



New Opportunities in Geodata Acquisition through Heavy-Duty-UAVs

Katharina Neuner, Christian Neuner, and Gerhard Neuner
twins.nrn OG, k.neuner@twins.co.at

The company twins.nrn OG is a manufacturer of UAVs for civil applications. The worldwide market for UAVs is reaching a peak at the moment, though currently UAVs are mainly used in field for image flights. As the demands from customer's sides get more and more complex and so does the sensor technology, every UAV manufacturer has to face the problem of developing a UAV for payloads beyond the common 3 to 5 kilograms. The twinMAX is an example for a heavy-payload UAV with a mission time of 20-30 minutes, a requested system which hasn't been on the market up to now. This system offers new opportunities for geodata collection through the assembly of new sensors.

Complex IR cameras help to gain information about unspoiled nature, pest infestation, agriculture and may also answer questions in the energy business. Sensors for measuring air pollutants, the configuration of a UAV with fire extinguishing devices and locating devices such as beacons is possible now and serves as a new tool for elegant, cost-efficient and environmental-friendly data collection.