

**AMENDMENT TO RULES COMMITTEE PRINT 116–**

**57**

**OFFERED BY MR. RESCHENTHALER OF  
PENNSYLVANIA**

At the end of title II, add the following new subtitle:

**1 Subtitle F—Department of Defense**  
**2 Simulation Training Initiative**

**3 SEC. 271. SHORT TITLE.**

**4** This subtitle may be cited as the “American Simula-  
**5** tion Initiative”.

**6 SEC. 272. DEFINITIONS.**

**7** In this subtitle:

**8** (1) The term “simulation software” means  
**9** computer technology and software designed to close-  
**10** ly approximate physical phenomena using mathe-  
**11** matical formulas for the purpose of product develop-  
**12** ment and testing, including, but not limited to, the  
**13** simulation of structures, fluids, electrical, materials,  
**14** optics and power.

**15** (2) The term “institution of higher education”  
**16** has the meaning given the term in section 101(a) of  
**17** the Higher Education Act of 1965 (20 U.S.C.  
**18** 1001(a)).

1           (4) The term “adjacent or related software  
2           technologies” means adjacent or related software  
3           technologies including, but not limited to, design and  
4           manufacturing, data management, production opti-  
5           mization, and product lifecycle management.

6           (5) The term “simulation data management  
7           software” means the software used to manage the  
8           data and processes associated with simulation soft-  
9           ware.

10 **SEC. 273. PURPOSES.**

11       The purpose of this subtitle is to ensure the contin-  
12       ued leadership of the United States in engineering simula-  
13       tion and its applications by promoting the development  
14       and expansion of an American workforce skilled in engi-  
15       neering simulation, in order to—

16           (1) facilitate technology innovation and private  
17       sector commercialization;

18           (2) meet economic and national security goals;

19           (3) increase the competitiveness of small- and  
20       medium- sized United States businesses in the global  
21       market;

22           (4) increase the competitiveness of large compa-  
23       nies by increasing the efficiency of their small and  
24       medium size suppliers;

1           (5) expand the number of engineers and sci-  
2           entists in the market and entering the market with  
3           expertise in engineering simulation;

4           (6) increase the number of United States small  
5           and medium sized businesses that use engineering  
6           simulation software as part of their standard oper-  
7           ations;

8           (7) promote increased participation in engineer-  
9           ing simulation including those individuals identified  
10          in sections 33 and 34 of the Science and Engineer-  
11          ing Equal Opportunities Act (42 U.S.C. 1885a,  
12          1885b); and

13          (8) promote economic upward mobility by pro-  
14          viding greater access to higher paid jobs.

15 **SEC. 274. MULTIDISCIPLINARY CENTERS FOR SIMULATION**  
16 **SOFTWARE EDUCATION.**

17          (a) GRANTS.—The Secretary of Defense, in consulta-  
18          tion with other Federal departments and agencies, as ap-  
19          propriate, shall award grants to consortia, including pri-  
20          vate sector entities and institutions of higher education or  
21          eligible nonprofit organizations, to establish multidisci-  
22          plinary capabilities for simulation software education,  
23          within different States in the United States.

24          (b) PURPOSE OF THE GRANTS.—The purpose of the  
25          grants shall be to establish educational training in simula-

tion software and applications, that can be accessed by students currently enrolled in institutions of higher education, as well as engineers and scientists already in the workforce (collectively referred to in this section as “students”), including by—

(1) developing a comprehensive curriculum and certification program for students;

(2) establishing a set of standard simulation tools using commercial-off-the-shelf simulation software, that support a broad range of simulation activities, including, but not limited to, simulation at the following design stages: ideation, detailed design, manufacturing, and operations and sustainment;

(3) providing students with tools of the trade that they can take with them to their future jobs;

(4) allowing such students to use what they have learned to optimize and standardize the curriculum and certification requirements; and

(5) fostering innovation by bringing industry perspectives to engineering simulation workforce development, including by leveraging industry knowledge and resources.

(c) REQUIREMENTS.—

(1) IN GENERAL.—A commercial entity, an institution of higher education or an eligible nonprofit

1 organization (or a consortium thereof) seeking fund-  
2 ing under this subtitle (each, hereinafter individually  
3 referred to as an “eligible recipient” or collectively,  
4 as “eligible recipients”) shall submit an application  
5 to the Secretary of Defense at such time, in such  
6 manner, and containing such information as the Sec-  
7 retary may require.

8 (2) ELIGIBLE RECIPIENTS.—To be eligible to  
9 receive a grant under this subtitle, an eligible recipi-  
10 ent shall—

11 (A) develop a standardized, accredited, na-  
12 tional certification training program for stu-  
13 dents (hereinafter referred to as the “Pro-  
14 gram”), that can be replicated and adminis-  
15 tered beyond the initial eligible recipient;

16 (B) consider enrollment by qualified appli-  
17 cants, both currently enrolled in an institution  
18 of higher education or already in the workforce,  
19 who can demonstrate increased employment  
20 prospects or enhanced career development be-  
21 cause of completion of the Program;

22 (C) be able to train students on state-of-  
23 the-art commercial-off-the-shelf simulation soft-  
24 ware, on a broad range of simulation activities  
25 including, but not limited to, the simulation of

1 structures, fluids, electrical, materials, optics,  
2 and power;

3 (D) enable a student to graduate the Pro-  
4 gram within a three-month period (hereinafter  
5 referred to as “graduate”); and

6 (E) be able to graduate an average of  
7 10,000 students per year over the first 5 years,  
8 sourced nationally.

9 (d) SELECTION AND DURATION.—

10 (1) IN GENERAL.—Each eligible recipient is au-  
11 thorized to use a grant under this subtitle carry out  
12 the activities as set forth in this subtitle for a period  
13 of 5 years.

14 (2) REAPPLICATION.—An eligible recipient that  
15 was previously awarded a grant under this subtitle  
16 may reapply for additional, subsequent periods of 5  
17 years on a competitive, merit-reviewed basis.

18 (3) TERMINATION.—The Secretary of Defense  
19 may terminate a grant made to an underperforming  
20 eligible recipient for cause during the performance  
21 period.

22 (e) FUNDING.—Subject to the availability of appro-  
23 priations, the Secretary of Defense shall allocate up to a  
24 total of \$75,000,000 for each eligible recipient under this  
25 subtitle for each of fiscal years 2021 through 2025.

1 Amounts made available to carry out this subtitle shall  
2 be derived from amounts appropriated or otherwise made  
3 available to the Department of Defense.

