

# Leading Civil UAV Pioneers Join Forces

Two pioneers of ultralight drones for civil use, senseFly (Switzerland) and Parrot (France), have joined forces to further develop their respective markets. Parrot has sold over 300,000 of its AR.drone quadcopters to the consumer market since its release in 2010, while the Swiss start-up senseFly has seen fast, global growth in demand for its fixed-wing drones for the mapping and GIS market.

senseFly already masters all the key technologies of its mapping solution: autopilot design, control & monitoring software, and hardware integration. Today, its complete solution includes the singlet CAM: ultralight flying drone equipped with a high-resolution camera and senseFly's proprietary autopilot that completely automates take-off, flight, image acquisition and landing, controlled by e-motion flight control and monitoring software and Postflight powered by Pix4D: Image reconstruction software capable of producing precise 2D and 3D maps.

This solution fills the gap between traditional terrestrial surveying and aircraft/satellite imagery. The use of conventional measuring tools operated by certified surveyors such as theodolites and laser scanners is time-consuming due to manual operations in the field and data processing. Standard aerial and satellite images are expensive, delayed, dependent on third-party availability and subject to cloud coverage.

Parrot will bring 5 million Swiss francs into senseFly. This strategic investment will give senseFly access to Parrot's industrial know-how, specialised UAV technology, and the cash to fund rapid growth and new product development. The senseFly office will remain in Ecublens, Switzerland, and its original management team will continue to lead the company. Parrot's investment enables senseFly to create dozens of new positions in the promising field of autonomous flying systems.

SenseFly was witnessing a revolution whereby flying drones are no longer exclusive to the military but are quickly spreading into the civilian world. In 2010, Parrot surprised competitors and fellow researchers alike when they hit the market with their iPhone-piloted quadcopter for filming and gaming. The same year, senseFly revolutionised the job of surveyors by providing fully autonomous flying cameras capable of producing precise 2D and 3D maps within minutes. Both companies are focused on developing very lightweight drones with the strong belief that this is critical to their use by the public at large, far beyond the military.

The professional market for ultralight civilian drones is expected to reach at least 1 billion USD per year by 2020. Among others, this demand will be driven by the need for geographical data exemplified by the growing use of geo-information systems (GIS) such as the ESRI software suite or Google Earth. GIS is a global market that reached 4.4 billion USD in 2010 with an annual sustained growth of more than 10.3%. The demand for GIS data is growing even faster with compound annual rates of 15.5% over the past eight years.