

**AMENDMENT TO**  
**RULES COMMITTEE PRINT 116-19**  
**OFFERED BY M . \_\_\_\_\_**

Subtitle H of title X is amended by redesignating sections 1090 and 1091 as sections 1091 and 1092, respectively.

After section 1089 of subtitle H of title X, add the following new section:

1 **SEC. 1090. SECURING AMERICAN RESEARCH FROM CYBER**  
2 **THEFT.**

3 (a) PURPOSE.—The purposes of this section are to  
4 help institutions of higher education protect federally  
5 funded research from cyber theft and interference by—

6 (1) directing the Networking and Information  
7 Technology Research and Development Program to  
8 provide for support and guidance on improving the  
9 security of academic computing and networking systems that process, store, and transmit federally  
10 funded research; and

11 (2) establishing a pilot program to support re-  
12 gional secure computing enclaves for academia to  
13

1 provide researchers with secure data storage and  
2 adequately protect Federal Government data.

3 (b) NETWORKING AND INFORMATION TECHNOLOGY  
4 RESEARCH AND DEVELOPMENT UPDATE.—Section 101 of  
5 the High-Performance Computing Act of 1991 (15 U.S.C.  
6 5511) is amended—

7 (1) by inserting after subparagraph (I) the fol-  
8 lowing:

9 “(J) provide for improving the security, re-  
10 liability, and resiliency of computing and net-  
11 working systems used by institutions of higher  
12 education and other non-profit research institu-  
13 tions for the processing, storage and trans-  
14 mission of sensitive federally funded research  
15 and associated data;” and

16 (2) by redesignating subparagraphs (J) through  
17 (O) as subparagraphs (K) through (P), respectively.

18 (c) COMPUTING ENCLAVE PILOT PROGRAM.—

19 (1) IN GENERAL.—The Secretary of Defense, in  
20 coordination with the Director of the National Insti-  
21 tute of Standards and Technology, the Director of  
22 the National Science Foundation, and the Secretary  
23 of Energy, shall establish a pilot program to ensure  
24 the security of federally supported research data and  
25 to assist regional institutions of higher education

1 and their researchers in compliance with regulations  
2 regarding the safeguarding of sensitive information  
3 and other relevant regulations and Federal guide-  
4 lines.

5 (2) STRUCTURE.—In carrying out the pilot pro-  
6 gram established pursuant to paragraph (1), the  
7 Secretary shall select three institutions of higher  
8 education from among institutions classified under  
9 the Indiana University Center for Postsecondary Re-  
10 search Carnegie Classification as a doctorate-grant-  
11 ing university with a very high level of research ac-  
12 tivity, and with a history of working with secure in-  
13 formation for the development, installation, mainte-  
14 nance, or sustainment of secure computing enclaves.

15 (3) REGIONALIZATION.—

16 (A) In selecting universities pursuant to  
17 paragraph (2), the Secretary of Defense shall  
18 give preference to institutions of higher edu-  
19 cation with the capability of serving other re-  
20 gional universities.

21 (B) The enclaves should be geographically  
22 dispersed to better meet the needs of regional  
23 interests.

1           (4) PROGRAM ELEMENTS.—The Department of  
2           Defense shall work with Institutions of Higher Edu-  
3           cation selected pursuant to paragraph (2) to—

4                   (A) develop an approved design blueprint  
5                   for compliance with Federal data protection  
6                   protocols;

7                   (B) develop a comprehensive and confiden-  
8                   tial list, or a bill of materials, of each binary  
9                   component of the software, firmware, or prod-  
10                  uct that is required to deploy additional secure  
11                  computing enclaves;

12                  (C) develop templates for all policies and  
13                  procedures required to operate the secure com-  
14                  puting enclave in a research setting;

15                  (D) develop a system security plan tem-  
16                  plate; and

17                  (E) develop a process for managing a plan  
18                  of action and milestones for the secure com-  
19                  puting enclave.

20           (5) DURATION.—The pilot program established  
21           pursuant to paragraph (1) shall operate for not less  
22           than 3 years.

23           (6) REPORT.—

24                   (A) IN GENERAL.—The Secretary shall re-  
25                  port to the Committee on Armed Services of the

1 House, the Committee on Armed Services of the  
2 Senate, the Committee on Science, Space, and  
3 Technology of the House, and the Committee  
4 on Commerce, Science, and Transportation of  
5 the Senate not later than 6 months after the  
6 completion of the pilot program under para-  
7 graph (1).

8 (B) CONTENTS.—The report required  
9 under subparagraph (A) shall include—

10 (i) an assessment of the pilot program  
11 under paragraph (1), including an assess-  
12 ment of the security benefits provided by  
13 such secure computing enclaves;

14 (ii) recommendations related to the  
15 valued of expanding the network of secure  
16 computing enclaves; and

17 (iii) recommendations on the efficacy  
18 of the use of secure computing enclaves by  
19 other Federal agencies in a broader effort  
20 to expand security of Federal research.

21 (7) AUTHORIZATION OF APPROPRIATIONS.—

22 There is authorized to be appropriated to the Sec-  
23 retary of Defense, \$38,000,000 for fiscal years 2020  
24 through 2022, to carry out the activities outlined in  
25 this section.

1 (d) DEFINITIONS.—In this section:

2 (1) INSTITUTION OF HIGHER EDUCATION.—The  
3 term “institution of higher education” has the  
4 meaning given such term in section 101 of the High-  
5 er Education Act of 1965 (20 U.S.C. 1001).

6 (2) SECRETARY.—The term “Secretary” means  
7 the Secretary of the Department of Defense.

