in para-  
24       graph (1) may be carried out after the Secretary of

1 Defense submits to the appropriate committees of  
2 Congress a report setting forth the following:

3 (A) A memorandum of agreement between  
4 the United States and Israel regarding sharing  
5 of research and development costs for the capa-  
6 bilities described in paragraph (1), and any  
7 supporting documents.

8 (B) A certification that the memorandum  
9 of agreement—

10 (i) requires sharing of costs of  
11 projects, including in-kind support, be-  
12 tween the United States and Israel;

13 (ii) establishes a framework to nego-  
14 tiate the rights to any intellectual property  
15 developed under the memorandum of  
16 agreement; and

17 (iii) requires the United States Gov-  
18 ernment to receive semiannual reports on  
19 expenditure of funds, if any, by the Gov-  
20 ernment of Israel, including a description  
21 of what the funds have been used for,  
22 when funds were expended, and an identi-  
23 fication of entities that expended the  
24 funds.

25 (b) SUPPORT IN CONNECTION WITH ACTIVITIES.—

1           (1) IN GENERAL.—The Secretary of Defense is  
2 authorized to provide maintenance and sustainment  
3 support to Israel for the directed energy capabilities  
4 research, development, test, and evaluation activities  
5 authorized in subsection (a)(1). Such authority in-  
6 cludes authority to install equipment necessary to  
7 carry out such research, development, test, and eval-  
8 uation.

9           (2) REPORT.—The support described in para-  
10 graph (1) may not be provided until 15 days after  
11 the Secretary of Defense submits to the appropriate  
12 committees of Congress a report setting forth a de-  
13 tailed description of the support to be provided.

14           (3) MATCHING CONTRIBUTION.—The support  
15 described in paragraph (1) may not be provided un-  
16 less the Secretary of Defense certifies to the appro-  
17 priate committees of Congress that the Government  
18 of Israel will contribute to such support—

19                   (A) an amount equal to not less than the  
20 amount of support to be so provided; or

21                   (B) an amount that otherwise meets the  
22 best efforts of Israel, as mutually agreed to by  
23 the United States and Israel.

24           (c) LEAD AGENCY.—The Secretary of Defense shall  
25 designate an appropriate research and development entity

1 of a military department as the lead agency of the Depart-  
2 ment of Defense in carrying out this section.

3 (d) SEMIANNUAL REPORT.—The Secretary of De-  
4 fense shall submit to the appropriate committees of Con-  
5 gress on a semiannual basis a report that contains a copy  
6 of the most recent semiannual report provided by the Gov-  
7 ernment of Israel to the Department of Defense pursuant  
8 to subsection (a)(2)(B)(iii).

9 (e) APPROPRIATE COMMITTEES OF CONGRESS DE-  
10 FINED.—In this section, the term “appropriate commit-  
11 tees of Congress” means—

12 (1) the Committee on Armed Services, the  
13 Committee on Foreign Relations, the Committee on  
14 Homeland Security and Governmental Affairs, the  
15 Committee on Appropriations, and the Select Com-  
16 mittee on Intelligence of the Senate; and

17 (2) the Committee on Armed Services, the  
18 Committee on Foreign Affairs, the Committee on  
19 Homeland Security, the Committee on Appropria-  
20 tions, and the Permanent Select Committee on Intel-  
21 ligence of the House of Representatives.

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