Congress of the United States

Washington, DC 20515

July 18, 2024

The Honorable Llyod J. Austin III Secretary of Defense U.S. Department of Defense 1000 Defense Pentagon, Washington, DC 20301-1000

Dear Secretary Austin,

We write regarding concern for the safety of U.S. servicemembers when operating or during transport in the Bell Boeing V-22 Osprey. After grounding the aircraft for months, the Department of Defense (DoD) announced the resumption of flights in March 2024. We are deeply concerned by the decision to resume flying the aircraft when the Osprey's Joint Program Office has yet to verify "the ultimate root cause" of accidents that have killed or injured dozens of servicemembers.²

The V-22 Osprey has had a turbulent safety record. Osprey accidents have killed 64 servicemembers and injured 93 since its introduction in 2007.³ Those accidents included four separate crashes in the past two years killing a total of 20 servicemembers.⁴ In 2022, a V-22 crashed in Norway during an exercise killing four Marines, including Massachusetts native Captain Ross Reynolds. Most recently, a V-22 Osprey crashed off the coast of Yakushima Island in southwestern Japan during a training session last November, killing all eight airmen onboard, including our constituent, Staff Sergeant Jacob Galliher. The crash in Japan resulted in a grounding of the V-22 aircraft across the services.

¹ Breaking Defense, "V-22 Osprey operating with 'limited envelope,' required to stay near airfields," Aaron Mehta, May 15, 2024, https://breakingdefense.com/2024/05/v-22-osprey-operating-with-limited-envelope-required-to-stay-near-airfields/.

² Military.com, "After Deadly Crashes, New 'Leading Theory' on Osprey Issues Points to Sprag Clutches," Konstantin Toropin and Thomas Novelly, June 18, 2024, https://www.military.com/daily-news/2024/06/18/new-theory-osprey-issues-says-deadly-crashes-may-be-linked-out-of-phase-engagement.html.

³ Associated Press, "Ospreys face flight restrictions through 2025 due to crashes, military tells Congress," Tara Copp, June 12, 2024, https://apnews.com/article/osprey-crash-congress-hearing-pentagon-88ae73cb1b4d75eeacccf7ae76c28080.

⁴ *Id*.

⁵ Air Force Times, "Body of airman killed in Osprey crash in Japan returning home," The Associated Press, December 17, 2023, https://www.airforcetimes.com/news/your-air-force/2023/12/17/body-of-airman-killed-in-osprey-crash-in-japan-returning-home/.

⁶ AirForce Times, "Body of airman killed in Osprey crash in Japan returning home," The Associated Press, December 17, 2023, https://www.airforcetimes.com/news/your-air-force/2023/12/17/body-of-airman-killed-in-osprey-crash-in-japan-returning-home/.

⁷ AirForce Times, "Body of airman killed in Osprey crash in Japan returning home," The Associated Press, December 17, 2023, https://www.airforcetimes.com/news/your-air-force/2023/12/17/body-of-airman-killed-in-osprey-crash-in-japan-returning-home/.

In December 2023, we wrote a letter following up on this accident to ensure the aircraft remained grounded until it was deemed safe for servicemembers and questions about this accident were answered.⁸ While we appreciate the Department's February 26 response, we continue to be troubled by a lack of transparency from the Department, including failing to share information about previous safety concerns the Osprey's manufacturers shared with the Department.⁹

We supported the decision to ground the V-22 for the safety of servicemembers tasked with operating and utilizing the aircraft. However, we are concerned that the March 2024 decision to resume flights was premature: Admiral Carl Chebi from the U.S. Naval Air Systems Command revealed the aircraft has not been deemed entirely safe. Instead of keeping it parked, the services in May 2024 formally resumed flights, albeit with restrictions of the V-22's capabilities, limiting it to just 30 minutes of flight time per use and requirements of more frequent part replacements. Admiral Chebi told the U.S. House of Representatives Oversight and Accountability Subcommittee on National Security that he will not return the V-22 to "unrestricted flight operations until [he is] satisfied that [the command has] sufficiently addressed the issues that may affect the safety of the aircraft." He predicted a decision would not be made on its safety until mid-2025. Admiral Chebi also indicated that "Naval Air Systems Command is conducting a 'holistic' review meant to be a comprehensive look at training, maintenance and operations of the V-22 aircraft... [t]hat is expected to take another six to nine months to complete."

There appears to be a litany of causes of the V-22's problems that have yet to be resolved to ensure it is safe to fly. ¹⁵ Marine Corps analysis has indicated, and Admiral Chebi believes,

⁸ Office of Senator Ed Markey, "Senators Markey and Warren and Chairman Neal Call for Answers on Safety of V-22 Osprey Aircraft Following Death of Staff Sgt. Jacob Galliher," December 22, 2023, https://www.markey.senate.gov/news/press-releases/senators-markey-and-warren-and-chairman-neal-call-for-answers-on-safety-of-v-22-osprey-aircraft-following-death-of-staff-sgt-jacob-galliher.

⁹ Letter from Assistant Secretary of the Navy for Research, Development, and Acquisition Nickholas Guertin to Senator Elizabeth Warren, February 26, 2024, pp. 2-3 [On file with the Office of Senator Elizabeth Warren]. ¹⁰ U.S. House Committee on Oversight and Accountability Subcommittee on National Security, the Border, and Foreign Affairs, "Addressing Oversight and Safety Concerns in the Department of Defense's V-22 Osprey Program," at 14:55, https://oversight.house.gov/hearing/addressing-oversight-and-safety-concerns-in-the-department-of-defenses-v-22-osprey-program/.

¹¹ Breaking Defense, "V-22 Osprey operating with 'limited envelope,' required to stay near airfields," Aaron Mehta, May 15, 2024, https://breakingdefense.com/2024/05/v-22-osprey-operating-with-limited-envelope-required-to-stay-near-airfields/; Military.com, "After Deadly Crashes, New 'Leading Theory' on Osprey Issues Points to Sprag Clutches," Konstantin Toropin and Thomas Novelly, June 18, 2024,

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¹² U.S. House Committee on Oversight and Accountability Subcommittee on National Security, the Border, and Foreign Affairs, "Addressing Oversight and Safety Concerns in the Department of Defense's V-22 Osprey Program," at 14:55, https://oversight.house.gov/hearing/addressing-oversight-and-safety-concerns-in-the-department-of-defenses-v-22-osprey-program/.

¹³ *Id.*

¹⁴ Task & Purpose, "V-22 Osprey flights to stay limited until mid-2025," Nicholas Slayton, June 16, 2024, https://taskandpurpose.com/news/v-22-osprey-flights-to-stay-limited-until-mid-2025.

¹⁵ Military.com, "After Deadly Crashes, New 'Leading Theory' on Osprey Issues Points to Sprag Clutches," Konstantin Toropin and Thomas Novelly, June 18, 2024, https://www.military.com/daily-news/2024/06/18/new-theory-osprey-issues-says-deadly-crashes-may-be-linked-out-of-phase-engagement.html.

several accidents have been centered around the functioning of the clutch.¹⁶ The problem occurs when there is a hard clutch engagement (HCE), which occurs when the clutch incorrectly engages resulting in damage to key components and lurching the aircraft in one direction or another.¹⁷ Currently, the services are replacing the clutch component after a certain number of flight hours to prevent any wrong engagement due to faster-than-expected wear and tear during flight.¹⁸ The spokesman for the Osprey's joint program office reported that investigators' new leading explanation for the crash is "out of phase engagement" that happens when parts of the clutch engage non-uniformly causing "slipping and/or rapid disengagement and reengagement." This out of phase engagement creates a dangerous situation for the crew and passengers and risks damaging key aircrafts parts.

Concerns about high risk military aircraft mishap rates led Congress to create the National Commission on Military Aviation Safety in 2018.²⁰ The Commission's 2020 report found that "from 2013 to 2018, over 6,000 accidents killed 198 servicemembers, destroyed 157 aircraft, and cost \$9.4 billion."²¹ The Commission recommended the Pentagon create a joint safety council to address the dismal track record.²² The council, as recommended, would not only bring the military aviation safety standards up to commercial standards, but it would also signal that safety is a key part of the Pentagon's operations by developing and overseeing department-wide safety policies.²³

It remains unclear, however, how much impact this Council is having. Earlier this year the Army's aviation mishap rates were "more than double the highest rate of any fiscal year in more than a decade." An Air Force Times analysis found an increase in Class A and B incidents that included "a spike in maintenance-related incidents has cost the Air Force millions of dollars and

¹⁶ Military.com, "Marine Corps Widow Pushes Back After Claims Deadly Osprey Malfunction Is 99% Fixed," Konstantin Toropin and Thomas Novelly, July 28, 2023, https://www.military.com/daily-news/2023/07/28/marine-corps-widow-pushes-back-after-claims-deadly-osprey-malfunction-99-fixed.html; Task & Purpose, "V-22 Osprey flights to stay limited until mid-2025," Nicholas Slayton, June 16, 2024, https://taskandpurpose.com/news/v-22-osprey-flights-to-stay-limited-until-mid-2025/.

¹⁷ Marine Corps Times, "Clutch problem in Osprey led to death of 5 Marines in 2022, Corps says," Isrene Loewenson, July 21, 2023, https://www.marinecorpstimes.com/news/your-marine-corps/2023/07/21/clutch-problem-in-osprey-led-to-death-of-5-marines-in-2022-corps-says/.

¹⁸ Military.com, "After Deadly Crashes, New 'Leading Theory' on Osprey Issues Points to Sprag Clutches," Konstantin Toropin and Thomas Novelly, June 18, 2024, https://www.military.com/daily-news/2024/06/18/new-theory-osprey-issues-says-deadly-crashes-may-be-linked-out-of-phase-engagement.html; Associated Press, "Ospreys face flight restrictions through 2025 due to crashes, military tells Congress," Tara Copp, June 12, 2024, https://apnews.com/article/osprey-crash-congress-hearing-pentagon-88ae73cb1b4d75eeacccf7ae76c28080.

¹⁹ Military.com, "After Deadly Crashes, New 'Leading Theory' on Osprey Issues Points to Sprag Clutches," Konstantin Toropin and Thomas Novelly, June 18, 2024, https://www.military.com/daily-news/2024/06/18/new-theory-osprey-issues-says-deadly-crashes-may-be-linked-out-of-phase-engagement.html.

²⁰ U.S. Naval Institute, "Report of National Commission on Military Aviation Safety on Aviation Mishaps from 2013 to 2020," report, December 1, 2020, https://news.usni.org/2020/12/03/report-of-national-commission-on-military-aviation-safety-on-aviation-mishaps-from-2013-to-2020.

²¹ Project on Government Oversight, "Military Aviation Is in a Tailspin," Jason Paladino, December 17, 2020, https://www.pogo.org/analysis/military-aviation-is-in-a-tailspin.
https://www.pogo.org/analysis/military-aviation-is-in-a-tailspin.

²³ *Id*.

²⁴ Defense News, "US Army faces uphill battle to fix aviation mishap crisis," Jen Judson, April 23, 2024, https://www.defensenews.com/training-sim/2024/04/23/us-army-faces-uphill-battle-to-fix-aviation-mishap-crisis/.

—increasingly often—injured airmen on the job as well."²⁵ In addition to aviation accidents, the most recent Joint Safety Council report to Congress stated that "[b]y the end of [fiscal year] 2023, the Department reported 40 fatalities and 33 Class 'A' mishaps that are above historical five-year averages."²⁶

The Department of Defense should be making servicemembers' safety a top priority. That means grounding the V-22 until the root cause of the aircraft's many accidents is identified and permanent fixes are put into place. Allowing the Department to take a "crawl-walk-run" approach, as Assistant Secretary of the Navy for Research, Development and Acquisition Nickolas Guertin called it, to bring the V-22 back into service is a misguided approach to safety. Given the leading theory on the V-22's problems, a material adjustment to the aircraft is needed and not flight limitations. To better understand the failures, the timeline, and what solutions are possible, we request answers to the following questions by August 1, 2024.

- 1. Will the report and conclusions of the V-22 Naval Air Command's holistic review, and any other review of the V-22 currently being conducted, be made public?
- 2. Has Bell Textron Inc. and Boeing Co. provided the necessary documentation needed to conduct a full review of the V-22 safety problems?
- 3. Please provide a list of all V-22 Osprey safety concerns Bell Helicopter and Boeing Defense, Space, & Security have shared with the Department over the past five years.
- 4. The Navy's February 26 response also said that Japan Ground Self Defense Force V-22s have not experienced similar safety issues as the U.S. fleet.²⁸ Japan placed restrictions on the V-22 after the November 2023 accident that lasted until March 2024. What procedures and policies did Japan put in place to ensure V-22 security after the November accident?
 - a. How were Japan's restrictions different from the United States' restrictions around the V-22 operations?
 - b. If the restrictions were different, why were they different?
- 5. How is the Joint Safety Council participating or conducting its own V-22 review?
- 6. Does DoD contract for any aircraft that are comparable to the V-22 that complete the same missions?

²⁵ Air Force Times, "Air Force's costliest accidents, maintainer injuries rose in 2023," Courtney Mabeus-Brown, April 8, 2024, https://www.airforcetimes.com/news/your-air-force/2024/04/03/air-forces-costliest-accidents-maintainer-injuries-rose-in-2023/.

²⁶ Joint Safety Council Chairman's Annual Statement of Compliance and Semi-Annual Report to Congress, December 2023, p. 4 [On file with the Office of Senator Elizabeth Warren].

²⁷ Breaking Defense, "V-22 Osprey operating with 'limited envelope,' required to stay near airfields," Aaron Mehta, May 15, 2024, https://breakingdefense.com/2024/05/v-22-osprey-operating-with-limited-envelope-required-to-stay-near-airfields/.

²⁸ Letter from Assistant Secretary of the Navy for Research, Development, and Acquisition Nickholas Guertin to Senator Elizabeth Warren, February 26, 2024, p. 2 [On file with the Office of Senator Elizabeth Warren].

- a. Is the DoD considering using comparable aircraft instead of the V-22 until its successor is operational?
- 7. Do any large-scale DoD strategies currently rely on the V-22?
- 8. Does DoD have evidence to believe that the V-280, the planned V-22 successor, would be a better version of the tilt-rotor concept that could bring the needed safety and versatility the services need?
 - a. When does DoD believe it will get the first V-280s?
- 9. The National Commission on Military Aviation Safety issued a report on aviation mishaps in the military from 2013 to 2020 with detailed breakouts by class and aircraft type. To assess the impacts of the commission and the subsequent Joint Safety Council, please provide the information detailed below for the past 5 years.
 - a. Mishaps, fatalities, destroyed aircraft, and estimated costs across DoD for Class A, Class B, and Class C of mishap classifications.
 - b. Breakdown of Class A mishap rates between DoD, Army, Air Force, Navy, Marine Corps.
 - c. Breakdown of the number of Class A mishaps by the top 10 most used aircraft types and rate of Class A mishaps per 100k hours of flight
 - d. Number of V-22 Class A mishaps and rate of Class A mishaps per 100k hours of flight
 - e. Flight, flight-related, and ground mishaps by class type.

Sincerely,

Elizabeth Warren

United States Senator

Richard E. Neal

Member of Congress

Edward J. <mark>M</mark>arkey

United States Senator