

Calendar No. 152

116TH CONGRESS
1ST SESSION

S. 1694

To require any Federal agency that issues licenses to conduct activities in outer space to include in the requirements for such licenses an agreement relating to the preservation and protection of the Apollo 11 landing site, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 23 (legislative day, MAY 22), 2019

Mr. PETERS (for himself, Mr. CRUZ, Mr. BROWN, Mr. BLUMENTHAL, Mr. MARKEY, and Mrs. CAPITO) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

JULY 16, 2019

Reported by Mr. WICKER, with an amendment and an amendment to the title
[Strike out all after the enacting clause and insert the part printed in *italic*]

A BILL

To require any Federal agency that issues licenses to conduct activities in outer space to include in the requirements for such licenses an agreement relating to the preservation and protection of the Apollo 11 landing site, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “One Small Step to
3 Protect Human Heritage in Space Act”.

4 **SEC. 2. FINDINGS; SENSE OF CONGRESS.**

5 (a) FINDINGS.—Congress makes the following find-
6 ings:

7 (1) On July 16, 1969, the Apollo 11 spacecraft
8 launched from the John F. Kennedy Space Center
9 carrying Neil A. Armstrong, Edwin E. “Buzz”
10 Aldrin, Jr., and Michael Collins.

11 (2) July 20, 2019, will mark the 50th anniver-
12 sary of the date on which the Apollo 11 spacecraft
13 landed on the Moon and Neil Armstrong and Buzz
14 Aldrin became the first humans to set foot on a ce-
15 lestial body off the Earth.

16 (3) The landing of the Apollo 11 spacecraft and
17 humanity’s first off-world footprints are achieve-
18 ments unparalleled in history, a direct product of the
19 work and perseverance of the more than 400,000 in-
20 dividuals who contributed to the development of the
21 Apollo missions on the shoulders of centuries of
22 science and engineering pioneers from all corners of
23 the world.

24 (4) Among the thousands of individuals who
25 have contributed to the achievements of the National
26 Aeronautics and Space Administration (in this sec-

1 tion referred to as “NASA”) are African-American
 2 women such as Katherine Johnson, Dorothy
 3 Vaughn, Mary Jackson, and Dr. Christine Darden,
 4 who made critical contributions to NASA space pro-
 5 grams. Katherine Johnson worked at NASA for 35
 6 years and calculated the trajectory of the Apollo 11
 7 landing and the trajectories for the spaceflights of
 8 astronauts Alan Shepard and John Glenn. Katherine
 9 Johnson, together with many other individuals the
 10 work of whom often went unacknowledged, helped
 11 broaden the scope of space travel and charted new
 12 frontiers for humanity’s exploration of space.

13 (5) The landing of the Apollo 11 spacecraft was
 14 made on behalf of all humankind, and Neil Arm-
 15 strong and Buzz Aldrin were accompanied by mes-
 16 sages of peace from the leaders of more than 70
 17 countries.

18 (6) The lunar landing sites of the Apollo 11
 19 spacecraft, the robotic spacecraft that preceded the
 20 Apollo 11 mission, and the crewed and robotic
 21 spacecraft that followed, are of outstanding uni-
 22 versal value to humanity.

23 (7) Such landing sites—

24 (A) are the first archaeological sites with
 25 human activity that are not on Earth;

1 (B) provide evidence of the first achieve-
2 ments of humankind in the realm of space trav-
3 el and exploration; and

4 (C) contain artifacts and other evidence of
5 human exploration activities that remain a po-
6 tential source of cultural, historical, archae-
7 ological, anthropological, scientific, and engi-
8 neering knowledge.

9 (8) As commercial enterprises and more coun-
10 tries acquire the ability to land on the Moon, it is
11 necessary to ensure the recognition and protection of
12 the Apollo 11 landing site and other historic landing
13 sites together with all the human effort and innova-
14 tion the sites represent.

15 (9) On July 20, 2011, NASA published the vol-
16 untary guidance entitled “NASA’s Recommendations
17 to Space-Faring Entities: How to Protect and Pre-
18 serve the Historic and Scientific Value of U.S. Gov-
19 ernment Lunar Artifacts”.

20 (10) In March 2018, the Office of Science and
21 Technology Policy published a report entitled “Pro-
22 tecting & Preserving Apollo Program Lunar Landing
23 Sites & Artifacts”.

24 (11) The Apollo 11 landing site and other simi-
25 lar historic landing sites in outer space merit legal

1 protection from inadvertent or intentional inter-
2 ference with such sites or the environment sur-
3 rounding such sites in order to prevent irremediable
4 loss of archaeological, anthropological, historical, sci-
5 entific, and engineering significance and value.

6 (12) Space-faring entities based outside the
7 United States have the capacity to land on the
8 Moon.

9 (13) The licensing requirements under this Act
10 are applicable only to United States-based activities
11 in outer space and therefore have limited efficacy for
12 protecting against intentional or inadvertent disturb-
13 ances of the Apollo 11 landing site and other similar
14 historic sites from space-faring entities based outside
15 the United States.

16 (14) A binding international agreement to pro-
17 tect the Apollo 11 landing site and other similar his-
18 toric sites by requiring adherence to the rec-
19 ommendations described in section 3(b) would be
20 sufficient to protect against intentional or inad-
21 vertent disturbances of the Apollo 11 landing site
22 and other similar historic sites.

23 (b) SENSE OF CONGRESS.—It is the sense of Con-
24 gress that the President should initiate a diplomatic initia-

1 tive to negotiate an international agreement described in
 2 subsection (a)(14).

3 **SEC. 3. LICENSING REQUIREMENTS CONCERNING PRESER-**
 4 **VATION OF HISTORIC LUNAR LANDING SITES.**

5 (a) IN GENERAL.—Beginning not later than 90 days
 6 after the date of the enactment of this Act, any Federal
 7 agency that issues a license to conduct an activity in outer
 8 space shall require each applicant for such a license—

9 (1) to agree to abide by the recommendations
 10 described in subsection (b); or

11 (2) in the case of an activity that requires a li-
 12 cense from more than one Federal agency, to certify
 13 (as described in paragraph (1) or (2), as applicable,
 14 of section 1746 of title 28, United States Code) that
 15 the applicant has submitted an application for a li-
 16 cense for such activity to another Federal agency
 17 that satisfies paragraph (1).

18 (b) RECOMMENDATIONS DESCRIBED.—The rec-
 19 ommendations described in this subsection are—

20 (1) “NASA’s Recommendations to Space-
 21 Faring Entities: How to Protect and Preserve the
 22 Historic and Scientific Value of U.S. Government
 23 Lunar Artifacts” issued by the National Aeronautics
 24 and Space Administration on July 20, 2011;

1 (2) the updates to “NASA’s Recommendations
 2 to Space-Faring Entities: How to Protect and Pre-
 3 serve the Historic and Scientific Value of U.S. Gov-
 4 ernment Lunar Artifacts” issued by the National
 5 Aeronautics and Space Administration on October
 6 28, 2011; and

7 (3) any successor heritage preservation rec-
 8 ommendations, guidelines, or principles relating to
 9 the protection and preservation of Government lunar
 10 artifacts issued by the National Aeronautics and
 11 Space Administration.

12 (c) EXEMPTIONS.—A Federal agency issuing a li-
 13 cense described in subsection (a) may, in consultation with
 14 the Administrator of the National Aeronautics and Space
 15 Administration, exempt specific activities of an applicant
 16 from the historic preservation agreement or certification
 17 under subsection (a) if such bona fide activities are deter-
 18 mined to have legitimate and significant historical, archeo-
 19 logical, anthropological, scientific, or engineering value.

20 (d) AUTHORITY TO ASSESS PENALTY FEES.—

21 (1) IN GENERAL.—A Federal agency issuing a
 22 license described in subsection (a) may assess a pen-
 23 alty fee on the holder of such license for conduct
 24 that violates one or more of terms of the license re-
 25 lating to the agreement under subsection (a)(1).

1 ~~(2) AMOUNT.—The penalty fee amount as-~~
 2 ~~sessed under paragraph (1) shall be—~~

3 ~~(A) commensurate with the nature and ex-~~
 4 ~~tent of the violation; and~~

5 ~~(B) sufficient to deter future violations.~~

6 ~~(c) ACTIVITY DEFINED.—In this section, the term~~
 7 ~~“activity” means an action or endeavor in outer space~~
 8 ~~that—~~

9 ~~(1) is intended to be lunar in nature, including~~
 10 ~~lunar orbit, landing, and impact; or~~

11 ~~(2) has a greater likelihood than not of becom-~~
 12 ~~ing lunar in nature, including unintentional orbit~~
 13 ~~and impact.~~

14 **SECTION 1. SHORT TITLE.**

15 *This Act may be cited as the “One Small Step to Pro-*
 16 *tect Human Heritage in Space Act”.*

17 **SEC. 2. FINDINGS; SENSE OF CONGRESS.**

18 ~~(a) FINDINGS.—Congress makes the following findings:~~

19 ~~(1) On July 16, 1969, the Apollo 11 spacecraft~~
 20 ~~launched from the John F. Kennedy Space Center~~
 21 ~~carrying Neil A. Armstrong, Edwin E. “Buzz”~~
 22 ~~Aldrin, Jr., and Michael Collins.~~

23 ~~(2) July 20, 2019, will mark the 50th anniver-~~
 24 ~~sary of the date on which the Apollo 11 spacecraft~~
 25 ~~landed on the Moon and Neil Armstrong and Buzz~~

1 *Aldrin became the first humans to set foot on a celes-*
 2 *tial body off the Earth.*

3 *(3) The landing of the Apollo 11 spacecraft and*
 4 *humanity's first off-world footprints are achievements*
 5 *unparalleled in history, a direct product of the work*
 6 *and perseverance of the more than 400,000 individ-*
 7 *uals who contributed to the development of the Apollo*
 8 *missions on the shoulders of centuries of science and*
 9 *engineering pioneers from all corners of the world.*

10 *(4) Among the thousands of individuals who*
 11 *have contributed to the achievements of the National*
 12 *Aeronautics and Space Administration (in this sec-*
 13 *tion referred to as "NASA") are African-American*
 14 *women such as Katherine Johnson, Dorothy Vaughn,*
 15 *Mary Jackson, and Dr. Christine Darden, who made*
 16 *critical contributions to NASA space programs. Kath-*
 17 *erine Johnson worked at NASA for 35 years and cal-*
 18 *culated the trajectory of the Apollo 11 landing and*
 19 *the trajectories for the spaceflights of astronauts Alan*
 20 *Shepard and John Glenn. Katherine Johnson, to-*
 21 *gether with many other individuals the work of whom*
 22 *often went unacknowledged, helped broaden the scope*
 23 *of space travel and charted new frontiers for human-*
 24 *ity's exploration of space.*

1 (5) *The landing of the Apollo 11 spacecraft was*
2 *made on behalf of all humankind, and Neil Arm-*
3 *strong and Buzz Aldrin were accompanied by mes-*
4 *sages of peace from the leaders of more than 70 coun-*
5 *tries.*

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7 *spacecraft, the robotic spacecraft that preceded the*
8 *Apollo 11 mission, and the crewed and robotic space-*
9 *craft that followed, are of outstanding universal value*
10 *to humanity.*

11 (7) *Such landing sites—*

12 (A) *are the first archaeological sites with*
13 *human activity that are not on Earth;*

14 (B) *provide evidence of the first achieve-*
15 *ments of humankind in the realm of space travel*
16 *and exploration; and*

17 (C) *contain artifacts and other evidence of*
18 *human exploration activities that remain a po-*
19 *tential source of cultural, historical, archae-*
20 *ological, anthropological, scientific, and engi-*
21 *neering knowledge.*

22 (8) *On July 20, 2011, NASA published the vol-*
23 *untary guidance entitled “NASA’s Recommendations*
24 *to Space-Faring Entities: How to Protect and Pre-*

1 *serve the Historic and Scientific Value of U.S. Gov-*
2 *ernment Lunar Artifacts”.*

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4 *Technology Policy published a report entitled “Pro-*
5 *tecting & Preserving Apollo Program Lunar Landing*
6 *Sites & Artifacts”.*

7 *(10) Space-faring entities based outside the*
8 *United States have the capacity to land on the Moon.*

9 *(11) The licensing requirements under this Act*
10 *are applicable only to United States-based lunar ac-*
11 *tivities and therefore have limited efficacy for pro-*
12 *tecting the Apollo 11 landing site, other similar his-*
13 *toric sites, and lunar artifacts from disturbances*
14 *caused by space-faring entities based outside the*
15 *United States.*

16 *(b) SENSE OF CONGRESS.—It is the sense of Congress*
17 *that—*

18 *(1) as commercial enterprises and more countries*
19 *acquire the ability to land on the Moon, it is nec-*
20 *essary to ensure the recognition and protection of the*
21 *Apollo 11 landing site and other historic landing sites*
22 *in acknowledgment of the human effort and innova-*
23 *tion the sites represent;*

24 *(2) the Apollo 11 landing site, other similar his-*
25 *toric landing sites, lunar artifacts, and the environ-*

1 *ment surrounding such sites and artifacts merit legal*
 2 *protection from disturbance to prevent irremediable*
 3 *loss of sites and artifacts that are of archeological, an-*
 4 *thropological, historical, scientific, and engineering*
 5 *significance and value; and*

6 *(3) the President should initiate a diplomatic*
 7 *initiative to negotiate an international agreement to*
 8 *protect the Apollo 11 landing site, other similar his-*
 9 *toric sites, and lunar artifacts by requiring adherence*
 10 *to the recommendations described in section 3(b),*
 11 *which would be sufficient to protect against disturb-*
 12 *ances of such sites and artifacts.*

13 **SEC. 3. LICENSING REQUIREMENTS CONCERNING PRESER-**
 14 **VATION OF HISTORIC LUNAR LANDING SITES.**

15 *(a) IN GENERAL.—Not later than 90 days after the*
 16 *date of the enactment of this Act, any Federal agency that*
 17 *issues a license to conduct a lunar activity shall require*
 18 *each applicant for such a license—*

19 *(1) to agree to abide by the recommendations de-*
 20 *scribed in subsection (b); or*

21 *(2) in the case of a lunar activity that requires*
 22 *a license from more than one Federal agency, to cer-*
 23 *tify under penalty of perjury as provided in para-*
 24 *graph (1) or (2), as applicable, of section 1746 of title*
 25 *28, United States Code, that the applicant has sub-*

1 mitted an application for a license for such activity
 2 to another Federal agency that satisfies paragraph
 3 (1).

4 (b) *RECOMMENDATIONS DESCRIBED.*—The rec-
 5 ommendations described in this subsection are—

6 (1) “NASA’s *Recommendations to Space-Faring*
 7 *Entities: How to Protect and Preserve the Historic*
 8 *and Scientific Value of U.S. Government Lunar Arti-*
 9 *facts*” issued by the National Aeronautics and Space
 10 Administration on July 20, 2011, and updated on
 11 October 28, 2011; and

12 (2) any successor heritage preservation rec-
 13 ommendations, guidelines, or principles relating to
 14 the protection and preservation of Government lunar
 15 artifacts issued by the National Aeronautics and
 16 Space Administration.

17 (c) *EXEMPTIONS.*—A Federal agency issuing a license
 18 described in subsection (a) may, in consultation with the
 19 Administrator of the National Aeronautics and Space Ad-
 20 ministration, exempt specific lunar activities of an appli-
 21 cant from the historic preservation agreement or certifi-
 22 cation under subsection (a) if such bona fide activities are
 23 determined to have legitimate and significant historical, ar-
 24 cheological, anthropological, scientific, or engineering value.

25 (d) *AUTHORITY TO ASSESS PENALTY FEES.*—

1 (1) *IN GENERAL.*—*A Federal agency issuing a li-*
 2 *cence described in subsection (a) may assess a penalty*
 3 *fee on the holder of such license for conduct that vio-*
 4 *lates one or more terms of the license relating to the*
 5 *agreement under subsection (a)(1).*

6 (2) *AMOUNT.*—*The penalty fee amount assessed*
 7 *under paragraph (1) shall be—*

8 *(A) commensurate with the nature and ex-*
 9 *tent of the violation; and*

10 *(B) sufficient to deter future violations.*

11 (e) *LUNAR ACTIVITY DEFINED.*—*In this section, the*
 12 *term “lunar activity” means an action or endeavor in space*
 13 *that—*

14 (1) *is intended to be lunar in nature, including*
 15 *lunar orbit, landing, and impact; or*

16 (2) *has a greater likelihood than not of becoming*
 17 *lunar in nature, including unintentional orbit and*
 18 *impact.*

Amend the title so as to read: “A bill to require any Federal agency that issues licenses to conduct lunar activities to include in the requirements for such licenses an agreement relating to the preservation and protection of the Apollo 11 landing site, and for other purposes.”.

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To require any Federal agency that issues licenses to conduct activities in outer space to include in the requirements for such licenses an agreement relating to the preservation and protection of the Apollo 11 landing site, and for other purposes.

JULY 16, 2019

Reported with an amendment and an amendment to the title