BETTER ENVIRONMENT DETECTION FOR MORE SAFETY

Helicopter pilots need the most accurate picture of their surroundings to take off and land safely in difficult conditions. Just like autonomous cars and trucks. The environment is already captured by a variety of systems, including LiDARs, radars, cameras, and AI-based maps. These systems are already on board many airborne and land vehicles. However, reliable and safe environmental sensing can only be achieved by intelligently linking all available information in real time. This is exactly what rule-based software from LAKE FUSION Technologies GmbH (LFT) does.

Focus on helicopters and commercial vehicles

LFT was founded in 2018 in Markdorf on Lake Constance (Baden-Württemberg) by former employees of the aviation group Airbus/Hensoldt. The three-member management team used their expertise, networks and experience to transfer the high safety standards of aviation to automated driving. This technology already enables Level IV autonomous driving. Commercial vehicles are also increasingly coming into focus: for example, autonomously flying multicopters for transporting the wounded in crisis areas, agricultural vehicles and industrial robots are conceivable. LFT is also offering obstacle warning systems for helicopters for the first time, which reliably detect high-voltage power lines or other small obstacles. This enables rescue helicopter missions in the most difficult visibility and terrain conditions, for example, where helicopters currently have to abort their mission or even remain on the ground.

Further fields of application

Other areas of application include automated environmental monitoring of large industrial plants and special applications for cranes and agricultural machinery. In the future, the equipment of ships on various bodies of water will enable anticipatory action through early detection of various objects.

The precise 3D measurement of the environment, the reliable detection of obstacles and conditions as a future technology will offer even more business opportunities for LFT in the near future. LFT's customers include a large number of major automotive manufacturers and suppliers, aviation equipment suppliers and companies from the security technology sector.

Located on four continents

Six years after its foundation, around 50 employees are currently working for LFT in Germany, the USA, Singapore and soon also Africa and Saudi Arabia. A further sales office for the Gulf region is due to open soon. With the sale of its software and development orders, LFT achieved a turnover of around EUR 4 million in 2023, and the trend is rising. In the meantime, well-known strategic investors have also recognized the value of the unique technology and have invested in LFT. These include the US-based LEE Holding as a seed investor, which owns the helicopter equipment supplier SES, the German technology group Rheinmetall and the former Daimler board member Dr. Eckhard Cordes as a well-known private investor.

LFT's goal is to continuously develop further fields of application for environment recognition on land, in the water and in the air.