It can happen to anyone who is out and about on their own: a misplaced foot while hiking or a misjudged bend on a mountain bike trail and suddenly you are lying injured on the ground, away from the path – unable to summon help. As soon as Rega is notified by the police or there is good reason to believe that a person has gone missing and is probably urgently in need of help, the Rega Operations Centre initiates a rescue search. On doing so, it has various resources at its disposal.

Search flight with the Rega helicopter

The Rega crews at the 12 helicopter bases throughout Switzerland are on standby around the clock. If the search area is relatively limited and, for example, the planned route of the missing hiker is known, a search flight along the hiking path by the nearest Rega helicopter with a crew on board who are familiar with the area is a sensible and swift initial measure. At night, the Rega crews can also use night vision goggles.

IR/EOS multi-sensor search system

The high-tech IR/EOS system comprises a highly sensitive infrared camera, optical sensors, a searchlight and a computer workstation installed in the helicopter cabin and makes it possible to perform searches from the air efficiently and over large areas – during the day and at night. IR/EOS is operated by a specially trained person and is mounted on an AgustaWestland Da Vinci rescue helicopter, which is on standby around the clock to carry out search operations.

Search using the new Rega drone

The Rega drone is planned to go into operation in 2020. It will be used, for example, if a search flight with a helicopter is not possible due to poor visibility. The drone scans large search areas at an altitude of 80–100 metres autonomously and without direct visual contact with the drone pilot. It is equipped with various sensors for locating people: an infrared camera and a mobile phone detector independently search for people in rough terrain (read more from page 16).

Found thanks to the Rega app

When the alarm is raised via Rega's emergency app, the position data is automatically transmitted to the Operations Centre and a telephone connection is set up. For this, mobile phone coverage is necessary. The new feature, "Share position with Rega" (see page 30), can help save valuable time during a search. If the decision is made to perform a search operation, the Rega flight coordinator can determine the last known location of the caller's smartphone.

The Helicopter Operations Centre

The Operations Centre plays a key role in a rescue search. It selects – usually in close collaboration with the police – the most suitable means of searching and mobilises the various rescue services. On doing so, the information available at the time the alarm was raised, as well as the topography and weather conditions in the search area, are taken into account. Aids such as a geographical information system, up-to-date and accurate meteorological data, and the countrywide Rega radio network also support the flight coordinators in their task.

Assistance by mountain rescuers from the Swiss Alpine Club SAC

The mountain rescuers from the Swiss Alpine Club SAC are called out if the Rega crews require help in rough terrain or if poor visibility renders rescue by air impossible. These rescue specialists also include teams with terrain search dogs, which can be deployed as efficient search aids.