

## Swiss Post to resume drone flights for medical services

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Swiss Post and drone manufacturer Matternet are resuming flights for healthcare services in Zurich and Lugano. This follows the Swiss Transportation Safety Investigation Board's (STSB) announcement that the cause of the controlled emergency landing has been determined: a short circuit led to the incident. Safety is the top priority for all involved. The manufacturer has therefore made several modifications to the drones. The Federal Office of Civil Aviation has approved these alterations. Swiss Post is a pioneer in Switzerland for autonomous and commercial drones. The drones have so far successfully completed over 3,000 flights for healthcare services in Lugano, Berne and Zurich.

On 25 January, a drone that was carrying laboratory samples across Lake Zurich was forced to initiate a controlled emergency landing and landed on Lake Zurich. The Swiss **Transportation Safety Investigation Board** (STSB) has determined the cause of the incident. According to the STSB's final report, it is highly likely that a short circuit led to the emergency drone landing. The short circuit interrupted the power supply to the GPS. The drone's safety mechanisms worked flawlessly: as intended in such cases, the drone initiated the emergency landing itself. To do so, the drone stops its rotors and opens its parachute. The drone glides downwards, emitting a high-pitched whistling sound and using bright blinking lights to attract attention.

**New redundant power circuit installed** Following the incident, Swiss Post and Matternet chose to take the precautionary measure of grounding all drones until the cause had been determined. Swiss Post and Matternet will now resume flights for their customers in Zurich and Lugano from 15 April 2019. Matternet has made a number of modifications to the drones. These alterations will prevent a technical defect from occurring in the same place. In the new V9 drone model, the GPS, compass and associated power circuit are duplicated. Matternet has tested the model extensively in the USA over the past few weeks. The Federal Office of Civil Aviation (FOCA) evaluated and approved the modifications on 8 March 2019.

## Safety is the highest priority

Compared to couriers on the road, drones save valuable time for doctors, caregivers and patients. As with ground transportation, incidents in the air can never be completely ruled out. Measures undertaken on the drone itself and in the choice of route help to keep the residual risk as low as possible. Routes are determined in conjunction with FOCA and are selected to ensure that they present the minimum possible number of risks. The drones themselves are equipped with various safety features, redundant systems and a collision warning system (FLARM).

**Pioneering work in the service of medicine** Swiss Post is a pioneer in Switzerland for autonomous and commercial drones – always in the service of medicine. Its drone logistics focuses on transporting laboratory samples. This offers tangible added value for the healthcare sector, as healthcare consignments in particular are often urgent and the speed at which they are delivered can be crucial. Swiss Post's service enables these urgent laboratory samples to be transported



using a method that is flexible, fast and more environmentally friendly than ground transportation, and is therefore tailor-made for hospitals. The Swiss Post and Matternet drones have so far successfully completed over 3,000 flights in Lugano, Berne and Zurich.

Source: Swiss Post