Testimony Opposing House Bill Number 1614 Limiting Driverless Truck Deployment in North Dakota

Mr. Chairman, Members of the Committee, and esteemed colleagues, thank you for the opportunity to provide testimony at this hearing.

My name is Maynard Factor, and I am the Vice President of Business Development for the Kratos Defense Unmanned Systems Division, a leader in providing driverless vehicle solutions for the US Department of Defense, allied nations, and global commercial markets.

Kratos deploys driverless trucks in a unique multi-vehicle platoon configuration, where a human-driven "Leader" truck transmits navigation data to a self-driving "Follower" truck, both equipped with Kratos' automated systems. This human-in-the-loop approach optimizes the performance of the driverless truck by allowing the human driver to adjust speed, gaps, and maneuvers in response to changing conditions. By pairing a human-driven Leader with a driverless Follower, we've created a flexible deployment model that prioritizes both safety and productivity. This deployment model also provides job security to maintain existing drivers to drive the Leader truck. It also offers significant opportunities for workforce transformation enabling drivers to transition into high-skill roles as system operators. This innovative approach has proven effective across multiple industries, providing real solutions to enhance supply chain reliability.

Our technology is already delivering results in North Dakota, with two active auto-platooning projects underway. I come before you today with firsthand experience, underscoring our commitment to advancing this technology safely and responsibly.

The first project currently underway in North Dakota is the Autonomous Truck Mounted Attenuator (ATMA), deployed in a platoon configuration with field-proven driverless technology to enhance work zone safety. A standard Truck Mounted Attenuator (TMA) truck is essentially a human-driven mobile crash barrier used to shield workers in highway maintenance zones. Currently, a human operator has to drive the TMA truck which puts them at risk of severe injury or death from collisions of errant vehicles, sometimes 80,000-pound tractor/trailers, entering the work zone. In 2022 alone, 96,000 work zone crashes occurred in the United States that resulted in multiple injuries and fatalities. By operating the TMA vehicle as an ATMA using driverless technology to remove the driver from the truck and assigning them to a different task in the work zone, we have effectively eliminated one of the most dangerous assignments in the work zone—driving a truck designed to be hit. However, Passing House Bill 1614 will halt the implementation of this life-saving innovation.

The second deployment, also in a platoon configuration, is underway in Wahpeton, North Dakota, in partnership with Minn-Dak Farmers Cooperative. Here, driverless trucks are used to haul Sugarbeets from satellite piling locations to the processing plant. This technology helps mitigate the impacts of the ongoing driver shortage, ensuring uninterrupted supply chain operations critical to food security and national security. The important work being conducted through this pilot will be halted if House Bill 1614 is passed. Both of these deployments showcase the practical, field-proven benefits of driverless truck technology addressing critical operational challenges faced in North Dakota

I believe it is critical for the committee to hear from those of us who are on the front lines of deploying this technology. The Kratos Defense deployment approach follows a "crawl, walk, run" methodology

to ensure that autonomous vehicles are tested and implemented in a controlled, progressive manner. This strategy ensures that we take the necessary time to work through any challenges and continuously improve safety standards before scaling up deployment efforts.

In addition to the internal rigor of Kratos technology and deployment validation methods, we also maintain a close working relationship with the North Dakota Department of Transportation (NDDOT), the North Dakota Highway Patrol, and other relevant roadway authorities. These agencies serve as an essential steering committee for our deployment efforts, providing valuable oversight and guidance. Through this partnership, we have provided complete transparency into our actions, offering full visibility into our intentions, safety cases, and the progress of our deployments. This collaborative effort ensures that every step we take aligns to the highest standards of safety, regulatory compliance, and public interest.

With that context in mind, I urge you to consider the significant, far-reaching benefits that driverless truck technology can bring to North Dakota, especially in the context of our rural communities, agricultural industry, and national security. As we stand on the edge of transformative technological innovation, I believe this bill could inadvertently harm our state's position as a leader in future-focused economic development. I will address several critical reasons why this legislation should not move forward.

1. **North Dakota's Competitive Position in Technology Development**
   North Dakota has an extraordinary opportunity to become a prime location for autonomous vehicle technology deployment. However, if this bill is passed, it will signal to technology companies, especially those working on autonomous trucking solutions, that North Dakota is not a forward-thinking state willing to embrace innovation. As a result, tech companies could take their investments and jobs elsewhere, leaving North Dakota behind in the race to lead the future of autonomous vehicle technology. Once this opportunity is missed, it may be nearly impossible to catch up with other states that are more progressive in supporting emerging technologies.

2. **Strengthening Economic Vitality in Rural and Agricultural Communities**
   The economy of North Dakota relies heavily on agriculture, including industries like Sugarbeet farming, which are particularly vulnerable to the impact of driver shortage the industry is currently facing. The impact of driver shortage is not just a minor inconvenience; it impacts business continuity, delays shipments, and reduces productivity. Driverless trucks can help alleviate these issues by ensuring the timely delivery of agricultural goods, stabilizing the supply chain, and strengthening the economic vitality of communities that rely on agriculture for their livelihood. To limit or delay this technology is to prolong the challenges our farmers face, affecting their profitability and sustainability.

3. **Supporting Rural Communities with Innovative Technology**
   Driverless truck technology offers an incredible opportunity to empower rural communities in North Dakota, where access to cutting-edge technology is often limited. The rural-urban divide in terms of technological advancement has been a longstanding issue, and North Dakota has the chance to become a leader in providing these communities with access to technological advancements that will improve their quality of life. By blocking the deployment of driverless trucks, we are inadvertently holding back the rural areas of North

Dakota from benefiting from the job creation, economic growth, and infrastructure enhancements that come with these advancements.

4. **Enhancing National and Food Security**
   The connection between supply chain security and national security is undeniable. As our country becomes increasingly dependent on global supply chains, the ability to move goods quickly, efficiently, and safely is paramount. The driver shortage is a direct threat to that security, and driverless trucking technology can help ensure the uninterrupted flow of goods, especially essential supplies. By embracing driverless technology, North Dakota can play a key role in fortifying the nation's supply chain resilience. In the same vein, food security is tied to the timely transportation of agricultural products, and the ability to deploy driverless trucks ensures that crops like Sugarbeets, grains, and other vital produce reach markets without delay.

5. **Workforce Development and Skills Enhancement**
   Driverless trucking is not about eliminating jobs; rather, it is about creating new opportunities for a workforce skilled in technology, robotics, and advanced manufacturing. The growth of autonomous vehicles will generate a demand for workers in roles such as vehicle maintenance, fleet management, technology development, and logistics optimization. Limiting the deployment of this technology prevents North Dakota from developing a highly skilled workforce that is well-equipped for the future. This also means fewer opportunities for workers in our state to gain the expertise necessary to participate in an increasingly tech-driven economy.

6. **Safety and Reducing Risks from Human Drivers**
   One of the most compelling reasons to support autonomous trucking is the potential for enhanced safety. Driver fatigue, traffic violations, and human impairments are persistent issues that contribute to accidents on our roads, particularly in the trucking industry. Driverless trucks can address these challenges by eliminating human error, which accounts for a large percentage of traffic accidents. The deployment of autonomous trucks could significantly reduce the number of fatalities and injuries caused by these factors, making our roads safer for everyone.

Conclusion

In conclusion, the potential benefits of driverless truck technology for North Dakota far outweigh the risks proposed by this bill. By passing House Bill 1614, we risk weakening the competitive edge of North Dakota, hindering economic growth, limiting technological innovation in rural areas, and threatening our national and food security. Instead, we should work toward embracing this technology, advancing workforce development, and continue positioning North Dakota as a leader in autonomous vehicle innovation. I urge you to consider these long-term benefits and reject this House Bill 1614, so that North Dakota can continue to thrive and lead in the future of transportation.

Thank you for your time and consideration.