

116TH CONGRESS  
2D SESSION

# S. 4043

To require the Secretary of Defense to develop a comprehensive database and repository on military aviators and conduct a study on such aviators to determine the incidence of cancer diagnosis and mortality among such aviators, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JUNE 23, 2020

Mrs. FEINSTEIN (for herself, Mr. CORNYN, Ms. CORTEZ MASTO, Mr. BLUMENTHAL, Mr. MARKEY, and Ms. ROSEN) introduced the following bill; which was read twice and referred to the Committee on Armed Services

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## A BILL

To require the Secretary of Defense to develop a comprehensive database and repository on military aviators and conduct a study on such aviators to determine the incidence of cancer diagnosis and mortality among such aviators, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Military Aviators Can-  
5 cer Incidence Study Act”.

1 **SEC. 2. DATABASE ON MILITARY AVIATORS AND STUDY ON**  
2 **THE INCIDENCE OF CANCER DIAGNOSIS AND**  
3 **MORTALITY AMONG MILITARY AVIATORS.**

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

6 (1) It has been reported that the prevalence of  
7 cancer is particularly high among military aviators,  
8 particularly among fighter pilots in the Air Force,  
9 Navy, and Marine Corps.

10 (2) There have been several alarming clusters  
11 of cancer diagnoses at military installations, includ-  
12 ing at Naval Air Weapons Station China Lake in  
13 California and Seymour Johnson Air Force Base in  
14 North Carolina.

15 (3) Four commanding officers who served at  
16 Naval Air Weapons Station China Lake have died of  
17 cancer. Each officer had completed thousands of  
18 flight hours in advanced jets.

19 (4) According to a study by the Air Force in  
20 2008 titled “Cancer in Fighters”, six pilots and  
21 weapons systems officers for the F-15E Strike  
22 Eagle at Seymour Johnson Air Force Base, aged 33  
23 to 43, were diagnosed with forms of urogenital can-  
24 cers between 2002 and 2005. Each officer had com-  
25 pleted at least 2,100 flight hours.

1           (5) A study by the Air Force in 2010 reported  
2           on a cluster of seven members of the Air Force Spe-  
3           cial Operations Command diagnosed with brain can-  
4           cer among crew members of the C-130 between  
5           2006 and 2009. The individuals affected were three  
6           C-130 pilots, two flight engineers, one loadmaster,  
7           and one navigator assigned to different installations  
8           around the world. Overall, brain cancer affects ap-  
9           proximately 6.5 out of 100,000 people in the United  
10          States annually.

11          (6) There has been no comprehensive study  
12          conducted of cancer rates among military aviators.

13          (7) One challenge of extracting findings from  
14          previous studies by the Navy or the Air Force on  
15          cancer rates is that each study focused on pilots who  
16          are active duty members of the Armed Forces and  
17          did not include the medical records of former pilots  
18          who are veterans, which is the population in which  
19          cancer is surfacing.

20          (8) Members of the Armed Forces who serve  
21          full military careers are not likely to be counted in  
22          data captured by the Department of Veterans Af-  
23          fairs. Members who serve 20 years or more are eligi-  
24          ble for health care under the TRICARE program,  
25          which is managed by the Department of Defense.

1 Also, many members pursue private sector jobs after  
2 separating from the Armed Forces and receive  
3 health care outside of the Federal Government.  
4 Those factors have made it difficult to find statistics  
5 to back up the health issues that families of military  
6 aviators are experiencing.

7 (b) DATABASE.—

8 (1) IN GENERAL.—Not later than 60 days after  
9 the date of the enactment of this Act, the Secretary  
10 of Defense shall seek to enter into an agreement  
11 with the National Institutes of Health, the National  
12 Cancer Institute, and the Department of Veterans  
13 Affairs, under which the Secretary of Defense shall  
14 develop a comprehensive database and repository—

15 (A) identifying each military aviator; and

16 (B) documenting the cancers, date of diag-  
17 nosis, and mortality of all such military avi-  
18 ators.

19 (2) DATA.—The Secretary of Defense shall for-  
20 mat all data included in the database and repository  
21 under paragraph (1) in accordance with the Surveil-  
22 lance, Epidemiology, and End Results program of  
23 the National Cancer Institute, including by  
24 disaggregating such data by race, gender, and age.

25 (c) STUDY.—

1           (1) IN GENERAL.—The Secretary of Defense, in  
2 conjunction with the National Institutes of Health  
3 and the National Cancer Institute, shall conduct a  
4 study on cancer among military aviators in two  
5 phases as provided in this subsection.

6           (2) PHASE 1.—

7           (A) IN GENERAL.—Under the initial phase  
8 of the study conducted under paragraph (1),  
9 the Secretary of Defense shall determine if  
10 there is a higher incidence of cancers occurring  
11 for military aviators as compared to similar age  
12 groups in the general population through the  
13 use of the database of the Surveillance, Epide-  
14 miology, and End Results program of the Na-  
15 tional Cancer Institute.

16           (B) REPORT.—Not later than one year  
17 after the date on which the Secretary of De-  
18 fense enters into the agreement under sub-  
19 section (b)(1), the Secretary shall submit to the  
20 appropriate committees of Congress a report on  
21 the findings of the initial phase of the study  
22 under subparagraph (A).

23           (3) PHASE 2.—

24           (A) IN GENERAL.—If, pursuant to the ini-  
25 tial phase of the study under paragraph (2), the

1 Secretary concludes that there is an increased  
2 rate of cancers among military aviators, the  
3 Secretary shall conduct a second phase of the  
4 study under which the Secretary shall do the  
5 following:

6 (i) Identify the carcinogenic toxins or  
7 hazardous materials associated with mili-  
8 tary flight operations from shipboard or  
9 land bases or facilities, such as fuels,  
10 fumes, and other liquids.

11 (ii) Identify the operating environ-  
12 ments, including frequencies or electro-  
13 magnetic fields, where exposure to ionizing  
14 radiation (associated with high altitude  
15 flight) and nonionizing radiation (associ-  
16 ated with airborne, ground, and shipboard  
17 radars) occurred in which military aviators  
18 could have received increased radiation  
19 amounts.

20 (iii) Identify, for each military aviator,  
21 duty stations, dates of service, aircraft  
22 flown, and additional duties (such as  
23 Landing Safety Officer, Catapult and Ar-  
24 resting Gear Officer, Air Liaison Officer,  
25 or Tactical Air Control Party) that could

1           have increased the risk of cancer for such  
2           military aviator.

3           (iv) Determine locations where a mili-  
4           tary aviator served or additional duties of  
5           a military aviator that are associated with  
6           higher incidences of cancers.

7           (v) Identify potential exposures due to  
8           service in the Armed Forces that are not  
9           related to aviation, such as exposure to  
10          burn pits or toxins in contaminated water,  
11          embedded in the soil, or inside bases or  
12          housing.

13          (vi) Determine the appropriate age to  
14          begin screening military aviators for cancer  
15          based on race, gender, flying hours, Armed  
16          Force, type of aircraft, and mission.

17          (B) DATA.—The Secretary shall format all  
18          data included in the study conducted under this  
19          paragraph in accordance with the Surveillance,  
20          Epidemiology, and End Results program of the  
21          National Cancer Institute, including by  
22          disaggregating such data by race, gender, and  
23          age.

24          (C) REPORT.—Not later than one year  
25          after the submittal of the report under para-

1 graph (2)(B), if the Secretary conducts the sec-  
2 ond phase of the study under this paragraph,  
3 the Secretary shall submit to the appropriate  
4 committees of Congress a report on the findings  
5 of the study conducted under this paragraph.

6 (4) USE OF DATA FROM PREVIOUS STUDIES.—

7 In conducting the study under this subsection, the  
8 Secretary of Defense shall incorporate data from  
9 previous studies conducted by the Air Force, the  
10 Navy, or the Marine Corps that are relevant to the  
11 study under this subsection, including data from the  
12 comprehensive study conducted by the Air Force  
13 identifying each military aviator and documenting  
14 the cancers, dates of diagnoses, and mortality of  
15 each military aviator.

16 (d) DEFINITIONS.—In this section:

17 (1) APPROPRIATE COMMITTEE OF CONGRESS.—

18 The term “appropriate committees of Congress”  
19 means—

20 (A) the Committee on Armed Services and  
21 the Committee on Veterans’ Affairs of the Sen-  
22 ate; and

23 (B) the Committee on Armed Services and  
24 the Committee on Veterans’ Affairs of the  
25 House of Representatives.



1           (2) ARMED FORCES.—The term “Armed  
2 Forces”—

3           (A) has the meaning given the term  
4 “armed forces” in section 101 of title 10,  
5 United States Code; and

6           (B) includes the reserve components  
7 named in section 10101 of such title.

8           (3) MILITARY AVIATOR.—The term “military  
9 aviator”—

10           (A) means an aviator who served in the  
11 Armed Forces on or after February 28, 1961;  
12 and

13           (B) includes any air crew member of fixed-  
14 wing aircraft, including pilots, navigators,  
15 weapons systems operators, aircraft system op-  
16 erators, and any other crew member who regu-  
17 larly flies in an aircraft or is required to com-  
18 plete the mission of the aircraft.

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