

PRESS RELEASE

Pfronstetten-Aichelau, March 28, 2023

Driving license with the help of the latest camera technology

A few years ago, Katja would never have dreamed that she would one day be able to sit in a driving school car and complete a driving course. Thanks to innovative camera technology and environment recognition, this is now possible.



Katja has a limited field of vision after a riding accident. With the help of state-of-the-art camera technology, she now has a comprehensive all-round view and a prerequisite for obtaining a driver's license. Photo: PARAVAN

"If it wasn't for my parents, I wouldn't be sitting here" says Katja, who has now successfully passed her driving test at the PARAVAN driving school in the Aichelau mobility park. Since a riding accident a good ten years ago, in which the 25-year-old suffered a brain hemorrhage, she has had a restricted field of vision on her left side. While she actually sees well with both eyes, it's just without the corner of her eye to the left. "At first, I really didn't think it was going to be anything," she says. But an innovative camera system - permanently installed in her future vehicle - equipped with integrated environment recognition, will compensate for this deficit in the future. "The technology compensates for what I can't see on the left."

The trip to the PARAVAN driving school and initial tests gave her hope that there were ways to pass the driving test with a vehicle customized for her. A traffic medical report confirmed that she was fit to drive. The following technical assessment by the TÜV expert supported the medical expert's findings. "Driving with impaired vision is not so easy," says the head of the PARAVAN driving school Ralf Buhmann. "In addition to the traffic medical report, a report from the ophthalmologist is often necessary. In the case of visual field restrictions, thanks to innovative camera systems, there are now good solutions to help those affected regain independent mobility."

A camera system with a monitor on the center console shows her exactly what is happening on the left side of her vehicle. Objects in motion are marked in different colors - depending on their distance. This allows Katja to gauge exactly how far away people or objects are from the vehicle.

PRESS RELEASE

"We're making friends"

"At first, I was a bit overwhelmed with all the technology," Katja reports about using the camera system during her first driving tests. The first driving tests were over the dirt roads around the PARAVAN mobility park. "It was the first time I'd ever been in a car," she says. "After all, it wasn't an option until then. But we're making friends." Initially, she tried to compensate for the deficit with body movements, similar to what she does when riding a bike. For currently, she uses an e-bike to get to work or to friends independently.

Next milestone driving test

In the meantime, routine is coming into the processes. She has now successfully mastered the driving course. "In the city, I have to concentrate super hard," reports the learner driver. "Traffic lights, signs, pedestrians, but I'm sure every novice driver feels that way." Then, after four weeks of practical driving training, the big moment arrived. "She has a good command of the vehicle," says driving instructor Hilsenbeck. "Now it's a matter of building up routines so that the procedures with the camera become second nature."

Having passed the driving test, it's now a matter of finding the ideal vehicle. Actually, she would have liked a Fiat 500, but it should be something safe, according to her parents' wishes "and it should also be chic," adds the project manager, who works at an advertising agency. After that, the vehicle still has to be equipped with the camera system prescribed for them and particularly large panoramic mirrors have to be fitted, similar to those on the driving school car. "I can't even realize yet how great it's going to be," she says happily.



Katja has successfully passed her practical driving test. A camera system helps her compensate for the deficits in her field of vision, Photo: PARAVAN



A high-resolution camera system positioned on the left side of the car provides a perfect all-round view of the left side of the vehicle and helps Katja achieve the mobility she had hoped for. Photo: PARAVAN

PRESS RELEASE



In her future car, too, a monitor with the necessary environment detection will be installed on the center console. The markings show Katja how far away people and objects are from the car, and whether they are moving. Photo: PARAVAN



After four weeks of driver training, she can now hold her driver's license in her hand. Photo: PARAVAN

Contact:

Anke Leuschke, Spokesperson, Paravan GmbH,
Tel.: +49 7388/ 99 95 81, E-Mail: anke.leuschke@paravan.de

About Paravan GmbH:

PARAVAN GmbH is the world market leader for highly individual vehicle solutions for the disabled. Around 180 employees develop and produce individually adapted automobile conversions, electric wheelchairs and even specially specialized driver training. PARAVAN pursues a holistic approach with its "one-stop concept". The technological highlight is Space Drive, an intelligent digital control system based on the drive-by-wire principle. Thanks to the active redundancy of the servo motors, it is completely fail-safe and the first to be approved for road use. With the help of this innovation, severely disabled people, some without arms or legs, can drive independently and safely. It is not possible for these drivers to simply intervene in the steering wheel. Worldwide, Space Drive has proven itself on over one billion road kilometers in the last 20 years and is used by numerous industrial customers for test vehicles in the field of autonomous driving. The system is available as a retrofit kit with an open interface for all known vehicle types. <http://www.paravan.com>