AMENDMENT TO RULES COMMITTEE PRINT 116–57

OFFERED BY MR. RESCHENTHALER OF PENNSYLVANIA

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

Subtitle F—Department of Defense Simulation Training Initiative

SEC. 271. SHORT TITLE.

This subtitle may be cited as the “American Simulation Initiative”.

SEC. 272. DEFINITIONS.

In this subtitle:

(1) The term “simulation software” means computer technology and software designed to closely approximate physical phenomena using mathematical formulas for the purpose of product development and testing, including, but not limited to, the simulation of structures, fluids, electrical, materials, optics and power.

(2) The term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
(4) The term “adjacent or related software technologies” means adjacent or related software technologies including, but not limited to, design and manufacturing, data management, production optimization, and product lifecycle management.

(5) The term “simulation data management software” means the software used to manage the data and processes associated with simulation software.

SEC. 273. PURPOSES.

The purpose of this subtitle is to ensure the continued leadership of the United States in engineering simulation and its applications by promoting the development and expansion of an American workforce skilled in engineering simulation, in order to—

(1) facilitate technology innovation and private sector commercialization;

(2) meet economic and national security goals;

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

(4) increase the competitiveness of large companies by increasing the efficiency of their small and medium size suppliers;
(5) expand the number of engineers and scientists in the market and entering the market with expertise in engineering simulation;

(6) increase the number of United States small and medium sized businesses that use engineering simulation software as part of their standard operations;

(7) promote increased participation in engineering simulation including those individuals identified in sections 33 and 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b); and

(8) promote economic upward mobility by providing greater access to higher paid jobs.

SEC. 274. MULTIDISCIPLINARY CENTERS FOR SIMULATION SOFTWARE EDUCATION.

(a) GRANTS.—The Secretary of Defense, in consultation with other Federal departments and agencies, as appropriate, shall award grants to consortia, including private sector entities and institutions of higher education or eligible nonprofit organizations, to establish multidisciplinary capabilities for simulation software education, within different States in the United States.

(b) PURPOSE OF THE GRANTS.—The purpose of the 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.

e) REQUIREMENTS.—

(1) IN GENERAL.—A commercial entity, an institution of higher education or an eligible nonprofit
organization (or a consortium thereof) seeking funding under this subtitle (each, hereinafter individually referred to as an “eligible recipient” or collectively, as “eligible recipients”) shall submit an application to the Secretary of Defense at such time, in such manner, and containing such information as the Secretary may require.

(2) ELIGIBLE RECIPIENTS.—To be eligible to receive a grant under this subtitle, an eligible recipient shall—

(A) develop a standardized, accredited, national certification training program for students (hereinafter referred to as the “Program”), that can be replicated and administered beyond the initial eligible recipient;

(B) consider enrollment by qualified applicants, both currently enrolled in an institution of higher education or already in the workforce, who can demonstrate increased employment prospects or enhanced career development because of completion of the Program;

(C) be able to train students on state-of-the-art commercial-off-the-shelf simulation software, on a broad range of simulation activities including, but not limited to, the simulation of
structures, fluids, electrical, materials, optics, and power;

(D) enable a student to graduate the Program within a three-month period (hereinafter referred to as “graduate”); and

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

(d) SELECTION AND DURATION.—

(1) IN GENERAL.—Each eligible recipient is authorized to use a grant under this subtitle carry out the activities as set forth in this subtitle for a period of 5 years.

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

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

(e) FUNDING.—Subject to the availability of appropriations, the Secretary of Defense shall allocate up to a total of $75,000,000 for each eligible recipient under this subtitle for each of fiscal years 2021 through 2025.
Amounts made available to carry out this subtitle shall be derived from amounts appropriated or otherwise made available to the Department of Defense.