TESTIMONY OF PAUL SNYDER DIRECTOR OF UAS OPERATIONS FOR THE JOHN D. ODEGARD SCHOOL OF AEROSPACE SCIENCES LEAD – AUTONOMOUS PLATFORMS, RESEARCH INSTITUTE FOR AUTONOMOUS SYSTEMS

March 22, 2023

HOUSE BILL 1519

To Chair David Clemens and Members of the Senate Transportation Committee:

I am Paul Snyder, Director of the UAS Operations Program at the University of North Dakota John D. Odegard School of Aerospace Sciences and Lead for Autonomous Platforms at UND's Research Institute for Autonomous Systems (RIAS). I have had the privilege to be a part of the aviation community in North Dakota for over 30 years — crewed and uncrewed.

UND Aerospace's roots are in aviation education, research, and training. Starting in 1968 in crewed aviation, UND Aerospace has for over 20 years been leading in UAS Operations and Autonomous systems in North Dakota — first in research as a Center of Excellence for FAA Research and later in 2009 when UND became the first university in the United States to offer a four-year degree in UAS Operations.

UND Aerospace has consistently worked beside industry, government, and academia for the furtherance of the aviation industry and workforce development. UAS Operations and Autonomous Systems are a natural progression to meet the ever-present need to operate more effectively, efficiently, and safely within the National Airspace System as well as in other modes of transportation used by autonomous vehicles. UAS Operations will continue to converge with all aspects: Airport Operations and Management, Air Traffic Management, Commercial Operations as well as Space Operations. This will be done with the safety mindset developed through the many lessons learned in Aviation as we forge new pathways to transport passengers and cargo as well as provide various services to the public.

Today I write to give testimony in support of House Bill 1519, which provides commitment for the advancement of uncrewed aircraft systems, autonomous vehicles, and other autonomous technology. Providing resources for the

Department of Transportation, Department of Health and Human Services, Department of Career and Technical Education, Department of Agriculture, and the Industrial Commission, this bill recognizes and begins to address the profound impact UAS and Autonomous vehicles have, and will continue to have, on the North Dakota ecosystem.

It is also a natural progression from the educational and research initiatives in autonomy that have already been accomplished, as well as the many lessons learned, by institutions here in North Dakota.

My support is predicated on language in the bill that supports engagement with other North Dakota entities, such as UND, which can provide expertise, existing state equipment, and forward-thinking solutions to ensure the advancements of this technology is used to its' fullest extent and benefits these North Dakota entities long term.

As we have learned, the acquisition of UAS, autonomous vehicles and related autonomous technology must be paired with experience, proven methods, an understanding of system safety, and proper education/training. While I support this bill, I encourage continued efforts to build into the aviation foundation started by UND in 1968. Furthermore, while workforce development funds have been specifically allocated to the "northwest area of the state," I believe future funding should be expanded to include all regions of North Dakota.

I urge a DO PASS on this bill, and I thank you for this continued commitment to keeping North Dakota and North Dakota entities as leaders in UAS, autonomous vehicles, and related technology. We truly live in exciting times.

Sincerely,

Paul Snyder

Director of UAS Operations Program

John D. Odegard School of Aerospace Sciences – UND Aerospace

Lead - Autonomous Platforms

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