

The rescue hoist

Every year, Rega evacuates more than 800 people with the aid of a rescue hoist. The hoist is always deployed when the helicopter is not able to land near the casualty.



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Scope of operation

The rescue hoist is used whenever the helicopter is not able to land near the casualty – for example, in steep, impassable terrain, over a forested area, over stretches of flowing or stagnant water, or during evacuations, such as from a construction crane or high-rise building.

Suitable rescue aids depending on the injury

Rescue triangle: The rescue triangle is deployed to evacuate casualties with minor injuries and people with heart problems who need to be transported in an upright position. It can be slipped on with just a few quick movements and is particularly valued as a result of being very comfortable to wear.

Rescue sack: If, during a rescue hoist operation, the casualty can only be transported lying down, he is laid on a vacuum mattress inside the rescue sack, hauled up to the helicopter, and flown to the nearest possible landing site, where he is transferred into the cabin.

Horizontal net: The horizontal net is used above all for recovering casualties with back injuries. It can be easily pulled under the patient's body and is so small that, when folded up, it can be encircled by two hands.

► These aids are depicted on page 12

The crew and their tasks

The pilot keeps the helicopter stable in the air and ensures that the load at the end of the cable does not start to swing. As he cannot see the patient, he has to rely on the radio commands of the hoist operator.

The paramedic assumes the function of the hoist operator. From his position next to the open cabin door, he uses a control device to lower the emergency flight physician to the casualty. He maintains constant contact with the pilot via the on-board radio.

The emergency flight physician administers first aid to the casualty and prepares him for transport. In the meantime, the helicopter lands nearby or hovers at a safe distance and awaits further instructions.



The rescue hoist in action

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The hoist operator attaches the flight physician to the end of the hoist cable and lowers him to the patient. As the pilot's view of what is happening below is restricted, each individual action is communicated over the on-board radio. "Flight physician attached to hoist... Ready to reel out hoist... Physician out... Hoist running... 80 metres ... 60 ... 40 ... one metre to the ground."

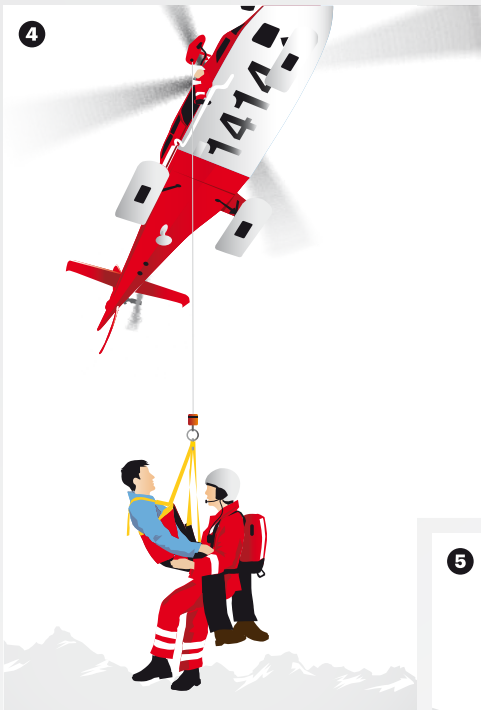
2



Four metres above ground, the flight physician signals to the hoist operator that he has almost reached the ground. The hoist operator gently brings the hoist to a halt and sets the physician down. Depending on the situation, the pilot either remains in a hovering position above the accident site or looks for a place to land.

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As soon as the flight physician and patient are ready, the hoist operator reels in the cable. The hoist is able to transport two persons or a maximum of 270 kilos. At that point, it is not the steel cable that reaches its limits, but the electric motor driving it.

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Having been set down next to the casualty, the physician makes an initial tentative diagnosis. He administers emergency medical assistance to the patient and, according to his injuries, prepares him for being transported with the hoist. The pilot forwards the suspected diagnosis to the Operations Centre, so that the staff there can inform the nearest suitable hospital.

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For a short time, the doctor and casualty remain outside the helicopter until the helicopter can land safely at a temporary landing site. The patient is then transferred into the cabin and flown to hospital.



See for yourself how the individual crew members work closely together during a hoist operation:

www.youtube.com/regatv