

114TH CONGRESS  
2D SESSION

# H. R. 6076

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IN THE SENATE OF THE UNITED STATES

DECEMBER 8, 2016

Received

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## AN ACT

To require the Administrator of the National Aeronautics and Space Administration to establish a program for the medical monitoring, diagnosis, and treatment of astronauts, 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 “To Research, Evaluate,  
3 Assess, and Treat Astronauts Act” or the “TREAT Astro-  
4 nauts Act”.

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

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

8           (1) Human space exploration can pose signifi-  
9 cant challenges and is full of substantial risk, which  
10 has ultimately claimed the lives of 24 National Aero-  
11 nautics and Space Administration astronauts serving  
12 in the line of duty.

13           (2) As United States government astronauts  
14 participate in long-duration and exploration  
15 spaceflight missions they may experience increased  
16 health risks, such as vision impairment, bone  
17 demineralization, and behavioral health and perform-  
18 ance risks, and may be exposed to galactic cosmic  
19 radiation. Exposure to high levels of radiation and  
20 microgravity can result in acute and long-term  
21 health consequences that can increase the risk of  
22 cancer and tissue degeneration and have potential  
23 effects on the musculoskeletal system, central nerv-  
24 ous system, cardiovascular system, immune function,  
25 and vision.

1           (3) To advance the goal of long-duration and  
2           exploration spaceflight missions, United States gov-  
3           ernment astronaut Scott Kelly participated in a 1-  
4           year twins study in space while his identical twin  
5           brother, former United States government astronaut  
6           Mark Kelly, acted as a human control specimen on  
7           Earth, providing an understanding of the physical,  
8           behavioral, microbiological, and molecular reaction of  
9           the human body to an extended period of time in  
10          space.

11          (4) Since the Administration currently provides  
12          medical monitoring, diagnosis, and treatment for  
13          United States government astronauts during their  
14          active employment, given the unknown long-term  
15          health consequences of long-duration space explo-  
16          ration, the Administration has requested statutory  
17          authority from Congress to provide medical moni-  
18          toring, diagnosis, and treatment to former United  
19          States government astronauts for psychological and  
20          medical conditions associated with human space  
21          flight.

22          (b) SENSE OF CONGRESS.—It is the sense of Con-  
23          gress that—

24                (1) the United States should continue to seek  
25                the unknown and lead the world in space exploration

1 and scientific discovery as the Administration pre-  
2 pares for long-duration and exploration spaceflight  
3 in deep space and an eventual mission to Mars;

4 (2) data relating to the health of astronauts will  
5 become increasingly valuable to improving our un-  
6 derstanding of many diseases humans face on Earth;

7 (3) the Administration should provide the type  
8 of monitoring, diagnosis, and treatment described in  
9 subsection (a) only for conditions the Administration  
10 considers unique to the training or exposure to the  
11 spaceflight environment of United States govern-  
12 ment astronauts and should not require any former  
13 United States government astronauts to participate  
14 in the Administration’s monitoring;

15 (4) such monitoring, diagnosis, and treatment  
16 should not replace a former United States govern-  
17 ment astronaut’s private health insurance;

18 (5) expanded data acquired from such moni-  
19 toring, diagnosis, and treatment should be used to  
20 tailor treatment, inform the requirements for new  
21 spaceflight medical hardware, and develop controls  
22 in order to prevent disease occurrence in the astro-  
23 naut corps; and

24 (6) the 340-day space mission of Scott Kelly  
25 aboard the ISS—

1 (A) was pivotal for the goal of the United  
2 States for humans to explore deep space and  
3 Mars as the mission generated new insight into  
4 how the human body adjusts to weightlessness,  
5 isolation, radiation, and the stress of long-dura-  
6 tion space flight; and

7 (B) will help support the physical and  
8 mental well-being of astronauts during longer  
9 space exploration missions in the future.

10 **SEC. 3. MEDICAL MONITORING AND RESEARCH RELATING**  
11 **TO HUMAN SPACE FLIGHT.**

12 (a) IN GENERAL.—Subchapter III of chapter 201 of  
13 title 51, United States Code, is amended by adding at the  
14 end the following:

15 **“§ 20148. Medical monitoring and research relating to**  
16 **human space flight**

17 “(a) IN GENERAL.—Notwithstanding any other pro-  
18 vision of law, the Administrator may provide for the med-  
19 ical monitoring and diagnosis of a former United States  
20 government astronaut or a former payload specialist for  
21 conditions that the Administrator considers potentially as-  
22 sociated with human space flight, and may provide for the  
23 treatment of a former United States government astro-  
24 naut or a former payload specialist for conditions that the  
25 Administrator considers associated with human space

1 flight, including scientific and medical tests for psycho-  
2 logical and medical conditions.

3 “(b) REQUIREMENTS.—

4 “(1) NO COST SHARING.—The medical moni-  
5 toring, diagnosis, or treatment described in sub-  
6 section (a) shall be provided without any deductible,  
7 copayment, or other cost sharing obligation.

8 “(2) ACCESS TO LOCAL SERVICES.—The med-  
9 ical monitoring, diagnosis, and treatment described  
10 in subsection (a) may be provided by a local health  
11 care provider if it is unadvisable due to the health  
12 of the applicable former United States government  
13 astronaut or former payload specialist for that  
14 former United States government astronaut or  
15 former payload specialist to travel to the Lyndon B.  
16 Johnson Space Center, as determined by the Admin-  
17 istrator.

18 “(3) SECONDARY PAYMENT.—Payment or reim-  
19 bursement for the medical monitoring, diagnosis, or  
20 treatment described in subsection (a) shall be sec-  
21 ondary to any obligation of the United States gov-  
22 ernment or any third party under any other provi-  
23 sion of law or contractual agreement to pay for or  
24 provide such medical monitoring, diagnosis, or treat-  
25 ment. Any costs for items and services that may be

1 provided by the Administrator for medical moni-  
2 toring, diagnosis, or treatment under subsection (a)  
3 that are not paid for or provided under such other  
4 provision of law or contractual agreement, due to the  
5 application of deductibles, copayments, coinsurance,  
6 other cost sharing, or otherwise, are reimbursable by  
7 the Administrator on behalf of the former United  
8 States government astronaut or former payload spe-  
9 cialist involved to the extent such items or services  
10 are authorized to be provided by the Administrator  
11 for such medical monitoring, diagnosis, or treatment  
12 under subsection (a).

13 “(4) **CONDITIONAL PAYMENT.**—The Adminis-  
14 trator may provide for conditional payments for or  
15 provide medical monitoring, diagnosis, or treatment  
16 described in subsection (a) that is obligated to be  
17 paid for or provided by the United States or any  
18 third party under any other provision of law or con-  
19 tractual agreement to pay for or provide such med-  
20 ical monitoring, diagnosis, or treatment if—

21 “(A) payment for (or the provision of)  
22 such medical monitoring, diagnosis, or treat-  
23 ment services has not been made (or provided)  
24 or cannot reasonably be expected to be made

1 (or provided) promptly by the United States or  
2 such third party, respectively; and

3 “(B) such payment (or such provision of  
4 services) by the Administrator is conditioned on  
5 reimbursement by the United States or such  
6 third party, respectively, for such medical moni-  
7 toring, diagnosis, or treatment.

8 “(c) EXCLUSIONS.—The Administrator may not—

9 “(1) provide for medical monitoring or diag-  
10 nosis of a former United States government astro-  
11 naut or former payload specialist under subsection  
12 (a) for any psychological or medical condition that  
13 is not potentially associated with human space flight;

14 “(2) provide for treatment of a former United  
15 States government astronaut or former payload spe-  
16 cialist under subsection (a) for any psychological or  
17 medical condition that is not associated with human  
18 space flight; or

19 “(3) require a former United States govern-  
20 ment astronaut or former payload specialist to par-  
21 ticipate in the medical monitoring, diagnosis, or  
22 treatment authorized under subsection (a).

23 “(d) PRIVACY.—Consistent with applicable provisions  
24 of Federal law relating to privacy, the Administrator shall



1 protect the privacy of all medical records generated under  
2 subsection (a) and accessible to the Administration.

3 “(e) REGULATIONS.—The Administrator shall pro-  
4 mulgate such regulations as are necessary to carry out this  
5 section.

6 “(f) DEFINITION OF UNITED STATES GOVERNMENT  
7 ASTRONAUT.—In this section, the term ‘United States  
8 government astronaut’ has the meaning given the term  
9 ‘government astronaut’ in section 50902, except it does  
10 not include an individual who is an international partner  
11 astronaut.

12 “(g) DATA USE AND DISCLOSURE.—The Adminis-  
13 trator may use or disclose data acquired in the course of  
14 medical monitoring, diagnosis, or treatment of a former  
15 United States government astronaut or a former payload  
16 specialist under subsection (a), in accordance with sub-  
17 section (d). Former United States government astronaut  
18 or former payload specialist participation in medical moni-  
19 toring, diagnosis, or treatment under subsection (a) shall  
20 constitute consent for the Administrator to use or disclose  
21 such data.”.

22 (b) CLERICAL AMENDMENT.—The table of contents  
23 for chapter 201 of title 51, United States Code is amended  
24 by inserting after the item relating to section 20147 the  
25 following:

“20148. Medical monitoring and research relating to human space flight”.

1 (c) ANNUAL REPORTS.—

2 (1) IN GENERAL.—Each fiscal year, not later  
3 than the date of submission of the President’s an-  
4 nual budget request for that fiscal year under sec-  
5 tion 1105 of title 31, United States Code, the Ad-  
6 ministrator of the National Aeronautics and Space  
7 Administration shall publish a report, in accordance  
8 with applicable Federal privacy laws, on the activi-  
9 ties of the National Aeronautics and Space Adminis-  
10 tration under section 20148 of title 51, United  
11 States Code, as added by subsection (a).

12 (2) CONTENTS.—Each report under paragraph  
13 (1) shall include a detailed cost accounting of the  
14 Administration’s activities under such section 20148  
15 of title 51, United States Code, and a 5-year budget  
16 estimate.

17 (3) SUBMISSION TO CONGRESS.—The Adminis-  
18 trator shall submit to the appropriate committees of  
19 Congress each report under paragraph (1) not later  
20 than the date of submission of the President’s an-  
21 nual budget request for that fiscal year under sec-  
22 tion 1105 of title 31, United States Code.

23 (d) COST ESTIMATE.—

24 (1) REQUIREMENT.—Not later than 90 days  
25 after the date of enactment of this Act, the Adminis-

1       trator of the National Aeronautics and Space Ad-  
2       ministration shall enter into an arrangement with an  
3       independent external organization to undertake an  
4       independent cost estimate of the cost to the National  
5       Aeronautics and Space Administration and the Fed-  
6       eral Government to implement and administer the  
7       activities of the National Aeronautics and Space Ad-  
8       ministration under section 20148 of title 51, United  
9       States Code, as added by subsection (a). The inde-  
10      pendent external organization may not be an entity  
11      of the National Aeronautics and Space Administra-  
12      tion, such as the Office of Safety and Mission Assur-  
13      ance.

14               (2) SUBMITTAL TO CONGRESS.—Not later than  
15      1 year after the date of the enactment of this Act,  
16      the Administrator shall submit the independent cost  
17      estimate undertaken pursuant to paragraph (1) to  
18      the Committee on Science, Space, and Technology of  
19      the House of Representatives and the Committee on  
20      Commerce, Science, and Transportation of the Sen-  
21      ate.

22               (e) PRIVACY STUDY.—

23               (1) STUDY.—The Administrator of the National  
24      Aeronautics and Space Administration shall carry  
25      out a study on any potential privacy or legal issues

1 related to the possible sharing beyond the Federal  
2 Government of data acquired under the activities of  
3 the National Aeronautics and Space Administration  
4 under section 20148 of title 51, United States Code,  
5 as added by subsection (a).

6 (2) REPORT.—Not later than 270 days after  
7 the date of the enactment of this Act, the Adminis-  
8 trator shall submit to the Committee on Science,  
9 Space, and Technology of the House of Representa-  
10 tives and the Committee on Commerce, Science, and  
11 Transportation of the Senate a report containing the  
12 results of the study carried out under paragraph (1).

13 (f) INSPECTOR GENERAL AUDIT.—The Inspector  
14 General of the National Aeronautics and Space Adminis-  
15 tration shall periodically audit or review, as the Inspector  
16 General considers necessary to prevent waste, fraud, and  
17 abuse, the activities of the National Aeronautics and  
18 Space Administration under section 20148 of title 51,  
19 United States Code, as added by subsection (a).

Passed the House of Representatives December 7,  
2016.

Attest:

KAREN L. HAAS,

*Clerk.*