

**Horizons Rega jets through the years** The new ambulance jet represents six decades of experience in repatriating patients. A look back at the early days of operations abroad. **14**

**Encounters Seriously burned after electric shock** Only a third of his body surface area is intact when the crew from the Wilderswil base fly the patient to a special burn centre. **24**



## Watery welcome at Zurich Airport

In April, Rega greeted the first of its three new ambulance jets with a traditional water salute. A project team spent four years optimising the interior fit-out and medical equipment of the Challenger 650 until it was “fully fledged”. **8**





**Hoist training in Oberriet (SG):** every manoeuvre is practised precisely so that in an emergency, the joint mission between the Rega crew and the rescue specialist from the Swiss Alpine Club SAC goes off without a hitch.



# “In its essence, Rega has stayed the same.”

Karin Hörhager  
Editor-in-Chief



## Dear Readers

While researching for this magazine, I had access to the archives of a retired flight physician who had worked for Rega for more than 25 years. It was wonderful to look through the old photos. The hairstyles and uniforms made me smile. But it was also fascinating to see how the Rega crews used to work, and how they came to the aid of their patients with what are – by today’s standards – simple means and resources.

Much has changed over the past decades. In its essence, though, Rega has always stayed the same: then, as now, the well-being of our patients is central to everything we do, and then, as now, we endeavour to use the technical means at our disposal to achieve the optimum for our patients.

But read all about it yourself: starting on page 8, we take you on a journey into the past, present and future of our almost sixty years of repatriation operations. Members of the project team tell how over the past four years they have put their heart and soul into working on countless details of the new Rega ambulance jet, further developed tried-and-tested solutions and conceived innovative new ones, and how their work will benefit our patients in future.

In this issue, we also share with you the story of a mission to assist a patient with severe burn injuries. We show you what a Rega helicopter base looks like from the inside and what a base manager’s job entails.

I hope you enjoy reading this latest issue and wish you an enjoyable summer.

A handwritten signature in black ink, appearing to be 'KH', written in a cursive style.



**8**

**Welcome with a water salute**



**14**

**Rega jets through the years**



**18**

**A look at a helicopter base**



**24**

**Flight to a special burn centre after electric shock**

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**Knowledge** Here you can find some interesting facts and figures relating to the theme.



**Online** Further details or even a visual titbit are available online via the given link.



**Additional information** More on the topic that we would like to share with you.

- Visit us at our website [www.rega.ch](http://www.rega.ch) or on [www.facebook.com/reg1414](https://www.facebook.com/reg1414).

**6 Take off** into the world of Rega.

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# Take off

In brief

## Authorisation to use major IFR flight routes

6 A further breakthrough for Rega on the road to realising its vision of all-weather rescue: with effect from 23 December 2017, the Federal Office of Civil Aviation (FOCA) granted Rega special authorisation to also use key intersections of the so-called Low Flight Network (LFN) at night and weekends for flights performed according to instrument flight rules (IFR). This network of flight routes is based on satellite navigation and links airports, hospitals and Rega helicopter bases with each other. In adverse weather, the Rega helicopters can now, for example, use the route over the Gotthard Pass and the IFR approach flight to Lucerne Cantonal Hospital via Emmen despite the ban on night-time flying.



## New Rega exhibition at the Swiss Museum of Transport

On 27 April 2018, the Swiss Museum of Transport in conjunction with Rega opened a new exhibition on the theme of aeromedical rescue as part of its special exhibition, "Switzerland in the air". Now visitors can, among other things, guide a rescue helicopter in to land in the downwash simulator, take a look round the Operations Centre at the Rega Centre and test their knowledge about Rega in an interactive quiz. The exhibition will be continually enhanced with further highlights: in 2019, for instance, Rega plans to "give back" to the Swiss population as a token of thanks for their support its oldest serving ambulance jet, the "HB-JRA", by placing it at the disposal of the museum as an exhibit. Then, together with the two rescue helicopters, the Alouette III SE 316 and the Agusta A 109 K2, a total of three former Rega aircraft will enrich the exhibition at the Museum of Transport.

## Rega crews helped an average of 29 patients per day

In 2017, Rega was in demand more than ever before in its history: last year, the Rega Operations Centre organised a total of 15,958 missions at home and abroad – which is equivalent to one mission every 33 minutes. The Rega crews came to the aid of on average 29 patients per day. Rega's mission statistics reflect the weather conditions in Switzerland: alone in the holiday months of February and October, which proved to be exceptionally sunny in 2017, 27 percent more patients required medical assistance by air than in the previous year.





### “A brief history of Rega”

From the daring pilots of the founding years through to the professional rescue organisation of today: our latest video takes you on a journey through the history of Swiss Air-Rescue and shows the development of the Rega fleet from the first helicopters right through to the latest addition, the new Challenger 650 ambulance jet.

► Video and further information: [www.history.rega.ch](http://www.history.rega.ch)



### The smart card holder

Protect your credit cards from skimming: the new Rega card holder not only has room for at least 10 cards, but also protects against digital theft by largely blocking the Radio Frequency Identification (RFID) signal. In addition, there is an extra slot so you do not have to fold your banknotes and receipts.

► For orders: Rega Shop from page 33 or [www.shop.rega.ch](http://www.shop.rega.ch)

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### The Rega crews fly seven ECMO missions in 10 days

Rega is the only air-rescue organisation in Switzerland with its own ECMO devices – that is, special heart-lung machines that can be deployed in both the ambulance jets and the rescue helicopters. Between 19 and 29 January 2018, the Rega crews flew seven ECMO missions transporting patients with very serious cardiovascular and lung diseases, including a two-year-old child. Generally, Rega performs around 25 of these special transports per year.

### The numbers in this issue:

**4,306**

is the number of hours the ambulance jets were in the air in 2017 in order to repatriate some 900 patients from all over the world.

**60,000**

additional patronages were registered by Rega last year. As a result, Rega can now count on the financial support of a total of over 3,436,000 patrons.

**102**

casualties with severe scalds or burns were flown by Rega to one of the two special burn centres in Switzerland last year.

### Tens of thousands of visitors view the new Rega jet

A huge turnout on the last weekend of May: tens of thousands of Rega patrons, fans and interested people took the opportunity to attend the Open Days at the Rega Centre at Zurich Airport. Besides the rescue helicopters, the main attraction was, as expected, Rega’s new Challenger 650 ambulance jet. If you were not able to come along in person, you can find the video highlights at [www.regacentre.rega.ch](http://www.regacentre.rega.ch).

► Guided tours of the Rega Centre or a Rega base: [www.visits.rega.ch](http://www.visits.rega.ch)





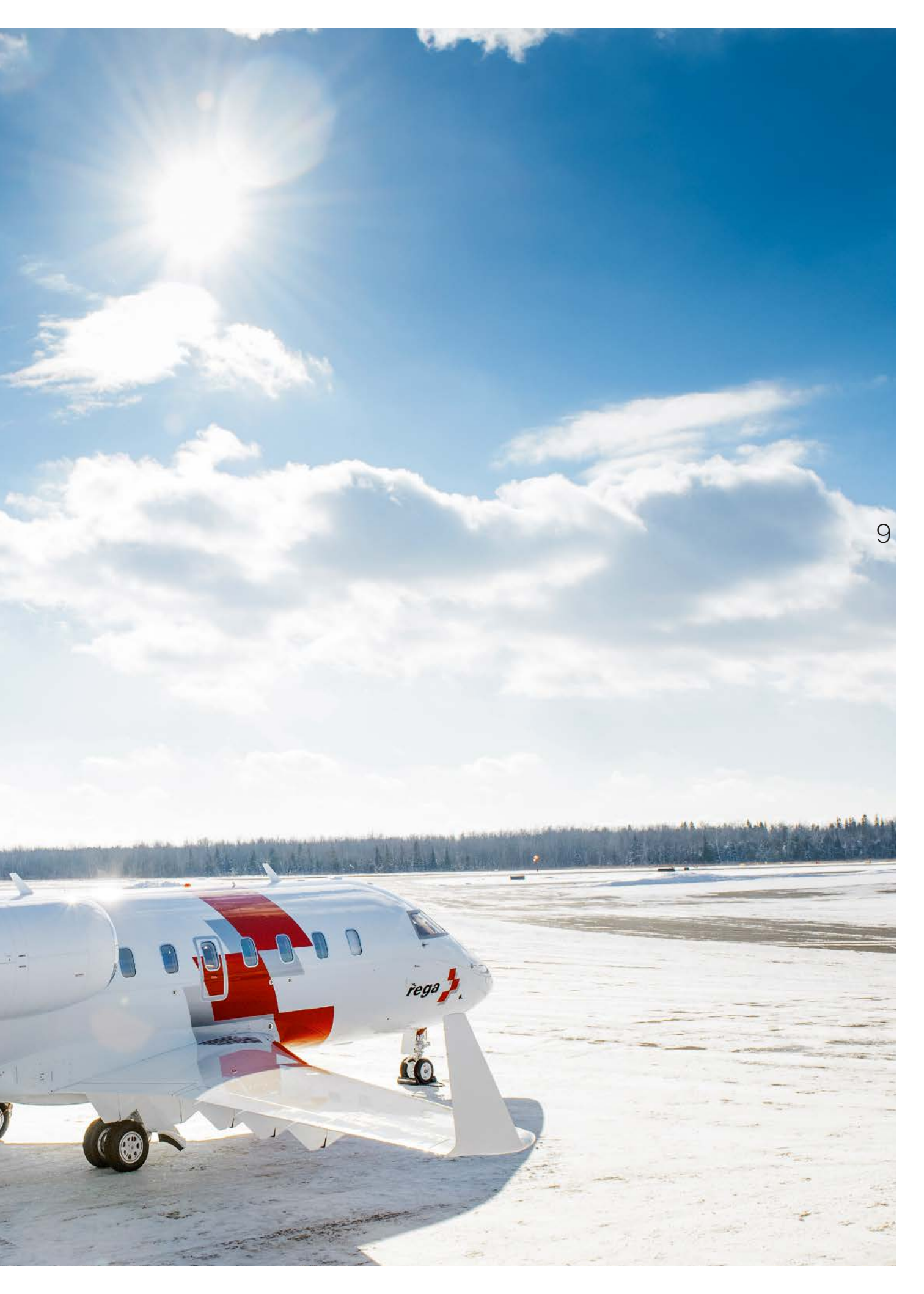
# A made-to-measure ambulance jet

**In mid-April 2018, the first of the three new Rega Challenger 650 jets landed at Zurich Airport. Just a few weeks earlier, Rega's project team had made their final inspection of the ambulance jet in Canada and examined the customised cabin and interior.**

8







64

different aircraft types were evaluated as possible successors to Rega's three tried-and-tested Challenger CL-604 jets.

With a powerful tug, Dr. med. André Keisker tests the belts that will secure Rega patients on the new bed during future flights. The belts hold, the easy-cleaning surface material is made with quality workmanship. André Keisker, Rega's Deputy Medical Director Jet and flight physician, can cross two more points off his long checklist.

"HB-JWA" – the registration of the first Rega jet of the latest generation – is standing in a hangar in Peterborough, Canada, an hour's drive north of Toronto. Equipped with the latest avionics, the Challenger 650 had been flown over as a "green aircraft" – empty but for the cockpit – from the Bombardier assembly hall in Montreal around a year earlier. Since then, specialist firms have been fitting out the custom interior in close collaboration with Rega and in accordance with its specifications. All that remains today is the final inspection and acceptance by the Rega project team.

**Developed and improved over four years**

André Keisker is part of the project team of Rega pilots, flight physicians, intensive care flight nurses and engineers. Over the past four years, the team have designed the entire interior of the new Rega ambulance jet. Based on the experience gathered from thousands of patient repatriations with the predecessor model, the Challenger CL-604, and after countless workshops and tests, they defined



► Flight physician André Keisker (I.) and intensive care flight nurse Thomas Burren inspect the workmanship of the patient beds.

what improvements should be made to the cabin and equipment in order to benefit the patients. Ideas turned into sketches, sketches into design drawings and models – and now the improvements are being put to the test one last time for final inspection and acceptance.

In the front section of the cabin, Philipp Simmen, project leader and a former Rega jet pilot, inspects the workmanship of the wall panelling that conceals the oxygen bottles mounted behind it. They are part of two separate oxygen systems – one for the cockpit and the other for medical purposes – and are just one of the countless customised features in the jet fit-out: "The interior of an ambulance jet cannot simply be chosen from a catalogue. We have to design it specially," says Philipp Simmen.

**High-tech mattress helps to prevent thrombosis**

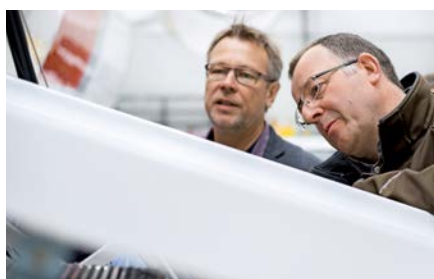
Further back in the cabin, his colleague André Keisker is now testing the mechanism to adjust the patient beds. The two newly developed beds are considerably wider and will be noticeably more comfortable for patients. "For example, the foot section can now be adjusted like a hospital bed so that we can raise the patient's legs. That is a major advantage, especially for back injuries," the Rega flight physician explains. At the foot end of the bed, he pushes the button on a remote control. This allows him to individually adjust the hardness of the high-tech mattress to the patient's weight and activate the pressure-relief function: wavelike



**Philipp Simmen**  
39, Rega project manager

"The interior of an ambulance jet cannot simply be chosen from a catalogue. We have to design it specially."





▲ The ramp has been completely redesigned for the new ambulance jet.

◀ The shallower angle makes loading and unloading patients easier and safer.

▶ Project manager Philipp Simmen inspects the ultramodern cockpit of the Challenger 650. He flew missions as a Rega jet pilot for 12 years.

movements in the core of the mattress reduce the risk of pressure sores among patients who cannot change position, and help to prevent thrombosis.

#### Good light for night-time emergencies

After examining the beds, it is time to test the new lighting concept. All the lights in the huge aircraft hangar in Peterborough are switched off to simulate a night flight. Thomas Burren, Head of Nursing Service Jets, switches on the LED lighting using a tablet and selects the “night flight” setting; a gentle, bluish light fills the cabin. It is just bright enough for the crew to safely administer the right dose of medication to a sleeping patient, but dark enough not to wake the patient in the process.

The intensive care flight nurse is clearly impressed: “On the old jet it was either light or dark. What was good for the crew often disturbed the patient, and vice versa. Now we can adjust the brightness smoothly and separately for different sections of the cabin. Sleeping patients will wake up less as a result.” The project team has thought about emergencies, too: if a patient has to be reanimated during the flight, for example, the entire lighting in

the aircraft can immediately be switched to full power at the touch of a button.

#### Monitored by tablet

The cabin is also where the members of the medical crew work. On a laptop, they record in the patient file all the details of which medication they administer and when, and which treatments they perform. In contrast to the old Rega jet, the Challenger 650 has a wireless network, which is used solely for operational purposes. With Wi-Fi on board, the crew can use a tablet as a mobile monitor to constantly record the most important parameters of the medical devices on the jet, such as the patient’s pulse, oxygen saturation and blood pressure. If a patient requires constant observation, the crew can now continue to monitor them from their seats – for example, if there is any turbulence during the flight. The wireless network also enables them to exchange information with the Operations Centre in Zurich: this way, data such as ECG or blood values can be sent to one of Rega’s senior consultants or to the destination hospital during the flight.

The Rega project team have meanwhile turned their attention to the ramp used to ▶

The lighting can now be adjusted smoothly and separately for all sections of the aircraft at the touch of a button.



▲ Inspection and acceptance of the interior fit-out: the Rega project team check every last detail on board the new jet.

◀ State-of-the-art avionics: the new features include an infrared camera in the nose of the Challenger 650.

load patients onto the jet on a stretcher. More than 16 years ago, the original version of this ramp was developed specifically for Rega and installed in the Challenger CL-604. It has now been redesigned for the new Rega jet. Working with a specialist company, Rega's engineers were able to more than halve the physical forces that arise on the ramp during mounting and dismounting. Now the ramp can be installed by a single crew member. The angles of its elements have also been optimised so that loading patients into the cabin is safer and requires less effort. To test the new construction, a wooden model of the jet cabin and the ramp was specially built to the original scale in a hangar in Dübendorf.

**One of the most modern ambulance jets in the world**

The day in the hangar in Peterborough, Canada is drawing to a close. The Rega project team work through the remaining points on the list and carefully check the equipment right down to the smallest detail. It is not least down to this level of commitment and determination among the team that the project to procure three new Rega jets has been completed on schedule and within budget. With the "HB-JWA", Rega now has one of the most modern ambulance jets in the world. By the end of 2018, it will be joined by

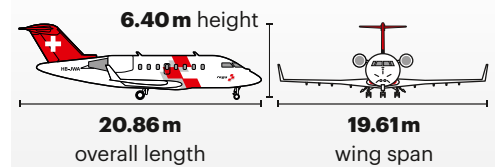
two more Challenger 650 aircraft of the same construction. In future, the three new Rega jets will reliably fly patients home from all over the world. Patients who will be professionally cared for by Rega crews that have helped to design "their" ambulance jet - based on their own, long years of experience in the service of Rega and specifically geared towards the needs of their patients.

*Adrian Schindler*



**Watch Rega's first Challenger 650** being painted in the video at: [challenger.rega.ch](http://challenger.rega.ch)

**K The new Rega ambulance jet: Challenger 650**



- 3 aircraft**
- 4 patients lying down per aircraft**
- 21,863 kg** maximum take-off weight
- 850 km/h** speed
- 6,500 km** maximum range



# Opinion

Ernst Kohler

“We fly whenever we are needed. And the new jets are not going to change that.”

Shortly after our new Challenger 650 ambulance jet arrived, I was standing with a journalist in front of the youngest addition to our fleet. With the aircraft still wet from the traditional water salute by the airport fire service, she asked me whether the 130 million franc investment in the three new ambulance jets would not put us under more pressure to fly even more patients, so that the jets are amortised as quickly as possible.

It was a fair question, especially bearing in mind that she works for a business journal and thinks accordingly: normally organisations borrow outside capital to make larger-scale investments, which they then have to finance with the income they generate. I explained that Rega works differently. We do not take out loans to purchase our aircraft, but put the money aside over many years for planned future investments.

However, that is only possible if there is money left over at the end of the year. That is why Rega, too, has to make a profit – so that we can regularly renew our ambulance jets and rescue helicopters and thus maintain our operations, as well as continue to improve air rescue on an ongoing basis. Long-term financial and fleet planning is therefore an existential issue for Rega.

There is something else that fundamentally distinguishes us from commercial organisations: thanks to the support of our patrons,

deployment of a Rega ambulance jet does not depend on whether it is worthwhile for our “coffers”, but on whether such transport is medically justified. At Rega, this decision is not taken by the managers, but by our medical consultants at the Operations Centre. They decide – in conjunction with the flight coordinators – when and how repatriation should take place. In order to do that, they discuss the diagnosis with the attending physician, talk to the patient, relatives and the patient’s own GP – and also always consider the patient’s general circumstances in addition to the medical situation.

The top priority for Rega is the patient’s well-being. But that does not mean that we are wasteful with our resources. In fact, quite the opposite is true: for example, we repatriate around 350 patients per year on scheduled flights. That is because it is a sensible and economical alternative to our three ambulance jets for those patients whose medical condition is stable enough for them to travel that way. And because then the Rega jets are available for patients who require transports with intensive medical care.

My explanation had long gone far beyond a brief, informative response to the journalist’s question. And so I concluded with the shortest possible answer I could give: “Rega does not aim to fly as many patients as possible. We fly whenever we are needed. And the new ambulance jets are not going to change that.”

Whether or not the Rega jet is deployed does not depend on whether it is financially worthwhile, but on whether such transport is medically justified.



**Ernst Kohler**

55, has been CEO of Rega since 2006. The former airport manager and mountain guide has four children and lives in the Lucerne region.

# The evolution of the Rega jet



14 **Rega's three Challenger 650 ambulance jets, which will be carrying out repatriation flights all over the world from 2018, represent not just cutting-edge technology, but also the culmination of almost six decades of experience in aeromedical operations.**

The decision in favour of the Challenger 650 – an updated version of the Challenger CL-604 that Rega has been operating for the last 16 years – as the successor to the three ambulance jets is not down to a lack of imagination, but much rather an indication that our predecessors did a lot of things right whenever they purchased Rega jets in the past.

#### Repatriation with a private plane

The evolution of Rega's ambulance jet fleet is characterised by the technological progress in the fields of aviation and medicine, as well as by the varying financial means available over the years. In the early days of Swiss Air-Rescue, which was founded in 1952, funds were extremely short and there was no question of it purchasing its own aircraft. So Fritz Bühler, who headed the organisation from 1960, used his contacts to perform the first repatriations with private propeller planes. It was only after Swiss Air-Rescue made a

successful appeal to the public for donations in 1966 – thus laying the foundations for the Rega patronage system – that it had sufficient funds to invest in part-ownership of a Cessna 414 in 1970. However, the speed and range of the propeller-driven Cessna 414 were still very limited.

This changed a few years later, when Rega entered the new era of jet aircraft by purchasing a Learjet 24D. This aircraft was the world's first civilian ambulance jet and flew much faster and higher than the Cessna, and also had a greater range. Now Rega could also fly patients back to Switzerland from Australia and the Far East. However, countless stops en route and all the formalities that this entailed made these operations – compared to today – an arduous undertaking for patients.

Already back in those days, the welfare of the patient took top priority. For instance, right at the beginning, the toilet on board the Learjet

was removed to make space in the cabin for the medical equipment. For the patients, who spent most of the time asleep, this was of little consequence. For the crews, however, it became a test of endurance, as the jet only needed to stop every four or five hours to refuel.

As the Swiss population began to travel more, the number of long-distance operations continually increased. Rega therefore extended its fleet in the early 1980s to include a Challenger CL-600, which had a considerably longer range and room for three or more patients. What's more, much to the relief of the crew, it also had a toilet and running water.

This investment was possible thanks to the increasing financial support of Rega's patrons. However, when in 1988 the two Learjet 35s needed to be replaced, funds still did not stretch to purchasing two more long-range jets like the Challenger CL-600. Instead, Rega chose two British Aerospace BAe125-800 mid-range aircraft.

#### Large-scale operation for tsunami victims in December 2004

Rega's current single-type fleet of aircraft originated in 2002, when the



long-serving jets were simultaneously replaced by three new Challenger CL-604 long-range jets. Now Rega's Operations Centre no longer needed to take account of the varying range of the Rega jets, but was able to deploy all three worldwide. This proved to be invaluable – in particular after the horrific tsunami in Southeast Asia in December 2004, when within the space of a week more than 60 patients were flown home to Switzerland.

Parallel to the aeronautical advances, progress was also continually made in terms of medical equipment. In the 1980s, for example, the repatriation of an artificially ventilated patient was among the most medically challenging transport operations; today it is a standard procedure. Moreover, whereas 30 years ago a device for measuring blood pressure weighed a massive 11 kilograms, nowadays an equivalent instrument weighs just 140 grams.

#### Advances on board the new Rega jets for the benefit of the patient

Every purchase of a new ambulance jet in Rega's history both reflects the extent of Rega's financial means at the time and represents the experience gained with those before it. As a result, the acquisition of the Challenger 650, too, drew significantly on experience gained with the predecessor model.

Rega's three new Challenger 650 jets represent almost 60 years of Rega repatriation history. For anyone who becomes seriously ill or injured abroad, one thing is certain: with its state-of-the-art ambulance jets and decades of operational experience, Rega is a unique bridge back home.

*Harald Schreiber*

## K Overview of Rega's ambulance jets

1961 – 1968

**Piaggio 166:** The first patient is repatriated from France using the private propeller plane belonging to a member of the Executive Board at Swiss Air-Rescue.



1970 – 1974



**Cessna 414:** Swiss Air-Rescue invests in part-ownership of a Cessna 414. It is equipped with a pressurised cabin, which enables patients with serious illnesses or injuries to be repatriated.

1973 – 1977

**Learjet 24D:** The first civil ambulance jet in the world is put into operation. Thanks to its range of 2,800 kilometres, patients can be flown home from Asia.



1977 – 1988



**Learjet 35:** The Learjet 24D is replaced by two Learjet 35s. The new models have a more spacious cabin and a greater range.

1982 – 1991

**Bombardier Challenger CL-600:** Rega's Learjet fleet is supplemented with a long-distance jet which can repatriate patients from all over the world with no or only few stops en route.



1988 – 2002



**British Aerospace BAe125-800:** Two mid-range aircraft replace the pair of Learjet 35s. In 1992, this aircraft is used to transport Rega's 100,000th patient.

1992 – 2002

**Bombardier Challenger CL-601:** The successor of the CL-600 also impresses with its combination of range and spacious cabin. In 1996, it embarks on Rega's first ever round-the-world operation.



2002 – 2019



**Bombardier Challenger CL-604:** From 2002, Rega opts for a single-type fleet of ambulance jets. The three identical long-distance CL-604 jets fly to a good 400 airports every year.

from 2018

**Bombardier Challenger 650:** The three successor models from the tried-and-tested Challenger family feature many innovations for patients and also allow the pilots to select time- and fuel-saving flight routes.





“The reliability of our ambulance jets is decisive for us”

16

**“We know we can rely on the Challenger 650,” says Urs Nagel, Rega Chief Pilot and Head of the Jet Operations division, on the choice of the new Rega ambulance jet. “This family of aircraft has proved itself over almost 40 years of operations on behalf of our patients – and will continue to reliably take us all over the world during the next 15 years.”**



## **Urs Nagel, you flew the first Challenger 650 to Switzerland. How does the new Rega jet differ from the old one?**

Apart from the livery, they look almost identical at first sight: Bombardier's Challenger 650 belongs to the same family as the Challenger

CL-604 and – apart from the larger windows – has the same dimensions. The differences can be found inside the aircraft. We have invested a lot in improving the avionic and medical equipment of the ambulance jet: highly devel-

oped, multifunctional patient beds, an optimised ramp for loading and unloading patients, special lighting and soundproofing, to name just a few of the new features. The catalogue of specifications with all the requirements for the new Rega jet was hundreds of pages thick in the end.

### **What is new in the cockpit?**

The avionics in the Challenger 650 are among the most modern available today. A perfect example of this is the "Enhanced Vision System". The jet now has an infrared camera installed in the nose that projects a thermal image of the environment onto the head-up display, positioned just in front of the pilot's line of sight.

### **What is that used for?**

During landing, it allows us to identify the runway in good time even if visibility is poor. That means that we can now also fly to smaller airfields in adverse weather conditions – and no longer have to revert to finding an alternative place to land.

**Urs Nagel, 57**

**"In future, we will be able to use shorter flight paths at a higher altitude, which is economically and ecologically more efficient."**

### **How often does that happen?**

Once or twice a month. What we will use every day is the Challenger 650's new weather radar and the satellite data link, which allows air-traffic control to constantly track our position and remain in contact with us. This gives the Rega jets the

navigation capability, for instance over the Atlantic, to use a shorter route at a higher altitude than before. That is not just ecologically and economically more efficient, but also means that the patient has to endure fewer stops en route – and gets home more quickly.

### **Rega has been flying Challenger aircraft for 40 years. Were there no alternatives?**

Our project team evaluated a total of 64 types of aircraft in search of a suitable successor. They included newer jets that fly a little faster and further – but also cost up to 20 million francs more per aircraft and would still have to prove that they are absolutely reliable. With the Challenger, if I am at an airport in Bolivia with a seriously ill patient on board, for example, I know that as a pilot I can rely on everything working perfectly when I "turn the key".

### **Have there ever been any failures?**

Our ambulance jets have not had a single engine failure in the past decade. Their "dispatch reliability" – in other words, the operational availability of our jets – lies at an excellent 99.8 percent. Rega flies to 400 different airports or airfields around the



## **In operation for patients worldwide**



The Rega Operations Centre receives **more than a dozen emergency calls a day** from abroad. In 2017, 1,249

patients were repatriated, **901 of them by ambulance jet**. The three Rega jets clock up 4,300 flying hours per year and fly to 400 airports around the world.

world every year – about four times more than Swiss, for example. But unlike an airline, if we have technical problems abroad, we cannot simply call in the ground support mechanic and book our patients onto other flights. Rega is therefore more reliant than virtually any other organisation on its jets having a high level of reliability and availability.

### **What do the new Rega jets cost?**

We are investing almost 130 million francs, which also includes the interior of the three aircraft and crew training. The fact that the new jet is a successor model to the old one has helped us to keep down the material and personnel costs.

### **What do you mean?**

We do not need to buy a new stock of spare parts for the three Challenger 650 jets, because many things are the same. And our jet pilots and aircraft maintenance technicians were spared the laborious process of retraining on a completely new type of aircraft; a few weeks of instruction in Montreal were sufficient. With its decision to remain with the tried-and-tested Challenger family, Rega has saved money. Instead we have invested in the equipment on board the new Rega ambulance jet – for the benefit of our patients.

*Interview: Ariane Lendenmann*

# The Rega base

In order to reach the casualty as quickly as possible after the alarm has been raised, Rega operates 12 helicopter bases distributed throughout Switzerland. At each base, a Rega crew and rescue helicopter are standing by, ready to bring medical assistance by air to people in distress around the clock, 365 days a year. A look at the Rega base in Lausanne.

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## On standby around the clock

For the **duration of their shift**, the crew members – comprising a pilot, paramedic and emergency flight physician – **live together on the base** so that they are ready for action at all times. They cook, eat and sleep under the same roof. Each base has a **kitchen ①**, a **living area ②** and three **bedrooms ③** with a shower and WC. Their work clothes and dirty materials are washed in the **laundry**.

## Everything under one roof

A helicopter base is equipped with all the **rescue material necessary for the various types of missions** performed by Rega – for example, hoist rescues, special critical care transports or search operations looking for people buried in an avalanche. Minor repairs are carried out in the on-site **workshop**. After each mission, the emergency flight physician replenishes the **medical supplies ④**, while the paramedic refuels the helicopter at the **filling station ⑤**. Thus the crew are immediately ready for action again.

## State-of-the-art technology

The crew is **in contact with the Operations Centre** at all times. Rega has various means of communication, including its own **nationwide radio network comprising 42 radio stations**. Voice messages or data – such as the coordinates of the accident site – can be transmitted directly into the cockpit via a mission control system. In addition, the crews use special tablet computers, so-called **electronic flight bags**. These give them access to further information about the mission, up-to-date meteorological data and detailed maps and charts.



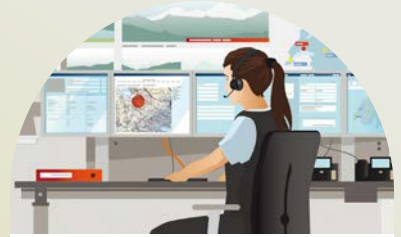


## At any accident site within 15 minutes

Rega's 12 helicopter bases are distributed throughout the country in such a way that the rescue crews can reach **any location in Switzerland** – with the exception of Canton Valais – **within 15 flight minutes**. The lowland bases ● are located in Dübendorf, Basel, Berne and Lausanne and the mountain bases ▲ in Untervaz, Locarno, St. Gallen, Erstfeld, Samedan, Wilderswil, Mollis and Zweisimmen. In addition, there is a partner base in Geneva. An **Airbus Helicopters EC 145** rescue helicopter is stationed at each of the lowland bases, while the mountain bases are each equipped with an **AgustaWestland Da Vinci**.



Radio station antenna



## Central coordination and supplies

The rescue missions performed by a base are coordinated by the **Operations Centre at the Rega Centre**, situated at Zurich Airport. It takes emergency calls that come in via the Rega emergency number 1414 or the Rega app around the clock and mobilises the helicopter crews. The **logistics staff** provide the helicopter bases with replacement supplies from the **central material store** at the Rega Centre. If necessary, **helicopter mechanics from the maintenance works** at the Rega Centre in Zurich drive with a service vehicle to the helicopter base in order to perform maintenance work.

19

Illustration: Daniel Karrer



**Pay a visit** to a helicopter base or the Rega Centre and take a look for yourself: [www.visits.rega.ch](http://www.visits.rega.ch)

bergstahd.ch

# DIE SCHWEIZ FLIEGT!

Neue Rega-Ausstellung im  
Verkehrshaus der Schweiz in  
Luzern erleben.





# 24h Rega

Werner Marty, 51, helicopter pilot and head of the Rega base in Lausanne

**As a professional pilot, Werner Marty used to sit in the cockpit of long-haul aircraft – until he found it too monotonous. Now, as a Rega helicopter pilot, he helps people in distress and is also head of the Rega base in French-speaking Switzerland.**

Werner Marty developed a passion for flying at a very early age: “When I was eight years old, a Lama helicopter transported the pylons for a new ski lift to our village. It flew backward and forward so adeptly, and I didn’t let it out of my sight,” he recalls. After a while, the pilot called him over and let him ride in the helicopter. “That evening I went home and announced: ‘Papa, I’m going to be a helicopter pilot!’”

Today, the 51-year-old – who comes from Guttet above Leuk, in Canton Valais – is indeed a “full-blooded pilot”, as he describes it, and doing exactly what he always dreamed of doing. “I’m happy as soon as I’m hovering with the helicopter 20 centimetres above the ground,” enthuses Werner Marty. “On top of that, by doing what I love best, I’m helping other people. What could be better than that?” When in 2000 he sat at the controls of a Rega rescue helicopter for the first time, he was already a military pilot on the Swiss Air Force Super Puma, and also had a number of years of experience as a professional pilot with Air Zermatt and with scheduled aircraft operated



by Swissair. “But in the cockpit of an MD-80 or an MD-11, it was simply a bit too boring. Apart from that, my wife was at home looking after our small daughter and I was miles away on the other side of the world and not around to give her a hand.” So before the birth of his son, he started work at Rega as a helicopter pilot.

Since then, he has never got bored. On his duty days as a pilot of an EC 145 helicopter at the Lausanne base, Werner Marty never knows in advance what kind of mission is awaiting him and his two crew

colleagues in the next minutes. In addition, for the last 10 years he has been the base manager in charge of a team of four pilots, paramedics and emergency flight physicians. As a result, the bilingual Valais native also has to deal with administrative and management tasks between missions. “It is this mix that makes my work at Rega so interesting,” he says.

Werner Marty feels himself to be very privileged: “With this job and my wonderful family who fully support me, I am the luckiest man alive.” Sometimes he almost has a guilty conscience as a result: “In the course of my work, I also see that not everyone is as fortunate as I am.”

*Ariane Lendenmann*

Continue reading on page 22 ►



**Helicopter pilots** at a Rega lowland base fly missions with the EC 145 rescue helicopter. Some of them also take on the role of **base manager**.

“I’m happy as soon as I’m hovering 20 centimetres above the ground.”



08:15

▲ Visual check: during the daily technical inspection, Werner Marty checks the condition of his helicopter. Is everything in the right place? Is there any leakage?

22



07:40

▲ Flight weather: at the beginning of his 24-hour shift as helicopter pilot, Werner Marty checks the weather situation and all the flight information for his operational area and prepares for the morning crew briefing.



08:45

◀ Maintenance work: the base manager calls on an electrician from the region to help replace the metal pole from which the base’s windsock is suspended.



10:05

► Rescue mission for the “Rega 4” crew from Lausanne: less than five minutes after the alarm is raised, the Rega helicopter is already in the air in order to bring medical assistance to a road accident victim as quickly as possible.





◀ Shared accommodation: the base manager does not shirk from doing cooking duties. The crew members take it in turn to supply the ingredients for a communal meal. That brings variation and creates a convivial atmosphere.

▶ Taking care of the helicopter: every week, the Rega crew on duty at the Lausanne base clean and polish the EC 145 helicopter. In particular, the tail needs to be free of smut from the engines.



◀ Office work: besides his duties as a helicopter pilot, Werner Marty also spends a lot of time in his office. As head of the Lausanne base, he is responsible for approving the duty rosters and dealing with other administrative tasks. He also looks after the logistics and maintenance at the Rega base in French-speaking Switzerland.

▶ Driven: in his free time, Werner Marty enjoys going off with his family on mountain bikes or touring skis in the Valais Alps. He also takes part in classic competitions, such as the "Patrouille des Glaciers" race from Zermatt to Verbier.



# Critical care transport after electric shock

24 **The patient has sustained burns to 70 percent of the surface area of his body, but he feels very little pain. What can save his life now is being transported to a special burn centre by the crew of “Rega 10”.**

**Bleak prognosis: the doctors put the chances of survival of the severely burned patient at around 50 percent.**

It is a hot summer’s day, just after 5pm. The helicopter from “Rega 10” is waiting on the helipad of Interlaken Hospital. This is already the fifth mission of the day for the crew from the Wilderswil base. While emergency flight physician Dr. med. Thomas von Wyl is finalising the handover of his patient, paramedic Marco Lei and pilot Rick Maurer are preparing materials for their next mission. Shortly afterwards, the mobile phone rings. “How are things going?” the Rega flight coordinator asks. On her monitor at the Operations Centre in Zurich she can see where the crew are, but she only has a rough idea of how long the patient handover will take. “On standby,” Rick Maurer reports. The flight coordinator informs him that there has been a high-voltage electrical accident near Thun and “Rega 10” is urgently needed.

High-voltage accidents usually cause extremely severe burns, which require immediate treatment at a specialised clinic (see box on

page 27). Rega has been called out to transport the patient quickly and carefully. The rotors are already turning as Thomas von Wyl climbs on board. Are his thoughts already on the next patient? “I always try to be as open-minded as possible when approaching a rescue mission. It allows me to assess the situation without fixing on a diagnosis, and there is less danger of overlooking something important at the accident scene,” explains the Rega emergency flight physician. However, shortly before the helicopter lifts into the sky, the all-clear comes in over the radio from Zurich: the casualty appears to have had a lucky escape. The rescue services have reported that he is being taken to the Inselspital University Hospital in Berne. Apparently, the main cause of concern is not his burns, but other injuries.

## **Burns worse than originally thought**

Back at the base, the crew replenish the medical supplies, refuel the helicopter and are dealing with the necessary paperwork when the Rega Operations Centre in Zurich calls again. The patient who had the high-voltage electrical accident sustained considerably more serious burns than originally thought, and he now urgently needs to be transferred to Zurich to the burn intensive care unit. It is just before 7pm when the rotors of the Da Vinci rescue helicopter come to a standstill on the helipad of the Inselspital University Hospital in Berne. The crew are focused as they make their way through the corridors to the trauma room: so ▶





**Patient handover at the Inselhospital:** Rega emergency flight physician Thomas von Wyl is briefed by the attending doctors on the diagnosis and what treatment has already been given.



**On the hospital helipad:** the crew of "Rega 10" carefully load the patient and the many monitoring devices and infusions into the Da Vinci helicopter.





**Complex transport:** the paramedic does not sit in the cockpit as usual, but assists the emergency flight physician in attending to the patient.

far, they know very little about the patient's actual condition.

"We receive all the details of how the accident happened, the patient's condition and what treatment has already been given directly from the attending doctors. The handover process is important, because from now on we are responsible for this person," explains Thomas von Wyl. It turns out that the 50-year-old patient was carrying out telematics work on a train carriage in a freight depot when he came too close to the overhead wire and suffered an electric shock that threw him to the ground from a height of four metres.

**A hot-air blanket helps to prevent hypothermia**

In the trauma room of the Inselspital, a detailed medical history has been taken of the patient, the charred remains of his clothing removed, and his wounds expertly cleaned and covered

with sterile bandages. To protect against possible hypothermia, the patient is lying beneath a hot-air blanket. He is connected to various monitors for observation and is receiving infusions to replenish fluids, which is vital after suffering burns. The team treating the patient at the hospital were able to rule out any severe injuries caused by the fall. What they are concerned about, however, is the extent of the burns: almost 70 percent of the casualty's body surface area is affected. The prognosis is bleak. Based on the ABSI scale, which predicts the survival rate depending on burn severity, the doctors put his chances at around 50 percent. Fortunately the man has not sustained any burns to the face or neck region. His airways are likewise unaffected. That is positive, as it simultaneously raises his chances of recovery and allows him to communicate with the medical team.

The severely injured burn patient is carefully prepared for the upcoming transport. With everyone present helping, he is gently lifted onto the Rega stretcher and the monitor cables and infusion tubes are switched to Rega's mobile devices. Emergency flight physician Thomas von Wyl makes one last check before the crew finally take charge of the patient: "I want to go through all the main symptoms again so that I'm prepared for any complications during transport." It has taken almost



**Dr. med. Thomas von Wyl**  
47, Rega emergency flight physician

"I'm careful not to give the patient false hope, but I still want to offer a sense of security and trust."



40 minutes to complete the complex handover at the Inselspital for the critical care transport by rescue helicopter.

They make their way through the hospital corridors and back to the rooftop helipad. The patient is loaded into the Rega helicopter and the three crew members prepare for the roughly 25-minute flight to the University Hospital Zurich (USZ). Paramedic Marco Lei usually sits in the cockpit next to the pilot, but now he takes a seat in the cabin beside the emergency flight physician. “If a patient is very severely injured, and their circulation is unstable or I’m expecting a lot of monitoring or treatment during the flight, I’m glad of my colleague’s help,” explains Thomas von Wyl.

#### The patient is not intubated and can speak

The two are, in fact, kept very busy throughout the flight. They have to stabilise the patient’s circulation and supply him with sufficient fluids. He requires relatively little pain relief. While minor or moderate burns are very painful, patients with deep burns feel hardly any pain because the nerves are destroyed. The patient is not intubated, so he can communicate with the crew. Even for the experienced emergency physician, this is a special situation: “With patients who may not survive their severe injuries, communication is a major challenge. I’m careful not to give the patient false hope, but at the same time I want to offer a sense of security and trust. I’m very aware that – if they survive – the road ahead will be a very long and difficult one.”

The Rega helicopter lands on the roof of the University Hospital Zurich – it is just after 8pm. The Rega crew make directly for the highly specialised intensive care burn unit, where patients are isolated from the outside world due to their high susceptibility to infection. The patient handover, too, takes place in a kind of airlock. As the patient is transferred once again, Rega emergency flight physician Thomas von Wyl briefs the USZ medical team on the accident, the patient’s condition and what medication he has been given. The Rega

crew’s direct responsibility for their patient ends when they hand him over to the hospital team. “It’s not always easy for me to switch off after such difficult missions. The accident and what lies ahead for the patient often stays with me for a long time.” That is why talking to his crew colleagues is so important, he says. “Once we have handed over the patient, the debriefing on the return flight or later on at the helicopter base is an important way of dealing mentally with this kind of mission.”

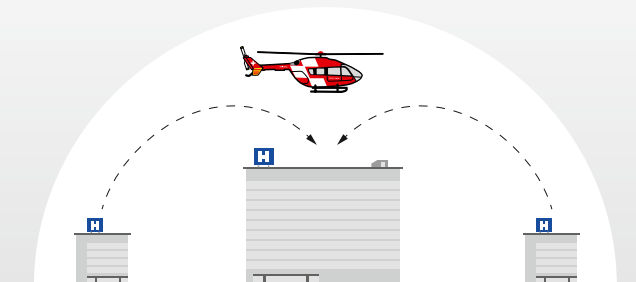
What the crew do not know at this point: the patient will survive his severe injuries and, after several months of rehabilitation, is able to return to work and to resume his hobbies.

*Karin Hörhager*



### Highly specialised medicine in Switzerland

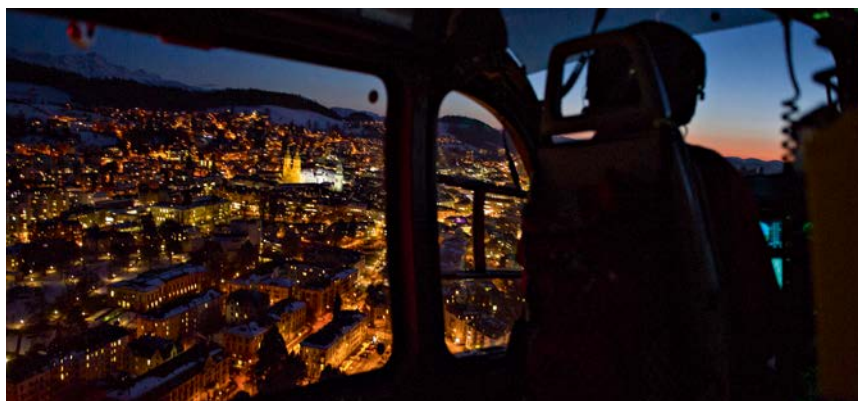
For many **highly specialised medical interventions and treatments**, Switzerland has too few cases for hospitals across the country to offer them cost-effectively and to the necessary high standards. Organ transplants, neurosurgery or similarly complicated medical treatments are therefore **only performed at a few specially equipped centres**. Patients with **severe burn injuries** are treated at the **University Hospital Zurich** for German-speaking Switzerland and Ticino, and at the **Centre hospitalier universitaire vaudois** in Lausanne for French-speaking Switzerland.



Rega plays a **key role in linking the peripheral regions to central hospitals with treatment centres for highly specialised medicine**. It has therefore focused on expanding the possibilities in this area for many years. A perfect example of this is its efforts to **set up and develop the so-called Low Flight Network, comprising instrument flight routes between the hospitals across Switzerland**.

# Helping together

**Mission by the Zurich Rega crew after a collision in Winterthur: while his colleagues fly one casualty directly to hospital, the Rega paramedic accompanies the other one to the hospital in a police vehicle.**



28

**Winterthur (ZH), 27.01.2018**

Late on this Saturday evening, the crew from the Zurich base are out on a mission in St. Gallen and have just delivered their tiny patient to the Children's Hospital of Eastern Switzerland. They have hardly set out on the flight back to the base when a call comes in from the Rega Operations Centre: there has been a road accident in the Winterthur area. The police are already on the way, but an ambulance is currently not available. Shortly afterwards, pilot Alex Itin is navigating the rescue helicopter towards the accident site in Wülflingen. Already from a distance, he and paramedic Walter Riedi can make out several police cars with flashing blue lights. Through their night vision goggles, which intensify any residue light by a factor of up to three thousand, the lights glitter brightly in the dark winter night.

"A car collided with a motor scooter," says Water Riedi, "and the scooter driver was catapulted onto the road and his passenger into the field".

**Walter Riedi, paramedic**  
 "Together we used all the resources that were available."

At the accident site, he and Rega emergency flight physician Simon Sulser immediately administer first aid to the two 40-year-old casualties. One has multiple injuries and urgently needs to be taken to Winterthur Cantonal Hospital. His companion is less seriously hurt. "But he needs to be taken to the A&E unit, too," says Walter Riedi. However, there are still no ambulances available. "We obviously didn't want to leave the second casualty behind in the cold, so in collaboration with the police, we used all the resources that were available."

While the Rega pilot and emergency flight physician fly the seriously injured man to the Cantonal Hospital by helicopter, the paramedic - assisted by police officers from Winterthur City Police - lifts the second patient carefully into a large police van - and attends to him on the back seat during the journey to the hospital, with the blue light flashing. "I met up with my colleagues again in the A&E unit, and we flew back to the base together."

Ariane Lendenmann

**Hoist rescue on the Eiger**

**Grindelwald (BE), 07.04.2018**

A rescue operation with numerous onlookers: an open-air concert is under way on the Kleine Scheidegg when, shortly before midday, the Rega Operations Centre receives an emergency call from the Eiger north face. A 5-person rope team have got into difficulties and need to be evacuated by the Rega crew from the Wilderswil base and the SAC rescue specialists using the rescue hoist.

**First flight for baby twins**

**Geneva, 14.03.2018** Twins Ajan and Aaron come into the world at Geneva University Hospitals three months early. A few weeks later, the crew from the Rega partner base in Geneva with a neonatology team on board fly the two premature babies in the transport incubator to hospital in Fribourg, close to where their parents live.

**Fall on cross-country ski trail**

**Celerina (GR), 14.02.18** On the descent through Staz Forest, a cross-country skier falls and injures his knee. The Rega crew from the Samedan base rescue the 57-year-old with the hoist and fly him to the Upper Engadin Hospital in Samedan.

**K Missions in response to severe burns**

**102** patients required Rega's assistance last year due to burns or scalding.

**47** persons suffered such serious burns in 2017 that they needed to be admitted to a special burn-centre.



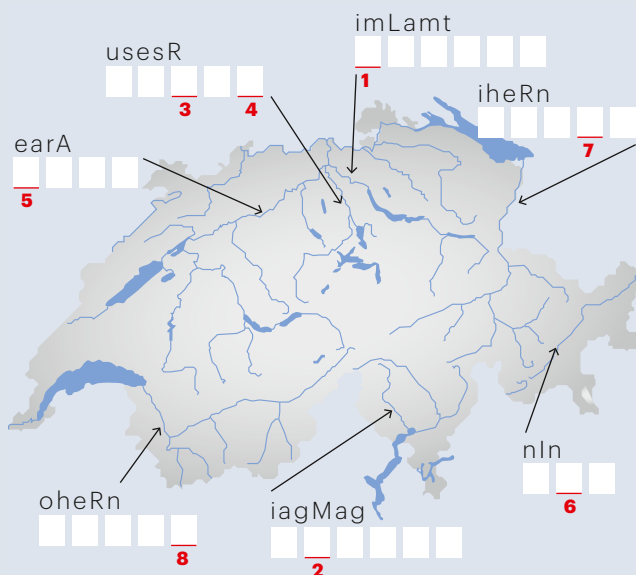
**Every third**

patient that was flown to hospital with burn injuries in 2017 was a child.





**Competition** All the letters are jumbled up! Can you unscramble the names of these Swiss rivers and then use the correct names to find the solution word?



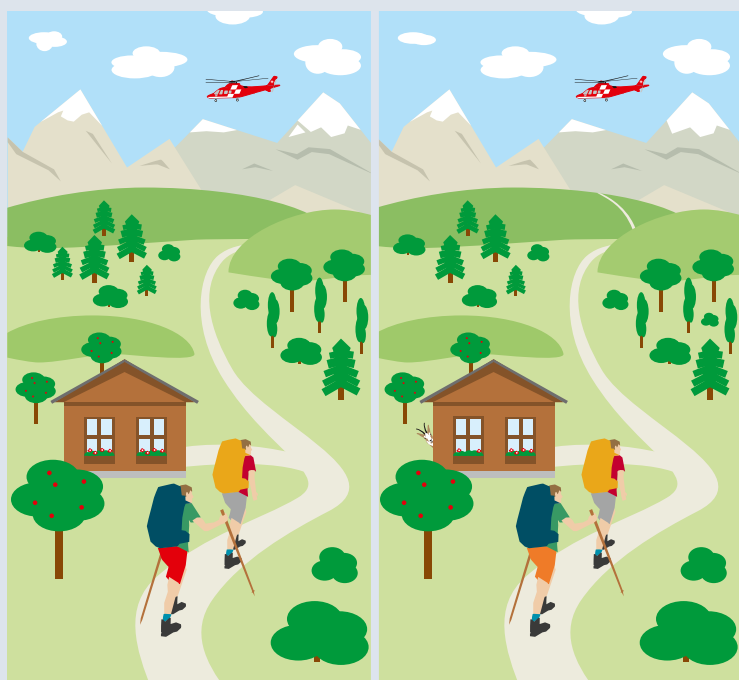
**Solution:** 1 2 3 4 5 6 7 8

**School trip** A school class is visiting the Rega base in the region. But the bus is not permitted to be overfull. What route should the driver take so that he can transport exactly 24 children in his bus?



29

**Picture puzzle** Look at the two pictures very carefully. Can you find 8 differences?



**Competition**

**Write the answer on a postcard and send by 31 July 2018 at the very latest to:**

Swiss Air-Rescue Rega  
 "Competition" Rega Magazine 1414  
 PO Box 1414  
 CH-8058 Zurich Airport

Ten winners drawn from the correct answers will each receive a spacious Rega sports and travel bag, which can be expanded to hold up to 70 litres.

**Good luck!**



**Solution from No. 89: 42**

**Each of the following have won a rescue**

**board game:** L. Leuenerberger, Wangen | N. Benz, Schlatt | N. Kaufmann, Grindelwald | Y. Stampfli, Lippoldswilen | Y. Inderbitzin, Lauerz | A. Tanniger, Villars-Mendraz | J. Ganhwage, Petit-Lancy | T. Stettlen, Plans-les-Ouates | L. Malacrida, Bellinzona | F. Venzi, Torricella **Congratulations!**

# Knowledge

30

## Burns to the skin can swiftly become life-threatening, so immediate action is necessary.

Minor scalds or burns usually heal well and without complications. But when should you consult a doctor, phone the emergency services, or even call out Rega? And why are burns so dangerous and difficult to assess and treat?

### An underrated organ: the skin

Burns and scalds are essentially caused by the effects of heat on the skin. To understand why this kind of thermal damage very quickly requires professional medical treatment, it is worth considering how important our skin is and what its function is.

The skin is the largest human organ. In adults, it has a surface area of around 1.7 square metres and weighs between 10 and 14 kilograms. Depending on the part of the body, it is 0.5–4 millimetres thick. The skin is composed of three layers, the epidermis, dermis and subcutaneous tissue, each of which is also composed of several layers (see box on page 31). Cells in the epidermis ensure that the

skin can constantly renew itself. The dermis is the thick, elastic yet firm middle layer of the skin. The subcutaneous tissue stores energy in its fat cells and insulates the body. The different layers of the skin have many functions – but its primary role is to

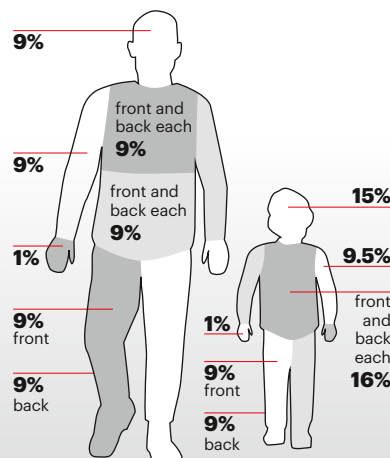
protect against harmful external influences and loss of heat and fluids. It is also an important sensory organ.

### Minor or severe burns

The severity of a burn depends on the temperature, duration and surface area exposed to heat. While more minor damage only affects the outermost layers of skin, serious burns or scalds also damage the deeper-lying layers. Depending on which layers of skin are affected, burns are categorised in degrees of severity ranging from 1 to 4.

In addition to depth, surface area is another important factor when assessing a burn. The so-called “rule of nines” is one way of quickly assessing the affected area in adults (other percentages apply to children, see diagram on the left): burns to the head and throat account for nine percent, each arm nine percent, the front and back of the torso two times nine percent each, the genitals one percent, and each leg two times nine

### K The “rule of nines”



The “rule of nines” helps to quickly assess how much of the body surface is affected by burns.



percent of the body surface area. Another method of calculation is the rule of thumb that the palm of the casualty's hand including the fingers corresponds to around one percent of their body surface area.

**When are burns life-threatening?**

The key factors for determining the severity of a burn and how dangerous it is are the depth (degree) and surface area of the affected skin. These factors determine whether the tissue damage is local or can affect the entire organism and is thus life-threatening. If ten percent or more of the body surface area (upwards of five percent in children) is affected, potentially life-threatening complications may arise.

In the case of second-degree burns larger than the size of a postcard (two to three percent of the body surface area), or if the face, genitals or hands are burned, a doctor should be consulted. If more than ten to fifteen percent of the body surface area has second-degree burns, the emergency services need to be called out.

All third and higher degree burns require treatment at a hospital – or if the affected area comprises more than ten percent of the body surface area, at one of the two special burn centres in Switzerland (see feature beginning on page 24).

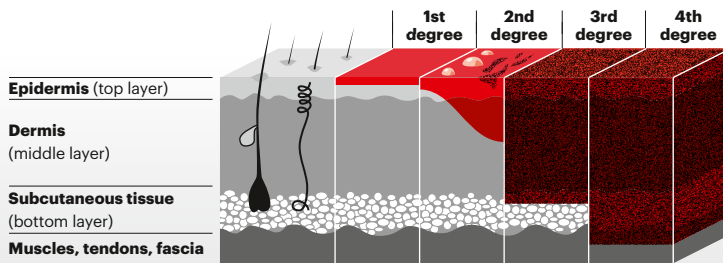
It is important to note that in the case of children and people who are elderly or infirm, burns to between five and ten percent of the body surface area can already have potentially fatal consequences. Information on how to identify and treat burns can be found in the overview on the right.

We wish you a wonderful, untroubled summer.

*Karin Hörhager*

► **More on this subject** can be found in the bfu guide at [www.burn.rega.ch](http://www.burn.rega.ch)

**K Assessing and treating burns**



**First-degree**

**Symptoms**

- Redness, mild swelling of the skin
- Itchiness
- Pain

**First aid**

- Cool the affected area with a damp cloth
- Lotions, ointments and pain-relief medication
- Sunburn: avoid further exposure to the sun!

**Second-degree**

**Symptoms**

- Redness of the skin
- Blisters filled with clear fluid
- Severe pain

- Leave the blisters alone and do NOT puncture them

**First aid**

- Cool the affected area immediately with warm tap water (approximately 20°C) – avoid loss of body heat
- Dry the wound and cover with a clean dressing

**Seek medical attention**

For burns to the face or on a joint, or to more than 2–3 percent of the body surface area (postcard size): consult a doctor.

- ❗ If more than 10 percent of the body surface area is affected, call the emergency services on 144.

**Third-degree**

**Symptoms**

- Black-and-white necrotic wounds/blisters
- No or only mild pain, as the nerve endings have been destroyed

- Do not allow the person to eat or drink (surgery may be necessary)

**First aid**

- Do NOT cool with water (risk of hypothermia)
- Cover burn wound with a dry dressing

**Seek medical attention**

Large burn areas cannot heal by themselves and require surgical treatment at a special burn centre (in Zurich/Lausanne).

- ❗ Immediately alert Rega on emergency number 1414 or call the emergency services on 144.

**Fourth-degree**

**Symptoms**

- Charring
- No pain
- Complete lack of sensation in the burned areas

**Seek medical attention**

Burns of this severity cannot heal by themselves and must be urgently treated at a special burn centre (in Zurich or Lausanne).

**First aid**

- Do NOT cool with water (risk of hypothermia)
- Cover burn wound with a dry dressing
- Do not allow the person to eat or drink (surgery may be necessary)

- ❗ Immediately alert Rega on emergency number 1414 or call the emergency services on 144.



Wir haben diese Limited Edition Uhr in Anerkennung der Schweizerischen Rettungsflugwacht Rega kreiert. Die zweite Zeitzone verweist auf ihre weltweite 24-Stunden-Bereitschaft.

Aussergewöhnliche Einsatzbereitschaft geniesst unsere höchste Wertschätzung.

**#GoYourOwnWay**



**GMT Rega  
Limited Edition**

**ORIS**  
HÖLSTEIN 1904

erhältlich im Fachhandel



# Rega Shop

Gift ideas and fan articles for the  
summer season 2018

OUR  
HIGH-  
LIGHTS

NEW

33



## 1 Card holder with RFID blocking 69.—

Protect your credit cards from skimming: this handy wallet protects against digital theft by largely blocking the RFID (Radio Frequency Identification) signal.

Compact wallet/credit card holder for at least 10 cards and several banknotes. Your two most important cards, stored on the front and back of the case, are quickly to hand and can be simply pushed out with your thumb.

- Colour: black
- Material: leather
- 7 slots, capacity for for at least 10 cards and several banknotes
- Closure: stainless steel clip
- Dimensions: 90 × 70 × 10 cm (L × W × D)



## 2 Challenger 650 29.—

Light as a feather, elegant, detailed: Rega's new twin-engine Challenger 650 ambulance jet to a scale of 1:100, 21 cm, plastic (ABS), collector's model (not suitable as a toy).

## Marketplace

A colourful mix of articles from our summer product range. Many products have already been adapted to the brand new Rega design. Here you can find various items in the old Rega look. Order now – only available while stocks last!

### CLASSIC

34



**3 "Traveller" multitool by Victorinox**  
99.— instead of 112.—

Pocket knife, thermometer, altimeter and barometer all in one. Free extra: high-quality leather case.



**4 Alarm 1414 – Swiss rescue board game** 39.— instead of 49.—

With this Rega board game, players are called out on various rescue missions to bring medical assistance to the casualty by air. The aim is to get to the scene of the accident as quickly as possible together with the appropriate specialists and rescue equipment. The winner is the first person to successfully complete three missions. For 2 to 4 players aged 8–99 years.

5



**5 Bicycle helmet**  
99.— instead of 119.—

uvex city i-vo S (52–57 cm).

6



**6 uvex ski goggles**  
99.— instead of 119.—

uvex downhill 2000 ski goggles, 100% UV protection. Ladies' & men's models. Made in Germany.

7



**7 AgustaWestland Da Vinci**  
19.— instead of 29.—

Collector's model, scale 1:43, metal.

8



**8 Wooden Rega jet**  
10.— instead of 15.—

9



**9 Rega-Memo**  
30.— instead of 39.—

40 picture pairs with enchanting, hand-drawn illustrations.

Only a few  
left in stock

Special offer valid from 1 June, only while stocks last.





### 10 Capcool 39.—

This intelligent cap provides high UV protection (UPF of 100+) and thus protects the scalp from harmful UV sun rays. The top-quality fabric is made in Switzerland and thanks to its functional textile properties has a cooling effect, prevents the build-up of heat, and is also water- and dirt-repellent. In addition, reflective elements increase visibility in the dark.

- Colour: black
- Material: 92% polyamide, 8% elastane
- Dimensions: one size, adjustable
- Care: wash separately at 40° C (do not use fabric softener)

► **Prevention:** 100% UV protection, Capcool is recommended as head protection by dermatologists.

## NEW



### 11 Sports sunglasses 179.—

“TN Air” sports sunglasses (Swiss brand) with interchangeable lenses. High-tech frame made from high-grade material, flexible yet stable. The Class 1 lenses (TALT system) are shatterproof. 100% UV protection up to 400 nm. The sunglasses weigh just 26 g. CE-certified. Come in a protective case with microfibre pouch and four pairs of lenses.

- Colour: black frame
- Four interchangeable lenses:
  - Clear (category 0, dusk)
  - Orange (category 1, sunny)
  - Smoke (category 2, medium sun exposure)
  - Black revo (category 3, beach, snow, mountains)
- Protective pouch for the lenses
- Case with belt buckle and karabiner
- Microfibre pouch

► **More information:** [www.tnsunglasses.ch](http://www.tnsunglasses.ch)



### 12 Daypack 79.—

The sporty day rucksack is equipped with an Airstripes system, allowing sufficient ventilation to the back. The main compartment is big enough to hold an A4 folder or file. Rain cover included.

- Colours: anthracite & red, with reflective stripe
- Anatomically shaped, padded shoulder straps
- Equipped with various pockets
- Detachable waist strap
- Rain cover
- Material: nylon and Super-Polytex 330D
- Volume: 25 litres
- Dimensions: 46 × 33 × 21 cm (H × W × D)



### 13 Toiletry bag 29.—

All your toiletries at a glance: unfold the bag twice, hang it up with the hook, and all your personal care products are at your fingertips. With mirror. Black.

- Dimensions: 26 × 19 cm (folded)
- Dimensions: 63 cm (hanging up)
- Material: ripstop nylon
- Weight: 218 g

## BESTSELLER



### Contents

- Face shield (for protected mouth-to-mouth resuscitation)
- Tick removal card
- Sterillium hand disinfection wipes
- Antiseptic wipes for cleaning wounds
- Tear-resistant Nitril disposable gloves
- Waterproof spray plaster 21.5 ml
- Pouch containing adhesive plasters
- Graze and burn plasters
- Blister plasters
- Sterile compresses
- Cooling bandage 6 cm x 4 m
- Self-adhesive bandage 6 cm x 3 m
- Gauze finger bandage 4 x 50 cm
- Set of wound closure strips 6 x 76 mm
- Set with scissors, tweezers and safety pin
- Roll of adhesive plaster to secure bandages 2.5 cm x 5 m
- Foil emergency blanket
- Storage container for medicaments
- First aid checklist
- External dimensions: 20 x 13 x 6 cm (L x W x D)
- Weight: 595 g

### 14 Outdoor first aid kit 89.—

The most important first aid items for outdoor use, compiled by Rega doctors. This set contains top-quality material (from IVF Hartmann) and is characterised by its innovative moist wound dressings. The case can be expanded by means of an extra zip, making room for additional products.

#### Online Shop

Place your orders in comfort and around the clock online via the Rega Shop.

[www.shop.rega.ch](http://www.shop.rega.ch)

#### Orders by telephone or fax

We would also be pleased to accept your orders direct via the following Rega Shop numbers.

Telephone orders **0848 514 514**

Fax orders **0848 514 510**

#### Terms and Conditions

- Articles are available as long as stocks last.
- Articles can be returned within 7 days.
- A charge of CHF 8.80 is made per order to cover postage and packaging costs within Switzerland.
- Delivery abroad (Europe): against advance payment only. A charge of EUR 30.- (CHF 30.-) will be made per order to cover postage and packaging costs. Any import charges (VAT, customs duty, etc.) are levied in accordance with the regulations of the destination country and are payable by the recipient.

The articles sold in the Rega Shop are of high quality and have been specially selected for our patrons. By purchasing an item, you are helping Rega to transport emergency medical assistance by air to people in distress 365 days a year.

**You can order Rega Shop articles through our online shop at [www.shop.rega.ch](http://www.shop.rega.ch) or by completing the order form and sending it in a stamped envelope to: Rega Shop, Postfach, CH-3076 Worb.**

Sender (please complete in block letters)

Ms  Mr

Family name \_\_\_\_\_

First name \_\_\_\_\_

Street/No. \_\_\_\_\_

Area code/Town \_\_\_\_\_

Tel. \_\_\_\_\_

Patron no. \_\_\_\_\_

Signature \_\_\_\_\_

**Thank you for your order.**



# For the youngest Rega fans



15

**15 Helicopter and jet soft toy**  
10.—

For young children to play with and cuddle. The rescue helicopter is 14 cm and the ambulance jet 9 cm high; both are 24 cm long.

**16 Wooden Rega helicopter**  
15.—

With this helicopter made from maplewood, there is plenty to discover: rounded contours and rounded contours, a movable propeller and wheels. For children aged 10 months and over. Manufactured by Hape Toys, complies with European toy standards. 12.7 cm long, 8.8 cm high.

16



17

## CLASSIC

**17 Globi storybook & colouring book** For prices, see order form

"Globi bei der Rettungsflugwacht" storybook, 99 pages (only available in German). Colouring book, 6 pictures to colour in, 23×16 cm.



## Order Form

Please write your name and address clearly on the front of this card, detach and send in a stamped envelope.



No.	Article	Price (CHF)	Amount	Ref.
1	Card holder with RFID blocking	69.—	_____	90077
2	Challenger 650	29.—	_____	50020
<b>Marketplace</b>				
3	Victorinox "Traveller", instead of 112.—	99.—	_____	90002
4	Swiss rescue board game, instead of 49.—	39.—	_____	40034
5	Bicycle helmet city i-vo, S (52–57 cm), instead of 119.—	99.—	_____	70011
6	Ski goggles, ladies' model, instead of 119.—	99.—	_____	90071
	Ski goggles, men's model, instead of 119.—	99.—	_____	90072
7	AgustaWestland Da Vinci, 1:43, instead of 29.—	19.—	_____	50006
8	Wooden Rega jet, instead of 15.—	10.—	_____	40029
9	Rega-Memo, instead of 39.—	30.—	_____	40013

No.	Article	Price (CHF)	Amount	Ref.
10	Capcool	39.—	_____	30050
11	Sports sunglasses	179.—	_____	90075
12	Daypack	79.—	_____	90076
13	Toiletry bag	29.—	_____	90078
14	Outdoor first aid kit	89.—	_____	90080

### For the youngest Rega fans

15	Helicopter soft toy	10.—	_____	50004
	Jet soft toy	10.—	_____	50022
16	Wooden Rega helicopter	15.—	_____	40028
17	Globi storybook, in German	20.—	_____	40002
	Globi colouring book, 6 pictures	4.—	_____	40001

### Special offer, 20% off

	"Commander" solar watch, black			
	instead of 289.—	230.—	_____	60004
	"Passenger" solar watch, red,			
	instead of 289.—	230.—	_____	60012

● New ● Bestseller ● Classic

For more articles in our range: [www.shop.rega.ch](http://www.shop.rega.ch)

# Emergency abroad

**If you have a medical problem, Rega is there for you around the clock – not only in Switzerland, but also abroad.**



In many cases, our medical consultants can provide the necessary help over the phone. If the ensuing medical clarifications indicate that repatriation is the best solution, our flight coordinators will arrange for you to be flown home in the Rega ambulance jet or on board a scheduled aircraft under the supervision of a member of Rega's medical staff.

Please be aware that Rega is not able to provide emergency assistance abroad: therefore, in the case of emergency, you should first alert a local rescue service, doctor or clinic, and only then Rega.

► **You can find more on this subject** at [www.repat.rega.ch](http://www.repat.rega.ch)

## Emergency numbers

Emergency number, Switzerland **1414**  
 Emergency number, abroad **+41 333 333 333**

## Patronage Centre

Matters concerning patronage

Tel. Switzerland **0844 834 844**  
 Tel. international **+41 44 654 32 22**

Monday – Friday  
 8.30 – 12.00 noon, 1.00 – 4.30 pm

## Rega Newsletter

[www.newsletter.rega.ch](http://www.newsletter.rega.ch)

## Rega Shop

Tel. Switzerland **0848 514 514**  
 Website **[www.shop.rega.ch](http://www.shop.rega.ch)**

## General information

Switchboard **+41 44 654 33 11**  
 Website **[www.info.rega.ch](http://www.info.rega.ch)**