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**HEALTH CONCERNS OF VETERANS AND SERVICEMEMBERS DEPLOYED TO
KARSHI-KHANABAD AIR BASE IN UZBEKISTAN BETWEEN 2001 AND 2005**

**BEFORE THE HOUSE COMMITTEE ON OVERSIGHT AND REFORM
SUBCOMMITTEE ON NATIONAL SECURITY**

November 18, 2020

Good Morning Chairman Lynch, Ranking Member Grothman, and Members of the Subcommittee. The Department of Defense (DoD) welcomes this opportunity to discuss the health concerns of Veterans and Service members who deployed to Karshi-Khanabad (K2) Air Base in Uzbekistan between 2001 and 2005 and the concerns identified by this subcommittee about possible exposure to potentially harmful toxins, chemicals, and other environmental hazards during their deployments.

The DoD is committed to the health and well-being of Service members and Veterans and is dedicated to working with our government and academic partners to continue to investigate potential adverse health effects associated with hazardous exposures during deployment to the K2 Air Base. The Department is aware of reports from former Service members and their families attributing adverse health consequences to exposures occurring during their deployment to K2.

In response to inquiries from this Committee earlier this year, the Department has provided extensive documentation concerning the environmental assessments of K2 (three separate detailed assessments were conducted), the summarized health hazard information provided to individuals who had served at K2, and an exploratory study conducted by researchers at the Army Public Health Center examining differences in health outcomes between those deployed to K2 and a comparison group of individuals who had deployed to Korea during the same timeframe. An initial list of 10,323 individuals identified by the Department as having deployed to K2, by beneficiary category and branch of service, was provided to the VA.

The K2 air base was used by the U.S. military for air transit, force staging, and a logistics hub providing support to Operation Enduring Freedom from late 2001 through June 2005. The site was initially developed and used by the Soviet military in the late 1970s to support operations in Afghanistan. The Soviets maintained a fleet of various bomber aircraft at K2, which required an underground fuel distribution system. Construction of military equipment, including missiles, in the Soviet era entailed use of asbestos and low-level radioactive-depleted uranium (DU).

The initial site assessment conducted by the U.S. military in 2001 found underground jet-fuel plumes, surface dirt contaminated with asbestos, and trace

amounts of depleted uranium. Periodic high levels of dust and other particulate matter in the air attributed to seasonal dust storms were also noted.

The assessment of these hazards noted that the measured fuel vapor levels were below the minimum risk levels established by the Agency for Toxic Substances and Disease Registry; asbestos was not detected in the air and therefore not likely inhaled by Service members; the levels of radiation found were not substantial enough to penetrate the skin; and radioactive dust was not detected, so there was no inhalation hazard. The source of the radiation was determined to be residue from non-U.S. (likely Soviet) depleted uranium remaining after fires in ammunition storage bunkers. These bunkers housed anti-aircraft missiles containing depleted uranium during the Soviet occupation of the K2 base. DU found was not in the living and working areas of K2 and was outside the berm of the main base living and normal operations area. The particulate matter (dust) was not expected to cause long term health effects due to the relatively brief exposure in this otherwise healthy, young population. Despite the conclusion that health effects from these hazards were unlikely, remediation efforts were undertaken to reduce risk further. These efforts primarily consisted of covering contaminated areas with clean soil and declaring them “off limits.”

In 2014, the United States Special Operations Command requested a study by the Army Public Health Command in order to investigate environmental exposure concerns identified by individual Service members. This study compared long-term health outcomes of those deployed to K2 to U.S. military personnel stationed in South Korea during the period 2001-2011. Because no specific health outcomes were specified, the study is properly considered “hypothesis generating” (assessing whether there are associations between exposures and outcomes within this dataset) rather than “hypothesis testing” (assessing a predefined relationship between the exposure from a K2 deployment and a specific outcome). The results of this study showed that those deployed to K2 were statistically significantly less likely than the comparison group to have the following: an adverse circulatory outcome (e.g., heart attack or stroke), adverse respiratory outcome (e.g., asthma), obstructive lung disease, and mental health disorders. While cancer of all causes showed a non-statistically significant elevation in K2 deployers, two specific cancer types (malignant melanoma and neoplasm of lymphatic and hemopoietic tissue) were significantly higher in the K2 group. The researcher cautioned these results were preliminary and further work was necessary to validate these findings. They based this assessment on the exploratory nature of the study and small number of cases with these diagnoses in the K2 group (8 melanoma and 7 lymphatic neoplasms among the 7,005 individuals studied). The South Korea-deployed comparison group of 28,024 Service members had similarly small numbers (8 melanoma and 6 lymphatic neoplasms). The small number of cases limited the ability to conclude a causal association existed.

The DoD has a long-established working relationship with the Department of Veterans Affairs (VA) for deployment health issues. The DoD-VA Deployment Health Working Group meets monthly to discuss items of mutual interest to the Departments, and to facilitate collaboration and cooperation on research and understanding of health

issues. In response to continuing inquiries about K2, the VA's Post Deployment Health Services Epidemiology Program designed a much larger and more comprehensive study to evaluate the potential associations of K2 deployment on health. The DoD and the DoD-VA Deployment Health Working Group worked jointly to provide VA a complete list of individuals who deployed to K2, as well as other background material and environmental assessments. Progress to date includes: verification of dates of service of individuals who deployed to K2, identification of those individuals who receive their healthcare through either the VA or the DoD, specific outcomes (diagnoses) to be analyzed, the overall design of the study, and a method for selecting appropriate controls (individuals who did not deploy to K2). In addition to the original group of 10,323 individuals identified as having deployed to K2, our work with the VA led to the identification of an additional 5,444 individuals who had deployed to Uzbekistan during the timeframe K2 was in operation. Because K2 was the only operating base in Uzbekistan at the time, these individuals are assumed to have deployed to K2. The VA and DoD agreed to include these additional 5,444 individuals in our ongoing research.

The DoD has provided subject matter expertise, assistance with data collection, and analytic support, and is committed to assist the VA in any way possible to facilitate the completion of this study.

The DoD acknowledges that Congress, Veterans, their families, and the Nation are awaiting completion of this study. However, accurate, complete, and reproducible results require a deliberate methodical approach achieved through the scientific method. It will likely require extensive data collection, analysis, review, and writing before a final report is completed. The report must be able to withstand the scrutiny of the rigorous peer-review process. The goal is to have results published in a peer-reviewed medical journal within the next 18 months.

Thank you to the Chairman, Ranking Member, and the entire subcommittee for your continued support to our Service members and our veterans. This concludes my testimony, and I look forward to answering your questions.