

## 115TH CONGRESS 1ST SESSION H.R. 2184

To support meeting our Nation's growing cybersecurity workforce needs by expanding the cybersecurity education pipeline.

## IN THE HOUSE OF REPRESENTATIVES

April 27, 2017

Mr. McCaul (for himself, Mr. Meehan, Mr. Perlmutter, Mr. Thorn-Berry, Mr. Langevin, Mr. Ratcliffe, and Mr. Richmond) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

## A BILL

To support meeting our Nation's growing cybersecurity workforce needs by expanding the cybersecurity education pipeline.

- 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 "Cyber Scholarship Op-
- 5 portunities Act of 2017".
- 6 SEC. 2. FINDINGS.
- 7 Congress finds the following:
- 8 (1) A well-trained workforce is essential to
- 9 meeting the Nation's growing cybersecurity needs.

1	(2) A 2015 report by the National Academy of
2	Public Administration found that the United States
3	faces a severe shortage of properly trained and
4	equipped cybersecurity professionals.
5	(3) A 2015 study of the information security
6	workforce found that the information security work-
7	force shortfall is widening.
8	(4) The National Science Foundation's
9	CyberCorps: Scholarship-for-Service program is a
10	successful effort to support capacity building in in-
11	stitutions of higher education and scholarships for
12	students to pursue cybersecurity careers.
12	SEC. 3. FEDERAL CYBER SCHOLARSHIP-FOR-SERVICE PRO-
13	SEC. 6. PEDERAL CIDER SCHOLARSHIII -POR-SERVICE TRO-
13	GRAM.
14	GRAM.
14 15	GRAM. Section 302 of the Cybersecurity Enhancement Act
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14 15 16 17 18 19 20	GRAM.  Section 302 of the Cybersecurity Enhancement Act of 2014 (15 U.S.C. 7442) is amended—  (1) in subsection (a), by adding at the end the following: "Scholarship recipients shall include eligible students who are pursuing an associate's degree in a cybersecurity field without the intent of trans-
14 15 16 17 18 19 20 21	GRAM.  Section 302 of the Cybersecurity Enhancement Act of 2014 (15 U.S.C. 7442) is amended—  (1) in subsection (a), by adding at the end the following: "Scholarship recipients shall include eligible students who are pursuing an associate's degree in a cybersecurity field without the intent of transferring to a bachelor's degree program and either
14 15 16 17 18 19 20 21	GRAM.  Section 302 of the Cybersecurity Enhancement Act of 2014 (15 U.S.C. 7442) is amended—  (1) in subsection (a), by adding at the end the following: "Scholarship recipients shall include eligible students who are pursuing an associate's degree in a cybersecurity field without the intent of transferring to a bachelor's degree program and either have a bachelor's degree already or are veterans of

1	is pursuing a doctoral or master's degree, such
2	agreement may include (if determined on a case-by-
3	case basis by the Director of the National Science
4	Foundation to be appropriate and to further the
5	goals of the scholarship-for-service program) an
6	agreement for the recipient to work at an institution
7	of higher education or for a local educational agency
8	teaching cybersecurity skills for a period equal to the
9	length of the scholarship following receipt of such
10	degree.";
11	(3) in subsection (f)—
12	(A) by striking paragraph (3) and insert-
13	ing the following:
14	"(3) have demonstrated a high level of com-
15	petency in relevant knowledge, skills, and abilities,
16	as described in the national cybersecurity awareness
17	and education program under section 401;"; and
18	(B) by striking paragraph (4) and insert-
19	ing the following:
20	"(4) be a student in an eligible degree program
21	at a qualified institution of higher education, as de-
22	termined by the Director of the National Science
23	Foundation, who is—
24	"(A) a full-time student; or

1	"(B) a student who is enrolled for study
2	leading to a degree on a less than full-time
3	basis but not less than half-time basis; and";
4	(4) by striking subsection (m) and inserting the
5	following:
6	"(m) Evaluation and Report.—
7	"(1) In general.—The Director of the Na-
8	tional Science Foundation shall evaluate and make
9	public, in a manner that protects the personally
10	identifiable information of scholarship recipients, in-
11	formation on the success of recruiting individuals for
12	scholarships under this section and on hiring and re-
13	taining those individuals in the public sector work-
14	force, including on—
15	"(A) placement rates;
16	"(B) where students are placed;
17	"(C) student salary ranges for students
18	not released from obligations under this section
19	"(D) how long after graduation they are
20	placed;
21	"(E) how long they stay in the positions
22	they enter upon graduation;
23	"(F) how many students are released from
24	obligations:

1	"(G) what (if any) remedial training needs
2	are required; and
3	"(H) the number of determinations permit-
4	ting scholarship recipients to fulfill their obliga-
5	tions at an institution of higher education or
6	local educational agency pursuant to subsection
7	(d) or in a critical infrastructure position pur-
8	suant to subsection $(p)(1)$ , and the reason for
9	each such determination.
10	"(2) REGULAR REPORTS.—The Director of the
11	National Science Foundation shall submit to Con-
12	gress a report containing the information described
13	in paragraph (1) not later than 180 days after the
14	date of enactment of the Cyber Scholarship Oppor-
15	tunities Act of 2017 and not less than once every 2
16	years thereafter."; and
17	(5) by adding at the end the following:
18	"(n) Resources.—The Director of the National
19	Science Foundation shall work with the Director of the
20	Office of Personnel Management to establish an online re-
21	source center for the CyberCorps community that consoli-
22	dates or eliminates other relevant websites, if possible.
23	Such online resource center shall—

1	"(1) present up-to-date, accurate information
2	about existing scholarship programs and job oppor-
3	tunities;
4	"(2) present a modernized view of cybersecurity
5	careers;
6	"(3) improve user friendliness; and
7	"(4) allow prospective job applicants to search
8	positions by State, salary, and title.
9	"(o) Cybersecurity at Kindergarten Through
10	GRADE 12 LEVEL.—The Director of the National Science
11	Foundation, in coordination with other Federal agencies
12	as necessary, shall carry out a program to grow and im-
13	prove cybersecurity education at the kindergarten through
14	grade 12 level that—
15	"(1) increases interest in cybersecurity careers;
16	"(2) helps students practice correct and safe
17	online behavior and understand the foundational
18	principles of cybersecurity; and
19	"(3) improves teaching methods for delivering
20	cybersecurity content for kindergarten through
21	grade 12 computer science curricula.
22	"(p) Critical Infrastructure Protection.—
23	Due to the need for skilled cybersecurity professionals to
24	protect the Nation's critical infrastructure, the Director
25	of the National Science Foundation may—

"(1) grant exceptions to students for fulfilling 1 2 post-award employment obligations under this sec-3 tion (on a case-by-case basis and in coordination with other Federal agencies) who agree to work in 5 a critical infrastructure mission at a Federal Gov-6 ernment corporation or a State, local, or tribal gov-7 ernment-affiliated asset, system, or network that is 8 considered to be part of a critical infrastructure sec-9 tor as described in Presidential Policy Directive—21, 10 issued February 12, 2013 (related to critical infra-11 structure security and resilience), or any successor; 12 and 13 "(2) develop a pilot program to enhance critical 14 infrastructure protection training for students pur-15 suing careers in cybersecurity. 16 "(q) Studies.—The Director of the National Science Foundation, in coordination with the Director of the Of-18 fice of Personnel Management, shall assess— 19 "(1) the potential benefits and feasibility of 20 granting scholarship awards under this section to 21 students who do not possess a bachelor's degree to 22 pursue an associate's degree or an industry-recog-

"(2) how scholarship recipients with an agreement to work at an institution of higher education

nized credential in a cybersecurity field; and

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- 1 or local educational agency are supporting the cyber
- workforce pipeline.".

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