



Kratos Defense Self-Driving Trucks are on the Road Across the United States, Increasing Worker Safety and Addressing Workforce Shortfalls

May 8, 2023

SAN DIEGO, May 08, 2023 (GLOBE NEWSWIRE) -- Kratos Defense & Security Solutions, Inc. (NASDAQ: KTOS) is a Technology Company in the Defense, National Security and Global Markets. Today, Kratos has multiple self-driving trucks deployed on the road across the United States supporting new deployment use cases and territories. Kratos deploys self-driving trucks to solve real-world workforce and safety issues of today burdening critical Transportation and Supply Chain operations. Since Kratos first adapted its U.S. Department of Defense (DOD) driverless technologies to commercial markets in 2014, Kratos has continually expanded its driverless solutions and applications to the overall driverless trucking industry.

The Kratos strategy for its commercial self-driving truck deployments has been methodically crafted in a progressive manner to capture a market comprised of millions of candidate vehicles. Starting with a driverless system design that is added to existing vehicles rather than only being available in newly purchased pre-configured vehicles, the Kratos technology can be applied to hundreds of millions of existing vehicles. This approach makes the application of driverless trucks achievable to effectively any municipality, organization, or company operating trucks today. Considering safety as the number one priority, Kratos has worked closely with highway authorities and stakeholders at the State and Federal level to coordinate the driverless technology implementation, define Operational Design Domains (ODD), and ensure regulatory and legislative compliance.

The Kratos systems are deployed in short-haul Leader Follower Platoons where a human-driven leader truck transmits navigation data to the driverless follower truck traveling closely behind. This short-haul deployment configuration provides a near-term driverless truck solution by avoiding the need to navigate the often complex multi-state legislative environments of long-haul operations. Kratos' deployment configuration also benefits from using human-in-the-loop decision making to address edge- and corner-case scenarios versus total reliance on new and largely unproven Artificial Intelligence (AI) and machine learning algorithms of independent Autonomous Trucking systems. This strategy has proven successful and is the key enabler for Kratos to deploy a range of self-driving trucks across the United States.

Steve Fendley, President of Kratos Unmanned Systems Division, said, "Our technology, approach, and cost level is unique and game changing. This sets us up with differentiators that can capture the existing truck/vehicle market rather than depend only on customers who can afford to buy new trucks / vehicles to achieve driverless capability. To this end, our market potential is tremendous and existing today. Couple that with the increasing driver shortage and the potential multiplies. Across the company, we're excited to watch our technology spread across the U.S. and to the rest of the world. Kratos' strategy and approach is to develop logical, practical, elegant, and affordable solutions to complex problems. The Kratos driverless truck systems epitomize our approach."

Kratos deployed its first commercial self-driving trucks to support Transportation Infrastructure maintenance for increasing work zone safety as the Autonomous Truck Mounted Attenuator (ATMA). The ATMA, developed in collaboration with multiple State Department of Transportation and Highway Patrol agencies, is a first-of-its kind automated maintenance truck operating in a Leader Follower Platoon with the driverless technology retrofit to existing fleet vehicles. The ATMA is deployed as a shadow vehicle replacing conventional human operated Truck Mounted Attenuator (TMA) vehicles used to protect workers and equipment ahead in mobile highway maintenance operations. Thousands of TMA trucks are deployed across the globe every day, and the drivers of these vehicles risk their lives daily as human-driven crash barriers protecting maintenance crews from an errant vehicle entering the work zone. To date, Kratos has deployed 12 ATMAs across the United States, as well as one in England, and the system has been recognized as a game-changing critical safety alternative to human drivers.



Kratos (Self-Driving) Autonomous Truck Mounted Attenuator vehicle operating on the road is deployed in several US States as well as in England

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/220b9e99-f37f-4215-8da7-d894c5538981>

Using driverless technology to eliminate this dangerous job, repurposing the former TMA driver, has also caught the attention of Federal highway authorities. The ATMA was recently selected by the U.S. Department of Transportation (DOT) Strengthening Mobility and Revolutionizing Transportation (SMART) grant program of the Bipartisan Infrastructure Law (BIL) initiated for advancing smart community technologies and systems to improve transportation efficiency and safety. This program will facilitate nationwide ATMA planning and scaled-up deployment coordination across the United States at a quicker pace.

Leveraging the success of the ATMA, Kratos has also retrofit driverless technology to Class 8 Semi-Tractor/Trailer trucks deployed in a Leader Follower Platoon using the self-driving solution to harden Supply Chain activity against impacts of the truck driver shortage burden. According to the American Trucking Association, currently there is a deficit of 80,000 available qualified truck drivers in the United States; this number is anticipated to rise to 160,000 by 2030. Addressing this issue, Kratos' driverless technology is strategically deployed to support integrated end-to-end supply chain activity achieving industry safety and operational goals. The first systems were deployed in North Dakota and Minnesota and accomplished several self-driving truck milestone achievements that included being the first:

- North Dakota Leader Follower Platoon
- Minnesota Leader Follower Platoon
- Northwest Passage deployment locations
- Agriculture hauling operations
- Renewable Energy hauling operations
- Winter weather deployments under extreme snow/ice/fog/cold temperature conditions
- Caged-flatbed trailers
- Tanker trailers
- 99,000-pound hauling weight (each truck with fully loaded trailer)



Kratos (Self-Driving) Tractor Trailer deployed to help solve the truck driver shortage challenge across the United States

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/fac02d3e-1157-4e83-8210-6562430ce559>

Maynard Factor, VP of Business Development for the Kratos Unmanned Systems Division, said, “Kratos self-driving truck solutions are industry game-changers addressing the issues burdening key Transportation and Supply Chain activities of today. Kratos is uniquely positioned as a developer of transformative systems, platforms, and products to adapt technology developed for military/defense applications into commercial markets. Leveraging field-proven pilotless/driverless, communications, command and control, and other advanced technologies developed across the Kratos organization enables our commercial driverless truck deployments to be safe, adaptable, and reliable in harsh environments previously not considered by other self-driving truck companies. Ensuring safety and business continuity are critical customer concerns and Kratos self-driving trucks are proving to be a viable solution for meeting these goals.”

The Kratos Leader Follower Platoon initially hit the road in Florida traveling several test route locations across US-90 and Interstate-10 coordinated with the Florida Department of Transportation and Highway Patrol agencies to ensure technology and regulatory compliance. Upon achieving several preliminary deployment objectives, the driverless trucks were then transported for actual deployment to North Dakota and Minnesota to support niche short-haul applications.

The first set of Leader Follower Platooning trucks were deployed in Wahpeton, North Dakota with Minn-Dak Farmers Cooperative (MDFC), one of America’s largest sugar beet shareholder/grower cooperatives. The trucks deployed from the MDFC facility with empty caged-flatbed trailers to a piling location approximately 30 miles away where harvested sugar beets were stored. Once at the location, leader and follower trucks were both loaded to approximately 99,000-pounds and navigated back to the MDFC facility where they were unloaded. Multiple runs were performed in varying extreme winter conditions traveling in hands-free driverless follower mode through the entire North Dakota route. The second set of Leader Follower Platooning trucks have been deployed for preliminary evaluation in Northern Minnesota. The trucks are connected to tanker trailers and are the first self-driving trucks to haul non-HAZMAT biodiesel in routes between plants performing various phases of the refining process. A third set of trucks will be deployed in the Ohio/Indiana region with a third-party logistics (3PL) organization to support various revenue-generating routes to be announced in a follow-on release.



Kratos (Self-Driving) 18-Wheeler supporting the Agriculture Industry to address driver shortage, even in inclement weather

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/edb9a218-888a-495c-8d55-087401248834>

About Kratos Defense & Security Solutions

Kratos Defense & Security Solutions, Inc. (NASDAQ: KTOS) is a technology company that develops and fields transformative, affordable systems, products, and solutions for United States National Security, our allies, and global commercial enterprises. At Kratos, Affordability is a Technology, and Kratos is changing the way breakthrough technology is rapidly brought to market – at a low cost – with actual products, systems, and technologies rather than slide decks or renderings. Through proven commercial and venture capital-backed approaches, including proactive, internally funded research and streamlined development processes, Kratos is focused on being First to Market with our solutions well in advance of the competition. Kratos is the recognized Technology Disruptor in our core market areas, including Space and Satellite Communications, Cyber Security and Warfare, Unmanned Systems, Rocket and Hypersonic Systems, Next-Generation Jet Engines and Propulsion Systems, Microwave Electronics, C5ISR, and Virtual and Augmented Reality Training Systems.

For more information, visit <http://www.KratosDefense.com>.

Notice Regarding Forward-Looking Statements

Certain statements in this press release may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are made on the basis of the current beliefs, expectations, and assumptions of the management of Kratos and are subject to significant risks and uncertainty. Investors are cautioned not to place undue reliance on any such forward-looking statements. All such forward-looking statements speak only as of the date they are made, and Kratos undertakes no obligation to update or revise these statements, whether as a result of new information, future events, or otherwise. Although Kratos believes that the expectations reflected in these forward-looking statements are reasonable, these statements involve many risks and uncertainties that may cause actual results to differ materially from what may be expressed or implied in these forward-looking statements. For a further discussion of risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of Kratos in general, see the risk disclosures in the Annual Report on Form 10-K of Kratos for the year ended December 25, 2022, and in subsequent reports on Forms 10-Q and 8-K and other filings made with the SEC by Kratos.

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Source: Kratos Defense & Security Solutions, Inc.

Photo 1



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Photo 2



Kratos (Self-Driving) Tractor Trailer deployed to help solve the truck driver shortage challenge across the United States

Photo 3



Kratos (Self-Driving) 18-Wheeler supporting the Agriculture Industry to address driver shortage; even in inclement weather