#### Suspend the Rules and Pass the Bill, H.R. 1396, with an Amendment

(The amendment strikes all after the enacting clause and inserts a new text)

116TH CONGRESS 1ST SESSION H.R. 1396

To award Congressional Gold Medals to Katherine Johnson and Dr. Christine Darden, to posthumously award Congressional Gold Medals to Dorothy Vaughan and Mary Jackson, and to award a Congressional Gold Medal to honor all of the women who contributed to the success of the National Aeronautics and Space Administration during the Space Race.

#### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 27, 2019

Ms. JOHNSON of Texas (for herself and Mr. LUCAS) introduced the following bill; which was referred to the Committee on Financial Services, and in addition to the Committee on House Administration, 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

## A BILL

To award Congressional Gold Medals to Katherine Johnson and Dr. Christine Darden, to posthumously award Congressional Gold Medals to Dorothy Vaughan and Mary Jackson, and to award a Congressional Gold Medal to honor all of the women who contributed to the success of the National Aeronautics and Space Administration during the Space Race. Be it enacted by the Senate and House of Representa tives of the United States of America in Congress assembled,

#### **3 SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Hidden Figures Con-5 gressional Gold Medal Act".

#### 6 SEC. 2. FINDINGS.

7 Congress finds the following:

8 (1) In 1935, the National Advisory Committee 9 for Aeronautics (referred to in this section as 10 "NACA") hired 5 women to serve as the first "com-11 puter pool" at the Langley Memorial Aeronautical 12 Laboratory where those women took on work mak-13 ing calculations that male engineers had made pre-14 viously.

(2) During the 1940s, NACA began recruiting
African-American women to work as computers and
initially separated those women from their White
counterparts in a group known as the "West Area
Computers" where the women were restricted to segregated dining and bathroom facilities.

(3) Katherine Johnson was born on August 26,
1918, in White Sulphur Springs, West Virginia.

(4) In 1953, Katherine Johnson began her career in aeronautics as a computer in the segregated

1	West Area Computing unit described in paragraph
2	(2).
3	(5) As a member of the Flight Research Divi-
4	sion, Katherine Johnson analyzed data from flight
5	tests. After NACA was reformulated into the Na-
6	tional Aeronautics and Space Administration (re-
7	ferred to in this section as "NASA"), Katherine
8	Johnson—
9	(A) calculated the trajectory for Alan
10	Shepard's Freedom 7 mission in 1961, which
11	was the first human spaceflight by an indi-
12	vidual from the United States;
13	(B) coauthored a report that provided the
14	equations for describing orbital spaceflight with
15	a specified landing point, which made her the
16	first woman to be recognized as an author of a
17	report from the Flight Research Division;
18	(C) was asked to verify the calculations
19	when electronic computers at NASA were used
20	to calculate the orbit for John Glenn's Friend-
21	ship 7 mission; and
22	(D) provided calculations for NASA
23	throughout her career, including for the Apollo
24	missions.

(6) Katherine Johnson retired from NASA in
 1986.

3 (7) Dr. Christine Darden was born on Sep4 tember 10, 1942, in Monroe, North Carolina.

5 (8) In 1962, Dr. Christine Darden graduated
6 from Hampton Institute with a B.S. in Mathematics
7 and a teaching credential.

8 (9) Dr. Christine Darden attended Virginia
9 State University where she studied aerosol physics
10 and earned an M.S. in Applied Mathematics.

(10) Dr. Christine Darden began her career in
aeronautics in 1967 as a data analyst at NASA's
Langley Research Center (referred to in this section
as "Langley") before being promoted to aerospace
engineer in 1973. Her work in this position resulted
in the production of low-boom sonic effects, which
revolutionized aerodynamics design.

18 (11) Dr. Christine Darden completed her edu19 cation by earning a Ph.D. in Mechanical Engineer20 ing from George Washington University in 1983.

21 (12) While working at NASA, Dr. Christine22 Darden—

23 (A) was appointed to be the leader of the24 Sonic Boom Team, which worked on designs to

1	minimize the effects of sonic booms by testing
2	wing and nose designs for supersonic aircraft;
3	(B) wrote more than 50 articles on aero-
4	nautics design; and
5	(C) became the first African American to
6	be promoted to a position in the Senior Execu-
7	tive Service at Langley.
8	(13) Dorothy Vaughan was born on September
9	20, 1910, in Kansas City, Missouri.
10	(14) Dorothy Vaughan began working for
11	NACA in 1943. Dorothy Vaughan—
12	(A) started at NACA as a member of the
13	West Area Computing unit;
14	(B) was promoted to be the head of the
15	West Area Computing unit, becoming NACA's
16	first African-American supervisor, a position
17	that she held for 9 years; and
18	(C) became an expert programmer in
19	FORTRAN as a member of NASA's Analysis
20	and Computation Division.
21	(15) Dorothy Vaughan retired from NASA in
22	1971 and died on November 10, 2008.
23	(16) Mary Jackson was born on April 9, 1921,
24	in Hampton, Virginia.

1	(17) Mary Jackson started her career at NACA
2	in 1951, working as a computer as a member of the
3	West Area Computing unit.
4	(18) After petitioning the City of Hampton to
5	allow her to take graduate-level courses in math and
6	physics at night at the all-White Hampton High
7	School, Mary Jackson was able to complete the re-
8	quired training to become an engineer, making her
9	NASA's first female African-American engineer.
10	(19) Mary Jackson—
11	(A) while at NACA and NASA—
12	(i) worked in the Theoretical Aero-
13	dynamics Branch of the Subsonic-Tran-
14	sonic Aerodynamics Division at Langley
15	where she analyzed wind tunnel and air-
16	craft flight data; and
17	(ii) published a dozen technical papers
18	that focused on the boundary layer of air
19	around airplanes; and
20	(B) after 21 years working as an engineer
21	at NASA, transitioned to a new job as
22	Langley's Federal Women's Program Manager
23	where she worked to improve the prospects of
24	NASA's female mathematicians, engineers, and
25	scientists.

(20) Mary Jackson retired from NASA in 1985
 and died in 2005.

3	(21) These 4 women, along with the other Afri-
4	can-American women in NASA's West Area Com-
5	puting unit, were integral to the success of the early
6	space program. The stories of these 4 women exem-
7	plify the experiences of hundreds of women who
8	worked as computers, mathematicians, and engi-
9	neers at NACA beginning in the 1930s and their
10	handmade calculations played an integral role in—
11	(A) aircraft testing during World War II;
12	(B) supersonic flight research;
13	(C) sending the Voyager probes to explore
14	the solar system; and
15	(D) the United States landing the first
16	man on the lunar surface.
17	SEC. 3. CONGRESSIONAL GOLD MEDALS.
18	(a) Presentation Authorized.—The Speaker of
19	the House of Representatives and the President pro tem-
20	pore of the Senate shall make appropriate arrangements
21	for the presentation, on behalf of Congress, of 5 gold med-

22 als of appropriate design as follows:

(1) One gold medal to Katherine Johnson in
recognition of her service to the United States as a
mathematician.

1	(2) One gold medal to Dr. Christine Darden for
2	her service to the United States as an aeronautical
3	engineer.
4	(3) In recognition of their service to the United
5	States during the Space Race—
6	(A) 1 gold medal commemorating the life
7	of Dorothy Vaughan; and
8	(B) 1 gold medal commemorating the life
9	of Mary Jackson.
10	(4) One gold medal in recognition of all women
11	who served as computers, mathematicians, and engi-
12	neers at the National Advisory Committee for Aero-
13	nautics and the National Aeronautics and Space Ad-
14	ministration between the $1930s$ and the $1970s$ (re-
15	ferred to in this section as "recognized women").
16	(b) Design and Striking.—For the purpose of the
17	awards under subsection (a), the Secretary of the Treas-
18	ury (referred to in this Act as the "Secretary") shall strike
19	each gold medal described in that subsection with suitable
20	emblems, devices, and inscriptions, to be determined by
21	the Secretary.
22	(c) Transfer of Certain Medals After Pres-
23	ENTATION.—

24 (1) Smithsonian institution.—

1	(A) IN GENERAL.—After the award of the
2	gold medal commemorating the life of Dorothy
3	Vaughan under subsection $(a)(3)(A)$ and the
4	award of the gold medal in recognition of recog-
5	nized women under subsection (a)(4), those
6	medals shall be given to the Smithsonian Insti-
7	tution where the medals shall be—
8	(i) available for display, as appro-
9	priate; and
10	(ii) made available for research.
11	(B) SENSE OF CONGRESS.—It is the sense
12	of Congress that the Smithsonian Institution
13	should make the gold medals received under
14	subparagraph (A) available for—
15	(i) display, particularly at the Na-
16	tional Museum of African American His-
17	tory and Culture; or
18	(ii) loan, as appropriate, so that the
19	medals may be displayed elsewhere.
20	(2) TRANSFER TO FAMILY.—After the award of
21	the gold medal in honor of Mary Jackson under sub-
22	section $(a)(3)(B)$ , the medal shall be given to her
23	granddaughter, Wanda Jackson.

#### 1 SEC. 4. DUPLICATE MEDALS.

Under regulations that the Secretary may promulgate, the Secretary may strike and sell duplicates in
bronze of the gold medals struck under this Act, at a price
sufficient to cover the cost of the medals, including labor,
materials, dies, use of machinery, and overhead expenses.

### 7 SEC. 5. STATUS OF MEDALS.

8 (a) NATIONAL MEDALS.—The medals struck under
9 this Act are national medals for purposes of chapter 51
10 of title 31, United States Code.

(b) NUMISMATIC ITEMS.—For purposes of sections
5134 and 5136 of title 31, United States Code, all medals
struck under this Act shall be considered to be numismatic
items.

# 15 SEC. 6. AUTHORITY TO USE FUND AMOUNTS; PROCEEDS OF 16 SALE.

(a) AUTHORITY TO USE FUND AMOUNTS.—There is
authorized to be charged against the United States Mint
Public Enterprise Fund such amounts as may be necessary to pay for the costs of the medals struck under
this Act.

(b) PROCEEDS OF SALE.—Amounts received from the
sale of duplicate bronze medals authorized under section
4 shall be deposited into the United States Mint Public
Enterprise Fund.

#### 1 SEC. 7. DETERMINATION OF BUDGETARY EFFECTS.

2 The budgetary effects of this Act, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, 3 4 shall be determined by reference to the latest statement titled "Budgetary Effects of PAYGO Legislation" for this 5 Act, submitted for printing in the Congressional Record 6 by the Chairman of the House Budget Committee, pro-7 vided that such statement has been submitted prior to the 8 vote on passage. 9