S. 09

To amend Title 51 of the United States Code.

IN THE SENATE OF THE UNITED STATES DECEMBER 28, 2020

Mr. LOULOU, (for himself)

A BILL

To amend Title 51 of the United States Code.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I — SPECIFICATIONS

SECTION 101. SHORT TITLE

(a) SHORT TITLE — This Act may be cited as the "Title 51 Amendments Act".

SECTION 102. DEFINITIONS

- (a) DEFINITIONS For the purposes of this Act
 - (i) ADMINISTRATOR The Administrator of NASA, appointed by the President and confirmed by the Senate.
 - (ii) ADMINISTRATION The National Aeronautics and Space Agency.

SECTION 103. SEVERABILITY

(a) SEVERABILITY — Should any provision of this Act be deemed invalid or unconstitutional for any reason in a court with relevant jurisdiction, the rest of the Act, and the application of the remaining provisions, shall not be affected.

TITLE II — AMENDMENTS

SECTION 201. FURTHER APPLICATION OF SECTION 503 OF THE INTERPLANETARY HORIZONS ACT

(a) AMENDMENT — 51 USC §20112 is amended by appending below Point (b)(2) —

"(3) SPACE DEBRIS DEORBIT TECHNOLOGIES

The Administration shall, to the extent of appropriated funds, initiate, support, and carry out such research, development, demonstration, and other related activities in ground propulsion technologies as are provided for in Section 503 of the Interplanetary Horizons Act."

(b) ADDITION — In Title 51, Subtitle II, Chapter 201, Subchapter II, insert —

"

§20118 - International Space Debris Collaboration

- (a) IN GENERAL The Administration, pursuant to §20115 of this Title, may and is recommended to engage in one or more programs of international collaboration with the purpose to
 - (i) Limit space debris.
 - (ii) Deorbit space debris.
 - (iii) Analyse space debris factors in space.
 - (iv) Create degradable space debris.
- (b) TREATIES The Administration, pursuant to §20115 of this Title, may participate in the peaceful application of agreements made by the President with the advice and consent of the Senate relating to aforementioned matters within this Section.

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SECTION 202. FURTHER APPLICATION OF SECTION 202 OF THE INTERPLANETARY HORIZONS ACT

- (a) IN GENERAL Title 51 is amended to change the end date for reports and activities pertaining to the International Space Station to be in accordance with Section 202 of the Interplanetary Horizons Act.
- (b) AMENDMENT 51 USC §50111(c)(2), notwithstanding any Subpoints is amended by striking all occurrences of "2023" and inserting in lieu "2025"

(c) SUBSECTION I AMENDMENT — 51 USC §50111(c)(2)(I), notwithstanding any Subpoints, is amended by inserting between "2024" and "2028" — "2025"

SECTION 203. AMENDMENTS TO THE PROCUREMENT OF PRIVATE SPACE TRANSPORTATION SERVICES; SECTION 50131

- (a) IN GENERAL Title 51 is amended to remove the exception from procurement of commercial vehicles if the Space Transportation System is available due to the retirement of the Space Transportation System.
- (b) STS REPEAL 51 USC §50131(b)(1) and 51 USC §50131(b)(7) are stricken and all provisions are renumbered accordingly.

SECTION 204. REPORT FOR UPCOMING RETIREMENTS OF PRIVATE SPACE TRANSPORTATION SERVICES

- (a) IN GENERAL Title 51 is amended to add a report on the preferred Space Transportation Services of the Administration and possible replacements for them when retiring.
- (b) ADDITION In Title 51, Subtitle V, Chapter 501, Subchapter III, insert —

§50135 - International Space Debris Collaboration

(a) IN GENERAL — The Administrator shall, no longer than 180 days after the enactment of the act, provide a detailed report to the appropriate committees of Congress, and the Senate and the House of Representatives of the United States, a report comprising of the most regularly used Space Transportation Services of the Administration and additionally their most optimal use relating to vehicular orbit, weight, transfers, and orientation, as well as a statement regarding potential alternatives if they were to be retired.

SECTION 205. REPEAL OF WEAPONRY AS MEANS FOR SPACE TRANSPORTATION SERVICES

(a) REPEAL — 51 USC §50134 is repealed.

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SECTION 206. REPEALING THE COMMERCIAL SPACE ACHIEVEMENT AWARD

(a) REPEAL — 51 USC §50506 is repealed.

SECTION 207. ADAPTING REENTRY CANCELLATIONS TO NOT BE DETRIMENTAL TO THE ENVIRONMENT OR CREW

- (a) IN GENERAL Title 51 is amended to amend and append the procedure for reentry into the atmosphere and the possibility for its cancellation.
- (b) REPEAL 51 USC §50909(a) is amended by striking "or reentry site, or reentry of a reentry vehicle" and "or reentry".
- (c) AMENDMENT 51 USC §2 is amended by renaming Subsection (b) Subsection (e) and appending below Subsection (a) —

"(b) CANCELLATION OF UNCREWED REENTRY

The Secretary of Transportation may prohibit or suspend the reentry of an uncrewed vehicle for the reasons of the public health and safety, the safety of property, or a national security or foreign policy interest of the United States, provided it has not deorbited to an extent greater than 75% of its periapsis and given that no part of its current orbit falls below 50 miles.

(c) ADAPTATION OF CANCELLATION

Should any vehicle fall below such limits as were described in Subsection (b), it shall be required by the Secretary of Transportation to communicate with the agency, company, or persons with control over the reentry and flight path and processes, to find a solution to such problem, and it shall consist of one of the following —

- (i) The destruction of the vehicle during reentry by means of weaponry.
- (ii) The placement of a vehicle using remaining fuel into an interim reentry orbit, which shall have a periapsis not inferior to 75 miles.
- (iii) The alteration of the orbit of the vehicle to provide for a different reentry path.

(d) CANCELLATION OF CREWED REENTRY

The Secretary of Transportation may prohibit or suspend the reentry of a crewed vehicle for the reasons of the public health and safety, the safety of property, or a national security or foreign policy interest of the United States, given that no crewmembers shall be harmed."

SECTION 208. FURTHER BANNING OBSTRUSIVE ADVERTISEMENT IN SPACE

- (a) AMENDMENT 51 USC §50902(12) is amended by striking "without" and inserting in lieu "with or without"
- (b) APPENDMENT 51 USC §50902(12) is amended by appending after "telescope" —

 "with a magnification size smaller or equal to 250 times"

SECTION 209. SLS COMMERCIAL PAYLOADS DELAY

(a) AMENDMENT — 51 USC §70103 is amended by appending below Point (b) —

"(c) SUNRISE PROVISION

The provisions laid out within this act shall not apply until 5 years after the first launch of the Space Launch System."

SECTION 210. REQUIRING SEMI-PERMANENT HABITATION IN A FUTURE LUNAR OUTPOST

(a) APPENDMENT — 51 USC §70505(a) is amended by appending after "outpost to be" — "permanently"

SECTION 211. NAMING THE SECOND LUNAR OUTPOST AFTER SCOTT KELLY

(a) APPENDMENT — 51 USC §70505(b) is amended by appending — "The United States portion of the second human-tended outpost established on the surface of the Moon shall be designated the "Scott Kelly Lunar Outpost"."

SECTION 212. REQUIRING SEMI-PERMANENT HABITATION IN A FUTURE LUNAR OUTPOST

(a) APPENDMENT — 51 USC §70901(a) is amended by appending after "civil space" —

", martian, lunar, or other planetary"

SECTION 213. REPEAL OF DE FACTO VOIDED PROVISIONS

(b) REPEAL — 51 USC §70907 is repealed.

TITLE III — FINAL PROVISIONS

SECTION 301. CHARLES E. BOLDEN SPACE AWARD

- (a) ESTABLISHMENT There is established a "Charles E. Bolden Youth Space Award. The award shall consist of a medal, which shall be of such design and materials and bear such inscriptions as determined by the Administrator.
- (b) CRITERIA The Administrator shall periodically make awards under this section to individuals that in the opinion of the Secretary of Commerce best meet either Point (ii) or (iii) as well as meet Point (i)
 - (i) The awardee is under the age of thirty.
 - (ii) The awardee has greatly contributed to innovation in scientific space exploration.
 - (iii) The awardee has locally developed technologies which could serve as innovation for scientific space exploration.
- (c) LIMITATIONS No awardee, once awarded, may receive the award a second time.

SECTION 302. ENACTMENT

(a) ENACTMENT — The provisions of this Act shall come into force on January 15th, 2021.