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January 27, 2025

Sixty-ninth Legislative Assembly of North Dakota State Capitol 600 East Boulevard Avenue Bismarck, ND 58505

Subject: Letter of Support for House Bill No. 1612, North Dakota Center for Aerospace Medicine

House Bill No. 1612 would establish the North Dakota Center for Aerospace Medicine and provide an appropriation to establish and operate it. I write in support of creating this center and funding it as a great step to aid current and prospective pilots and air traffic controllers in getting needed healthcare, navigating Federal Aviation Administration (FAA) policies on medical certification, and building further on the University of North Dakota's leadership in the aviation industry.

I am an aviation safety professional in business aviation as well as a certificated pilot and flight instructor who is familiar with the complexities of the FAA medical certification process and policies for pilots and air traffic controllers. I graduated from the University of North Dakota in 2004 with a Bachelor of Business Administration degree in Aviation Management. While a student at UND, I joined Delta Tau Delta fraternity, of which John Hauser and Sam McGuire were members. Tragically, John and Sam died by suicide in 2021 and 2023, respectively. John felt he couldn't get the mental healthcare he needed without jeopardizing his aviation medical certificate. This is a challenge felt by many pilots in the industry for mental health and other medical conditions, which often leads to healthcare avoidant behavior and conditions that may worsen when left untreated.

Fitness for Duty is a broad aviation safety concept that encompasses periodic medical certification by the regulatory authority as well as an individual assessment at the time of the duty period to ensure that the pilot or air traffic controller is able to safely perform their aviation-related duties. Medical and mental health conditions, some medications, and even normal life stressors can all be things that may necessitate standing down for a period of time to ensure the pilot or air traffic controller is able to safely perform their duties. While aspects of fitness for duty are taught during pilot or air traffic controller training, medical histories that existed before the pilot or air traffic controller began training, or medical or mental health conditions that developed long after the individual became a pilot or controller, oftentimes complicate aeromedical certification of the individual.

The North Dakota Center for Aerospace Medicine would provide a respected educational voice to the industry that acknowledges pilots and air traffic controllers' concerns about

seeking healthcare and maintaining their FAA medical certification and help build trust between pilots and air traffic controllers and the FAA. It would also provide access to the medical professionals with specific FAA authorizations to conduct the exams and testing, and support for the administrative processing with the FAA that adds to the complexity of medical certification by Aviation Medical Examiners (AMEs).

The FAA Airmen Certification System indicates there are over 4,000 active pilots in North Dakota¹, many of whom could benefit from the resources of this center. Currently there are 14 FAA AMEs in North Dakota, and some are close to retirement. Only 2 of the AMEs in North Dakota are authorized to perform the exams of pilots and air traffic controllers that are taking antidepressant medications or have a history of alcohol or substance abuse or dependence. Further, the center would provide access to FAA-authorized aviation neuropsychology and psychology personnel that are required as part of the FAA's certification processes for a number of conditions.

Regionally, the FAA Airmen Certification System indicates there are over 24,000 pilots in North Dakota, Minnesota, and South Dakota combined², and the presence of this center is likely to benefit pilots and air traffic controllers from outside of North Dakota too. When we consider the research possibilities that exist with the FAA, Department of Defense, and Space Medicine, among other organizations, the positive impact of the center is likely to extend to many more of the nation's 800,000+ pilots.

To put the pilot statistics into the context of mental health, national statistics from the U.S. Department of Health and Human Services show that about half of all people will be diagnosed with a mental health disorder at some point in their lifetime³, and 1 in 5 adults will face a mental health challenge in any given year⁴. I've spoken with a number of aviation mental health providers who confirm that rates of mental health challenges are consistent between aviation personnel and the overall population.

The U.S. Centers for Disease Control and Prevention (CDC) data show the following 5-year trends related to mental health conditions and mental healthcare for adults aged 18 and over. In nearly all of these metrics, the trendline shows an increase in the condition or treatment for it.

¹ FAA Airmen Registry Report: https://registry.faa.gov/activeairmen/M70_Active_Pilots_Summary.pdf#page=5

² FAA Airmen Registry Report: https://registry.faa.gov/activeairmen/M70_Active_Pilots_Summary.pdf#page=5

³ U.S. Department of Health and Human Services: https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/mental-health-and-mental-disorders

⁴ National Alliance on Mental Illness: https://www.nami.org/about-mental-illness/mental-health-by-the-numbers/

	professional in	had feelings of depression ⁶	prescription	nervousness, or anxiety ⁸	Taking prescription medication for feelings of worry, nervousness, or anxiety ⁹
2019	9.5%	4.7%	9.8%	11.1%	11.7%
2020	10.1%	4.4%	10.3%	11.2%	12.1%
2021	11.1%	4.5%	10.6%	11.3%	12.9%
2022	12.6%	5.1%	11.5%	12.7%	14.1%
2023	13.4%	4.9%	11.4%	12.5%	14.3%

Similarly, considering that today's youth are tomorrow's pilots and air traffic controllers (and incoming UND aviation students), CDC data show higher percentages of mental health symptoms and treatment by youth aged 12-17 years than adults. These individuals are more likely to need the center's expertise as FAA medical certification policies require disclosure of conditions that have "ever in your life occurred" and, at a minimum, visits to medical and mental health providers that have occurred within the last 3 years.

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⁵ National Center for Health Statistics. Percentage of mental health counseling in the past 12 months for adults aged 18 and over, United States, 2019—2023. National Health Interview Survey. Generated interactively: Jan 27 2025 from https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html

⁶ National Center for Health Statistics. Percentage of regularly had feelings of depression for adults aged 18 and over, United States, 2019—2023. National Health Interview Survey. Generated interactively: Jan 27 2025 from https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html

⁷ National Center for Health Statistics. Percentage of taking prescription medication for feelings of depression for adults aged 18 and over, United States, 2019—2023. National Health Interview Survey. Generated interactively: Jan 27 2025 from https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html

⁸ National Center for Health Statistics. Percentage of regularly had feelings of worry, nervousness, or anxiety for adults aged 18 and over, United States, 2019—2023. National Health Interview Survey. Generated interactively: Jan 27 2025 from https://wwwn.cdc.gov/NHISDataQueryTool/SHS adult/index.html

⁹ National Center for Health Statistics. Percentage of taking prescription medication for feelings of worry, nervousness, or anxiety for adults aged 18 and over, United States, 2019—2023. National Health Interview Survey. Generated interactively: Jan 27 2025 from

	Any mental health therapy	Symptoms of Depression	of Anxiety	Any prescription medication for mental health
July 2021-December 2022	19.7% ¹⁰	17.4% ¹¹	21.2% ¹²	13.7% ¹³
July 2021-December 2023	19.8% ¹⁴	17.8% ¹⁵	19.7% ¹⁶	15.6% ¹⁷

Current perceptions and realities of FAA aeromedical policy keep a considerable number of aviation professionals from seeking treatment for their mental health. A 2022 study found that 56% of pilots reported a history of healthcare avoidance behavior due to fear for losing their medical certificate¹⁸. That same study indicated that 26% of pilots misrepresented or withheld information on a written healthcare questionnaire for fear of medical certificate loss. If medical certification is to be an effective screening tool for ensuring aviation safety, it requires honesty, trust, and workable policies for both the

https://wwwndev.cdc.gov/NHISDataQueryTool/NHIS_TEEN/index.html

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¹⁵ National Center for Health Statistics. Percentage of teens aged 12-17 years with symptoms of depression during the past 2 weeks, United States, July 2021-December 2023. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

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¹⁰ National Center for Health Statistics. Percentage of teens aged 12-17 years who received any mental health therapy in the past 12 months, United States, July 2021-December 2022. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

¹¹ National Center for Health Statistics. Percentage of teens aged 12-17 years with symptoms of depression during the past 2 weeks, United States, July 2021-December 2022. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

¹² National Center for Health Statistics. Percentage of teens aged 12-17 years with symptoms of anxiety during the past 2 weeks, United States, July 2021-December 2022. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

¹³ National Center for Health Statistics. Percentage of teens aged 12-17 years who took prescription medication to help with emotions, concentration, behavior or mental health in the past 12 months, United States, July 2021-December 2022. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from https://wwwndev.cdc.gov/NHISDataQueryTool/NHIS_TEEN/index.html

¹⁴ National Center for Health Statistics. Percentage of teens aged 12-17 years who received any mental health therapy in the past 12 months, United States, July 2021-December 2023. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

¹⁶ National Center for Health Statistics. Percentage of teens aged 12-17 years with symptoms of anxiety during the past 2 weeks, United States, July 2021-December 2023. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from

¹⁷ National Center for Health Statistics. Percentage of teens aged 12-17 years who took prescription medication to help with emotions, concentration, behavior or mental health in the past 12 months, United States, July 2021-December 2023. National Health Interview Survey—Teen. Generated interactively: Jan 27 2025 from https://wwwndev.cdc.gov/NHISDataQueryTool/NHIS_TEEN/index.html

¹⁸ Hoffman WR, Aden J, Barbera RD, Mayes R, Willis A, Patel P, Tvaryanas A. Healthcare Avoidance in Aircraft Pilots Due to Concern for Aeromedical Certificate Loss: A Survey of 3765 Pilots. J Occup Environ Med. 2022 Apr 1;64(4):e245-e248. doi: 10.1097/JOM.000000000002519. Epub 2022 Feb 15. PMID: 35166258.

regulator and the regulated. UND's aviation and medical expertise, research capabilities, and leadership are well matched to the creation of this center for aerospace medicine to better understand the implications of current policies and provide the data to substantiate changes in the interest of safety.

In summary, the establishment of and funding for the North Dakota center for aerospace medicine is time and money well spent by the North Dakota Legislature to support the aviation community in North Dakota and across the country, build on the well-established aviation legacy at UND, and help shape a healthier, safer path for the future.

Sincerely,

Mark E. Larsen, CAM