

# INFORMATION FOLDER



# We fly for your life

# **Contact press**

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# **HISTORY**

#### Luxembourg, 1988.

A young boy is hit by a garbage truck while crossing the street and his foot is severely injured.

Surgery in a specialised hospital in France, 130 km away, becomes urgent and vital. But the ambulance gets stuck in traffic and is unable to reach the hospital in time to save the child's foot. Amputation of the boy's foot is now unavoidable.



Until 1988, no air rescue services existed in Luxembourg. The Luxembourgish government had an agreement with various rescue services abroad, enabling it to use their rescue helicopters in case of need. This cooperation, nonetheless, only applied to flights from one hospital to another, and no primary missions were flown in Luxembourg.

Except for a group of professional fire fighters, nobody was bothered by this situation. They themselves oftentimes wished for a quicker arrival at the accident site in order to being able to save more human lives. The idea of a Luxembourgish air rescue service was born!

### Resistance

The fire fighters therefore committed themselves to purchasing a rescue helicopter. Unfortunately, they hadn't counted on stiff resistance from the Minister of Interior and the Protection Civile, who responded with a clear "No" - or even "Over my dead body".

This opposition, however, did not daunt these determined fire fighters: "No one helped us, so we had to help ourselves and founded the 'Luxembourg Air Rescue' organisation", recounts René Closter, today president and CEO of the Luxembourg Air Rescue. The LAR's founders needed specialised knowledge, an adequate infrastructure, and most importantly, money. "But we had none of that. Our stubborn heads were our only capital!" recalls René Closter.

#### ...and then what?

In search of the support they sorely needed, the group contacted Siegfried Steiger. The German architect had lost his son Björn in a bicycle accident in 1979. Back then, the ambulance took over two hours to get to the accident site, which proved too long and unfortunately his son died. After this cruel blow of fate, Siegfried Steiger changed his life completely. He collected money, created the "Steigerstiftung", and founded the German air rescue service DRF ("Deutsche Rettungsflugwacht"). Today, DRF is one of the world's largest air rescue organisations, operating more than 50 rescue helicopters.

Eager to support the Luxembourgish movement, Steiger leased them one of his helicopters (a Bell Long Ranger) along with a crew to operate it. But there was no base for the helicopter! Even though an empty hangar at Findel Airport was available, LAR was not allowed to use it. Airport officials and the Ministry of Transportion flatly refused to allow LAR to use it with the statement: "Not with us!"

The determined Air Rescue founders, however, did not give up and found a discarded armoured tent to do the job. In a team-effort, the tent was erected and the helicopter finally had a roof over its rotors. A caravan served as an office and the helicopter began its operations in March 1989. Siegfried Steiger advanced the money needed to cover the expenses incurred, a debt which would have to be repaid later.



## And it continued...

On 15<sup>th</sup> of June 1989, Luxembourg Air Rescue was awarded the status of a non-profit organisation. A milestone; yet the transportation of emergency physicians and paramedics to accident scenes remained an open question. "We faced a large number of opponents", says René Closter. The "Protection Civile", for example, launched a petition to prevent Luxembourg Air Rescue from being incorporated into the emergency rescue system while readers' letters, name-callings and threats flooded the organisation. "I believe that the loose talk and opposition of our adversaries forged us even closer together as a team", René Closter concludes today.

# Finally becoming part of the SAMU

After long and enduring negotiations with the Luxembourgish government, Luxembourg Air Rescue was finally integrated into the national SAMU system in November of 1991. For safety reasons, the SAMU physicians insisted on using a dual-turbine helicopter, which LAR then had to rent from DRF. This tripled the costs of the young air rescue service organisation.

# **Second helicopter**

But what happens when the country's only helicopter is already on mission or undergoing maintenance when an accident occurs? Well, you need a second rescue helicopter. So in 1995 Luxembourg Air Rescue rented an additional helicopter and subsequently opened a second base at St. Louis Hospital in Ettelbruck in 1996. Luxembourg now had one of the best and most capable helicopter networks in the region.

# **Sleepless nights**

"At times, we had outstanding debts of one million dollars, and oftentimes a queasy feeling of being in deep water...", recalls René Closter. "In any case, I've had many sleepless nights back then". In 1995, Luxembourg Air Rescue finally saw the light at the end of the tunnel: the then - hereditary Grand Duke Henri - took over the patronage of the organisation, that was attracting more and more members, and receiving an increasing amount of donations. LAR still had to face unexpected financial strains because of new international JAR-OPS regulations, which dictated the use of two modern CAT A helicopters. These regulations ensured not only a safe landing, but also the ability to continue flying in case of a motor defect thanks to a second fail-safe engine.

# State-of-the-art helicopters

Despite tough times, LAR embarked on the adventure of leasing two state of the art McDonnell Douglas MD900 Explorer helicopters. Luxembourg Air Rescue was the first operator in Europe to use this type of helicopter, which distinguishes itself by virtue of a technical revolution: the absence of a tail rotor. It simply steers by using an air jet at the rear of the helicopter. Due to the lowered risk of the tail rotor hitting any objects and causing possible damage, take-offs and landings are therefore much safer. The MD900 is also considered to be particularly quiet with low levels of vibration. The medical interior of both aircraft are identical to those of the SAMU vehicles, and consequently interchangeable.

# First own aircraft

Things were looking up! In order to better cater to its members' needs, Luxembourg Air Rescue decided to lease its first ambulance aircraft in 1998. Henceforth, accident victims could also be repatriated from abroad. The aircraft, a Mitsubishi MU 2, was kitted out to transport intensive care patients. As it subsequently carried out numerous missions abroad, in 2000, LAR expanded its fleet to include a Learjet 35A, an extremely fast long-haul aircraft with modern equipment. This second aircraft enabled LAR to perform, under ideal conditions, worldwide repatriation flights using the organisation's own staff.



#### **ISO** certification

In July 2002, LAR achieved another milestone in its successful history. As first air rescue service organisation worldwide, it received the highest quality label: the ISO 9001 certification, guaranteeing, in the best interest of the patient, permanently controlled and optimised safety and quality standards.



# **Expanding its range of services**

In its early years, Luxembourg Air Rescue transported numerous premature babies in specially purchased incubators. The smallest passenger weighed only 750 grams! As Luxembourg does not have a hospital specialising in burns, LAR had to fly severe burn victims abroad. Since 1991, LAR is an integrated part of the SAMU system, flying so-called primary missions which transport the emergency physician directly to the accident site.

Apart from these medical services, Luxembourg Air Rescue also performs "search and rescue" services, i.e. it searches for missing persons or rescues them from difficult situations. LAR pilots are therefore equipped with night-vision goggles, otherwise reserved for military use only. Luxembourg Air Rescue's tasks also include a close cooperation with the Luxembourgish police forces. All costs incurred in carrying out these services are covered by the Luxembourgish government; neither member contributions nor donations are used for these expenses.

# **Luxembourg Air Rescue today**

Today, Air Rescue operates six state-of-the-art McDonnell Douglas MD902 helicopters as well as four ambulance jets, including three Learjet 45XR and one Challenger 605, making it one of the leading air rescue organisations in Europe. LAR specialists are saving lives 24/7.

Thanks to the support of the population of Luxembourg, the ambitious vision of just a few fire fighters has turned into the reality of a modern and professional organisation which acts in accordance with the highest safety and quality standards.

LAR is also a certified partner of the United Nations, and takes part in international humanitarian missions, such as those in the quake-battered regions of Iran or Morocco. In 2004, Luxembourg Air Rescue also deployed one of its aircraft to aid those impacted by the December Tsunami disaster. Its longest humanitarian relief effort followed the Pakistan earthquake in October 2005. Luxembourg Air Rescue further expanded its horizons in October 2007 by providing organ transportation services for the Strasbourg University Hospital. Since 2008, it has transported organs for the entirety of France (with the exception of the Paris region). In cooperation with the Luxembourg fire brigade and the Ministry of Interior, a fire extinguisher bucket was also purchased in 2010, allowing LAR to support fire fighters from the air when tackling inaccessible fires as well as forest or large blazes.



# MISSIONS, VISIONS, VALUES

Our mission is to save human lives and to preserve people's health by operating rescue helicopters and ambulance aircraft in Luxembourg, the Greater Region and throughout the world, 365 days a year by applying high safety and quality standards.



# MISSIONS, VISIONS, VALUE

# **Our vision**

12

... is to be the best in the field of Air Rescue and Medical Repatriation in order to serve our members and patients.

# Our values - What we believe in

"Members and Patients are the base of our 'raison d'être'"

By focusing on the needs and requirements of our members, patients, partners and customers, we fulfil our mission and generate additional values for all.

#### Leadership

#### "Passion to lead"

By setting clear objectives we create new value.

#### **Trust**

#### "Dare to share"

By growing in trust we make progress. We trust and respect each other's roles.

# Team spirit

#### "One mind, one heart"

By working together, we join forces. Our ambulance teams help all for one and one for all.

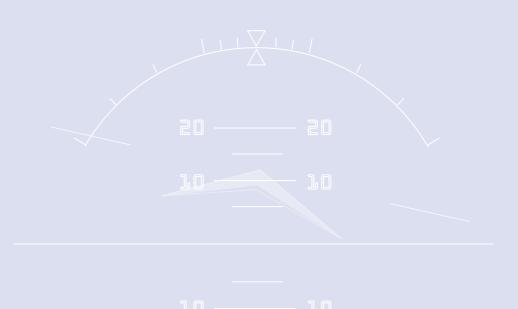
#### **Professionalism**

#### "Always professional"

Even in the most complicated and dangerous situations we act with the highest competence.



# ROTOR WING ACTIVITIES



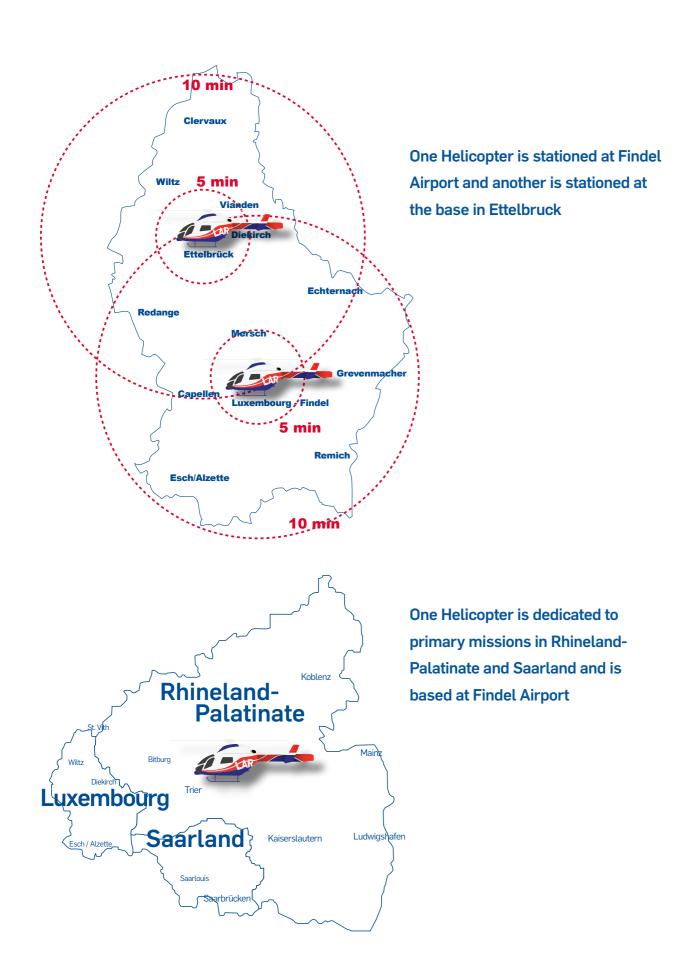
#### **Luxembourg and the greater region**

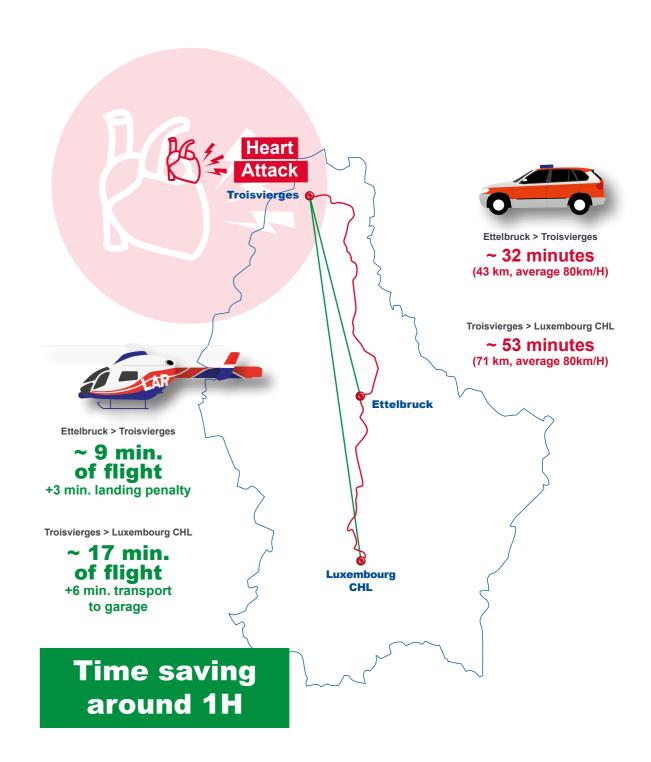
One LAR rescue helicopter is stationed at Findel Airport and another one in Ettelbruck. This geographic positioning enables them to reach any point in Luxembourg within 10 minutes. LAR is integrated into the national SAMU emergency and rescue system and can take off within two minutes after an alert, guaranteeing a fast, efficient and effective nationwide emergency services.

Due to its role as a rapid means of transportation for the emergency physician, first-aid treatments can be administered very quickly and the treatment-free interval-reduced, so lowering the risk of further complications. A third LAR rescue helicopter, also stationed at Findel Airport, carries out rescue missions in Rhineland-Palatinate and Saarland.

The three helicopters are also used for intensive-care patient transfers from Luxembourgish hospitals to specialised hospitals in Luxembourg or neighbouring countries.

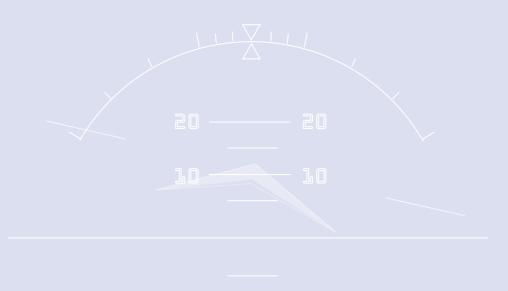






**Important time saving: "TIME IS MUSCLE"** 

# FIXED WING ACTIVITIES



#### Worldwide

Findel Airport is the base of the Luxembourg Air Rescue ambulance aircraft fleet, which is available for around-theclock medium and long distance flights and fully equipped for the transport of intensive care patients from one hospital to another, as well as for the repatriation of ill and injured patients from abroad.

The LAR air ambulance fleet consists of four ambulance jets, including three Learjet 45XR and one Challenger 605.



# **Organ team transport**

Following a successful public tender, Luxembourg Air Ambulance, a 100% subsidiary of the Luxembourg Air Rescue, is, in cooperation with a French partner, the exclusive organ team transporter for France. (except for the Paris region).



Since 1<sup>st</sup> January 2013, all organ team transports for all French transplantation centres (except the Paris region) are coordinated and directed from the Luxembourg Control Center. Approximately 800 missions a year are flown jointly with our French partner.

# **Coordination of the fleet** and staff

The heart of LAR, the LCC (Luxembourg Control Center), receives all emergency calls from abroad, provides the necessary support to LAR members in case of an emergency and coordinates LAR's aircraft fleet. The LCC consists of professional medical personnel and flight planners.



# The main tasks of the Luxembourg Control Center:

- ▶ Taking care of the LAR members who suffer medical emergencies abroad.
- Organisation of worldwide patient transportations with LAR ambulance aircraft, airlines or ground ambulances.
- ▶ Cooperation with international air rescue organisations on all continents for the fast and flexible planning of repatriations.



# FLEET EQUIPMENT

#### MD 902 Explorer

6 medical rescue helicopters

# **Learjet 45XR**

3 ambulance jets



# FLEET EQUIPMENT

## **MD902**

**6 Rescue Helicopters** 

#### **Manufacturer**

McDonnell Douglas Helicopters / MDHI

#### **Performance**

710 PS

#### **Cruise speed**

max. 260 km/h

(typical cruise speed: 220 km/h)

#### **Altitude**

max. 6,000 m

# Range

500 km

#### **Landing requirements**

about 20 x 20 m

#### **Engines (2)**

Pratt & Whitney PW 206E / 207E

#### **Tank**

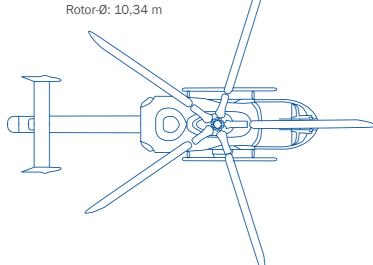
590 I

#### **Maximum weight**

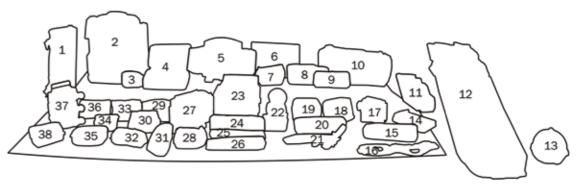
2,950 kg

#### **Dimensions**

Length: 9,80 m Height: 3,40 m Width: 2,84 m







- 1 Oxygen
- 2 Rescue Bag
- 3 I.V. Access Set
- 4 Drugs
- 5 Monitor/Defibrillator Corpuls3
- 6 Head Stabilisation
- 7 Corpuls Set
- 8 Airway Pedia
- 9 Ambu Pedia
- 10 Pedia Bag
- 11 K.E.D System
- 12 Stretcher and Vacuum Mattress
- 13 Helmet
- 14 Additional Set Type Samu
- 15 Vascular Catheter Set
- 16 Neck Stabilisation
- 17 Mobile Ultrasound Device
- 18 Mobile Suction Unit
- 19 Urine Catheter Set
- 20 Amputation Set

- 21 Back Stabilisation
- 22 Cards and hearing protector
- 23 Intensive Care Ventilator Pulmonetics LTV 1200®
- 24 Video laryngoscope
- Ventilation Set
- Thorax Drain Set
- 27 Suction Unit Weinmann ACCUVAC Rescue®
- 28 Accuvac Spare Set
- 29 Antidot Set Type SAMU
- IV Solutions Basic
- 31 Intubation
- Intraosseous Infusion System EZ-IO
- Diagnostic Set
- Minor Trauma
- 35 Sterile Material Set
- 36 Metalyse®
- Infusion System B.Braun Perfusor® Compact

25

38 Perfusor Syringes 50cc

# FLEET EQUIPMENT

## **45XR**

3 Learjets

#### Manufacturer

Bombardier, Wichita, USA

#### **Performance**

3,500 lbs effort tranchant

## **Cruise speed**

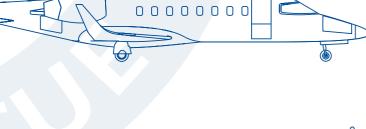
860 km/h

#### **Altitude**

max. 15,500 m

#### Range

4,000 km



## **Landing requirements**

min. 1,100 m

#### Engines (2)

Honeywell TFE731-20BR-1B

#### **Tank**

3,400 |

## **Maximum weight**

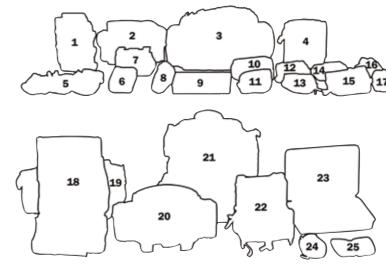
8,700 kg

#### **Dimensions**

Length: 17,78 m Height: 4,44 m Wingspan: 14,72 m







- 1 Syringe Pump B.Braun Perfusor® Compact
- 2 Suction Unit Weinmann ACCUVAC Rescue®
- 3 Bag of advanced resuscitation
- 4 Monitor Propag
- 5 Intubation Kit
- 6 Video laryngoscope
- Respirator Oxylog 2000
- 8 Thoracic drain kit
- 9 Syringes pumps set
- 10 Sterile material
- 11 Set for Intraosseous access EZ-IO
- 12 Set for intravenous access
- 13 Diagnostic set

- 14 Naso-gastric cathether
- **15** First-aid boxes
- 16 Non invasive ventilation set
- 17 Tracheotomy set
- **18** Ampullarium
- 19 Oxygen Backpack 5 liters / 200 bar
- 20 Defibrillator and Monitor Corpuls 3
- 21 Rescue bag Advanced Life Support
- 22 Ventilator LTV 1200
- 23 Blood analysis kit
- 24 Pressure Cuff control manometer
- 25 Glucometer

# THE CREW

"Our people make the difference"

I am especially proud of my team. LAR is not René Closter. I am the flag carrier, but also the person who has to roll with the punches.

LAR is a team of remarkable professionals who regularly risk their health and sometimes even their lives to save the lives of others.

They are all highly qualified and experienced, and ensure the smooth running of emergency operations.

I am proud to say they make the difference.

René Closter



# Crew of a rescue helicopter in the national SAMU emergency and rescue system



1 pilot



1 Hems Crew
Member (HEMS
Helicopter Emergency
Medical Service)



1 SAMU Emergency physician specialised in anaesthesia and reanimation



1 nurse specialised in anaesthesia and reanimation

# Crew of an air ambulance

**Double Stretcher** 



2 pilots



2 intensive-care physicians



2 nurses specialised in anaesthesia and reanimation







# **MILESTONES**

## LIFESAVERS AGAINST ALL ODDS

From a caravan and a tent to one of the most modern air rescue services in the world.



# **April 1995**

1990

Hereditary Grand Duke Henri takes over the patronage of LAR.



#### 18<sup>th</sup> April

Many political, logistical, administrative and most of all financial hurdles had to be overcome before the official foundation of Luxembourg Air Rescue A.s.b.l. (LAR).



1989

#### 1st March

LAR presents its first helicopter. On the same day, the Bell B 206 Long Ranger flies its first mission. Initially, LAR is only allowed to transport patients from hospital to hospital.

#### 15<sup>th</sup> June

Acknowledgment of the "Fondation Luxembourg Air Rescue" as a non-profit institution by Grand-Ducal decree.

9<sup>th</sup> July

General Vicar Mathias Schiltz is nominated president of the Fondation Luxembourg Air Rescue.



#### 15<sup>th</sup> May

Fleet change: The new two turbine BO 105 CBS replaces the one turbine Bell Long Ranger.

#### 1<sup>st</sup> November

Thanks to a convention with the Minister of Internal Affairs, LAR becomes a part of the Luxembourgish rescue services SAMU.

1991



#### April

An additional helicopter of the type Ecureuil is added to the fleet. The Ecureuil is exclusively used for secondary transports (from hospital to hospital) and based at Findel Airport.

#### May

LAR operations successfully meet the standards of international flight regulations JAR OPS 3.

#### 19<sup>th</sup> July

An MD 900 Explorer helicopter replaces the Ecureuil. Thanks to its size, reduced noise levels, and its NOTAR-System (the MD 900 Explorer has no rear rotor so reducing the danger of accidents), this helicopter type is particularly suitable for rescue missions.

Opening of a second air base in Ettelbruck, enabling the SAMU to reach any point in Luxembourg within 10 minutes.



1998

#### September

The first LAR-owned air ambulance, a Mitsubishi MU 2, is put into operation. From now on, member repatriation flights can be performed anywhere in Europe and North Africa.

1999

#### March

Fleet change: After 8 years of faithful services to LAR, the BO 105 is replaced by a second MD Explorer helicopter.

#### April

In cooperation with Caritas International, LAR brings roughly a ton of urgently required emergency medication to a refugee camp in Kosovo.



# November 1999

Due to numerous repatriations from more distant countries, LAR puts the second air ambulance, type Learjet 35A (LX-ONE), into use.



#### March

The LAR air ambulance fleet is modernised: The Mitsubishi MU 2 is replaced by a King Air B200 (LX-DUC).





#### 1<sup>st</sup> January

On behalf of the Luxembourgish Police, LAR makes an additional MD Explorer helicopter operational. The expenses resulting from these missions are covered by the Police.

2001

## October 2005

During a three-month long operation, following an earthquake in the Pakistani Kashmir area, LAR completes 925 helicopter missions, transporting 2,112 patients and 20 tons of aid supplies. This mission is the longest humanitarian disaster relief mission in the history of LAR.



#### 9<sup>th</sup> July

LAR is the first air rescue organisation worldwide to receive the ISO 9001:2000 Certification in all categories.

#### September

Signature of a quality charter by five leading European air ambulance organisations: REGA (CH), DRF (D), ADAC (D), Tyrol Air Ambulance (A) and LAR (L).

#### October

Fleet extension: In order to guarantee continuous air operations during maintenance intervals, a third MD Explorer helicopter is purchased as spare helicopter.



2003

#### July

The second air ambulance, type Learjet 35A (LX-LAR), is put into operation for worldwide repatriation flights. The LX-LAR replaces the King Air B200 (LX-DUC).

#### 26th December

Following a devastating earthquake, which kills more than 80,000 people and by request of the Luxembourgish Foreign Ministry / "Direction de la Coopération au Développement", LAR transfers both of its air ambulance jets to Bam, Iran. In collaboration with the canine rescue unit of Luxembourgish Red Cross, LAR provides instantaneous disaster relief. From now on, humanitarian commitments are part of the mission spectrum of LAR. Two further humanitarian missions follow within one year.

2004

#### February

An LAR air ambulance provides humanitarian relief efforts following an earthquake in Morocco.

#### 27<sup>th</sup> May

After a long battle, the groundbreaking ceremony for the construction of the LAR hangar in Ettelbruck is finally held!

#### January

An LAR medical team brings help to the tsunami-impacted regions of Asia.

#### March

The helicopter hangar of LAR in Ettelbruck is inaugurated. From now on, the helicopter "Air Rescue 2" is stationed there, increasing operational readiness in the Oesling, while saving expenses for the daily flights from and to the LAR bases at Findel as well as reducing the noise levels for local residents by approximately 40%.

#### March

Cross-border help - extension of the fleet by a fourth helicopter: Emergency knows no borders: By contract with the Ministers of Internal Affairs of Rhineland-Palatinate and Saarland, LAR is integrated into the rescue system of both German Federal States. From now on, an additional LAR helicopter positioned at Findel Airport operates daily rescue missions in the nearby German border area. The costs of these interventions are covered by the German health insurance schemes.

2005



 $\sim$  38

# **April 2009**

An additional hangar on P5 at the Findel airport is provided by the Ministry of Transportation. This interim solution enables LAR to shelter its aircraft and technical equipment.



2006

#### July

Extension of the LAR fleet with a double-stretcher Learjet 35A (LX-TWO), enabling the simultaneous transportation of two intensive care patients.

#### November

LAR provides a rescue helicopter for the NATO summit in Riga. The expenses of this mission are covered by the Luxembourgish government. 2007

#### October

Following a successful bid on a European tender, the Hôpitaux Universitaires de Strasbourg (HUS) appoint LAR as their exclusive organ transportation provider for the French territory.



2008

#### April

LAR is 20 years old and during a press event with three Ministers (Mars Di Bartolomeo, Minister of Health and Social Security, Lucien Lux, Minister of the Environment and Transportation, and Jean-Marie Halsdorf, Minister of Home Affairs and Town and Country Planning), LAR reflects on the difficulties of its early years and the lifesaving missions it completed in its first 20 years.

#### July

In cooperation with France Transplant, LAR expands its organ transportation activities throughout the north-eastern region of France.

#### 29<sup>th</sup> April

The LAR fleet is expanded to include a Cessna Citation Mustang, an aircraft to be primarily used for organ team transportation activities. The Mustang Citation has the advantage of only needing a very short landing runway, allowing it to fly into regional airports as well as smaller airfields.

#### June

Renewed test and confirmation of the certification ISO 9001:2008 in all areas of LAR.

#### 9<sup>th</sup> September

Luxembourg Air Rescue gets official approval for the independent maintenance of its helicopter fleet. From now on, maintenance work can be executed faster and more flexibly.

#### December

A European regulation elaborated by EASA stipulates that all helicopters in service for air rescue purposes need to be upgraded by the end of 2009 to meet the highest performance class possible in aviation. After two years of considerable financial investments, all five LAR rescue helicopters are equipped with the necessary performance driven engines as well as separated tanks as required by these European directives

2009



# 18th July 2010

In cooperation with the Luxembourg Ministry of Home Affairs, LAR is expanding its capabilities by adding the Bambi Bucket®, an external water container used in fire-fighting. With the Bambi Bucket®, forest, large-scale as well as hard-to-access fires, can be extinguished from the air.



2010

#### 5<sup>th</sup> March

The first mission of LAR's fifth helicopter. The MD902 helicopter with the registration number LX-HAR is the newest addition to the LAR fleet.

#### March/April

LAR sends an MD902 helicopter to Austria as part of a 6-week training program. The LAR pilots will provide on-site training on the MD 902 helicopter for the helicopter pilots from the air rescue organisation Heli Austria. The fact that LAR has been asked to do this by its Austrian colleagues in this very important area proves that Luxembourg Air Rescue is recognised at an international level.

#### 23<sup>rd</sup> June

For the first time, Luxembourg Air Rescue participates in the National Holiday parade. Three helicopters fly over the "Avenue de la Liberté" during the civil part of the parade.

#### 23<sup>rd</sup> November

LAR president and CEO René Closter welcomes LAR's 180,000<sup>th</sup> member at Luxembourg Airport and thanks the family personally. In his speech, he emphasises the importance of the support of the members once again. They are LAR's "raison d'être" and, without them, air rescue services in Luxembourg could not be guaranteed.

2011

0011

# February

After a long preparation phase, Skyservice Air Ambulance and European Air Ambulance EAA (a GEIE between LAR and DRF Luftrettung) organise a special reception to officially announce their collaboration. The new service accelerates the repatriation of patients from both sides of the Atlantic Ocean. No time will be lost on compulsory crew rest times since the wing-to-wing transfer will take place

at the end of the duty time of one crew and includes the handover of the patient to a fresh crew from the partner organisation.

Critical patient transfers will take place in a secure environment at the relevant service's home airfield - in Canada at the Skyservice Air Ambulance bases in Montreal or Goose Bay and in Europe at the EAA bases in Luxembourg or Baden/Karlsruhe. All partners have state-of-the-art medical equipment.

Such cooperation also exists with RMSI, which specialises in patient evacuation in crisis regions. RMSI stabilises the patient in that region and then flies him out to the next international and safe airport, where EAA takes over and continues the repatriation under optimal medical conditions.

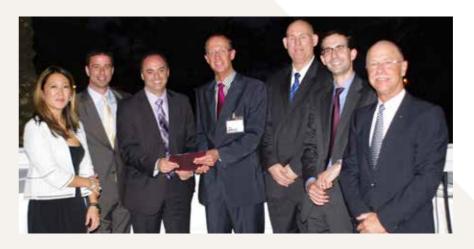
#### 1st May

On May 1<sup>st</sup>, the first of two new aircraft lands at Findel Airport. The Learjet 45XR is one of the most up-to-date jets in its category in terms of technology and can cover great distances while consuming only a minimum of fuel. The Learjet 45XR also benefits from its short landing capabilities as well as its speed.

Together with an Austrian specialist in air ambulance interior technology, an innovative and unique patient transport system is developed, which not only meets the high-quality standards of LAR, but also offers the option to quickly adjust the interior to the particular and varied tasks and missions of a state-of-the-art air rescue organisation.

#### 17<sup>th</sup> November

The two new ambulance aircraft are presented to the Luxembourgish public. The technical developments of the past 20 years make a restructuring of the fleet necessary in order to stay abreast of the changes in aviation and medical technology. With the new fleet, LAR enters a new era of air ambulance services.





#### 5<sup>th</sup> June

Due to the change and standardisation of the LAR fleet, the Cessna Citation Mustang leaves the fleet.

#### 13th November

LAR welcomes its 185,000<sup>th</sup> member, family Wagner - Da Silva from Useldange, at its base at the Findel Airport. About 60% of the Luxembourgish population now support the lifesaving air rescue services. René Closter, president and CEO of LAR, points out: "LAR only exists because of the support of our members, which are our 'raison d'être'. Thanks to the support of the Luxembourgish population, the solidarity community and the membership fees, LAR can provide lifesaving services by air."



## 2013

#### 1<sup>st</sup> January

Luxembourg Air Ambulance, a 100% subsidiary of Luxembourg Air Rescue, becomes, together with a French partner, the exclusive organ team transporter for France Transplant, for the whole of France, except for Paris. With the centralisation of the organ team transport, Luxembourg Air Ambulance has jointly, with its French partner, won the public tender for the provision of a central operations centre as well as the operation of organ team transports.

Since 1st January 2013, all organ team transports for all French transplantation centres (except for those in Paris) are coordinated and executed via the LAR Luxembourg Control Center. Approximately 1,300 missions are operated jointly throughout the year.

#### 18<sup>th</sup> April

In 2013, LAR celebrates its 25th anniversary and offers its members an exclusive trip with Luxair and invites the press to visit the installations at Findel Airport. On June 12th, numerous guests and employees gather for a cultural event. The Grand-Duke Henri and the Grand-Duchesse Maria Teresa take the opportunity to participate in the celebration at Philharmonie Luxembourg and congratulated LAR for its 25 years of livesaving activities.



# 12th June

In the presence of Minister Bausch, René Closter, president and CEO of Luxembourg Air Rescue, lays the symbolic foundation stone of the new LAR operational building at Luxembourg Airport.



#### 12th June

Ending the temporary housing in containers and tents, the new functional LAR building will contain two hangars. Following a 15-month long construction period, the building will house the state-of-the-art control center, as well as a new maintenance hangar, creating an ideal work environment for LAR's internal maintenance operations. As MDHI Service Center, LAR will subsequently be able to perform the entire maintenance of its rescue helicopter fleet in-house, eliminating the costly transfer to England for major maintenance works. The new building will regroup all crews and employees and finally offer them an ideal work environment with an adequate and much-needed infrastructure in order to fulfil their daily lifesaving missions.

#### 8<sup>th</sup> December

In the wee hours of December 8th 2014, Luxembourg Air Rescue's recently purchased Learjet 45XR aircraft lands at Findel Airport. This expansion of the fleet to a total of five air ambulances follows the continuing growth of LAR activities.

Since 22<sup>nd</sup> January 2015, the new aircraft, with the registration LX-ONE, carries out patient repatriation flights after the aircraft has been coated in the LAR corporate colours and the authorisation procedures have been completed by the DAC (Direction de l'Aviation Civile).

## 2014



# In September,

LAR is given permission to carry out "base maintenance" on its rescue helicopters.





2015

#### 10th February

Ready to accept new challenges: LAR puts its new medical equipment for the transportation of patients with highly infectious diseases into operation. This medical evacuation module (Medevac) enables the safe transport of patients suffering an Ebola infection for example, meaning that neither crew nor jet come into contact with the pathogen during the transport. The development of this "flying isolation ward" for the Learjet 45XR airplane took several months, while considering all medical as well as aeronautical requirements. In addition, pilots, medical and ground-handling staff had to undergo special training in cooperation with "Médecins Sans Frontières."

The official presentation of the new equipment was held on February 10<sup>th</sup>, 2015 in the presence of Luxembourg's Minister of the Interior, Dan Kersch, members of World Health Organisation, the Haut-Commissariat à la Protection Nationale, the Administration des Services de Secours and the US State Department.

The development of this special equipment followed a request from the Luxembourgish government in the context of an EU project. All related costs are covered by public funds.

21st May

On the 21st of May, Luxembourg Air Rescue celebrates 10 years of cross-border cooperation with Saarland and Rhineland-Palatinate. During the festivities in Nittel, at the same venue where everything began 10 years ago, the Minister of the Interior of Luxembourg Dan Kersch, the Minister of Interior and Sports of Saarland, Klaus Bouillon, and the Assistant Secretary of State of Rhineland-Palatinate, Randolf Stich. participate. Starting with 2 missions a day, the rescue helicopter Air Rescue 3, which is coordinated by control center Trier, nowadays flies up to 1,000 missions per year in these two federal states.



#### June

For the fourth time since 2002, all LAR's activities are audited and it receives the quality label ISO 9001 for a further 3 years. This regular control by the European Society for Certification of Management Systems (ESCM) not only helps to maintain a high quality level for LAR, but furthermore continuously improves it.



#### September

In September, LAR is given permission to carry out "base maintenance" on its rescue helicopters, also called annual or periodic maintenance as, it occurs once a year. To date, this inspection has been carried out in MDHI service centers in Germany, England and most recent-

ly in Belgium. This "base maintenance" meant that costs related to the transport of the helicopter and to the accommodation of the crew went beyond the normal maintenance costs. The fact that the LAR helicopter technicians are now able to carry out the annual inspection of the LAR helicopters in their own hangar will make the maintenance work more cost-effective. And this is just one of the many advantages that this permission brings: it also means, for example, a substantial time saving. Until now the transport time has been added to the duration of the "base maintenance", which usually takes four to five weeks. This could be delayed due to weather conditions. For these reasons, it has always been the aim of the LAR to be able to carry out the "base maintenance" of its helicopters itself.

#### 30th September

The 2015 prize of the Foundation of the Deutsche Bank Luxembourg S.A. for the support of German-Luxembourgish cooperation in the field of sciences goes to René Closter, for his work in founding and developing Luxembourg Air Rescue.



# On April 20th 2016,

LAR staff, together with guests, celebrate the official inauguration of their new premises, in the presence of His Royal Highness, Grand Duke Henri of Luxembourg.



2016

#### 20th April

At last the time has come: after a construction phase of over a year - so staying within the original time schedule - Luxembourg Air Rescue has moved into its new premises at Findel Airport. On April 20th 2016, LAR staff, together with guests, celebrated the official inauguration in the presence of His Royal Highness, Grand Duke Henri of Luxembourg. The newly constructed premises comprise three hangars with a combined size of 3,600 sgm for the LAR aircraft fleet, as well as 3,500 sqm office space, including a state-of-the-art Control Centre and innovative medical training facilities. For René Closter, president and CEO of Luxembourg Air Rescue, the new building is the ideal base for air rescue services in Luxembourg: "The new building has been planned by our staff for our staff. It constitutes in many ways a significant progress for our lifesaving mission. The infrastructure, and so the working conditions, have been optimised for our staff in such decisive ways that they are now able to better fulfil their mission of saving people in emergency situations."

One improvement is that, as a certified MDHI Service Center, LAR can now carry out all helicopter repair and maintenance services by itself. This allows a reduction in costs, especially with regards to larger maintenance tasks for which the helicopters previously had to be flown to maintenance companies located abroad, and which now can be performed in-house. Furthermore, maintenance works on the LAR ambulance aircraft fleet can also be carried out by LAR's own technicians in the new hangars.

An additional advantage is the fact that all LAR staff are now located under one roof, compared to the two separate sites in the past. This will not only help to reduce costs and allow a better utilisation of resources, it will also help to improve the teamwork across all departments of the LAR Group. Thanks to shorter communication lines between different departments, working conditions and processes can be further improved, which reflect the high quality standards of LAR and contribute to the well-being of patients and members.

#### 1st October

Since the 1st of January 2013, Luxembourg Air Ambulance, a 100% subsidiary of Luxembourg Air Rescue, is together with a French partner, the exclusive organ team transporter for France Transplant for all of France except Paris. In October 2016, the contract is extended. To date, the LAR Learjet based at Findel and in charge of organ team transports flew mainly at night. Since the 1st of October 2016, a LAR Learjet is on standby 24/7 for organ team transports. This expansion of the agreement takes into account the growth in organ team transports in France, which are now increasingly taking place during the day.

#### 3<sup>rd</sup> November

On the 3<sup>rd</sup> of November, during the closing session of the annual global meeting of ITIJ (International Travel & Health Insurance Journal) in Berlin with over 800 participants from all over the world, LAR's daughter entity European Air Ambulance (EAA), responsible for the commercial marketing of air ambulance services to global business partners and third parties, has been

granted the prestigious ITIJ Industry 2016 award for Best Air Ambulance Provider of the Year in the world. This prize honours excellence and innovation in the global travel and health insurance industry, rewarding companies that have been providing outstanding services over the previous year. Four internationally renowned providers were nominated as finalists for this award from all globally operating flight organisations.



#### 1st December

At the beginning of December, the new aircraft of Luxembourg Air Rescue, a Learjet 45XR with the registration number LX-RSQ, lands on Findel. It occupies the place of the recently sold Learjet 35A. LAR adds the new aircraft as part of a roll out program that had already seen 2 Learjet 35A replaced by 45XR. The goal is that the last Learjet 35A of the five-strong LAR fleet will leave during the coming year. The LAR fleet will be one of the youngest worldwide.

## rance Journal)

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March

The last Learjet 35A leaves the LAR fleet and is replaced by a Learjet 45XR. With that the rolling out program is finished. From now on, LAR disposes of five Learjet 45XR.

2017

#### May

It has already been 30 years since a handful of enthusiasts launched Luxembourg Air Rescue. LAR's employees celebrated this milestone anniversary on the evening of May 31st in the presence of Their Royal Highnesses The Grand-Duke and Grand-Duchess of Luxembourg, together with other eminent guests from the world of diplomacy and politics.

Apart from the ambassadors of Belgium, Great Britain, Greece, France, Germany and the Netherlands, numerous politicians from Luxembourg and the Greater Region participated in the birthday celebration at Findel Airport. The proceedings opened with a speech by Prime Minister Xavier Bettel, in which he highlighted how LAR has become a treasured Luxembourgish institution.

He was followed by René Closter, founding member and president of LAR, who reviewed the organisation's development over the last 30 years.

"We are proud of the accomplishments of the last 30 years and are grateful for the trust which the Luxembourgish people and many from all over the world have in us", he said. "The LAR is a big global player and is well-known and respected internationally. Day after day, we fly missions far beyond our national borders."

Jeff Skiles, the co-pilot and one of the heroes of "The Miracle of the Hudson", congratulated LAR during a keynote speech in which he described how the famous ditching in the Hudson River unfolded.

René Closter concluded by summing up the driving ethos of LAR in the following way: "To prove ourselves worthy of the trust which our 185,000 members and our patients have in us, is our daily goal – today and for the coming 30 years."



# 31st May 2018,

LAR employees celebrate the milestone anniversary in the presence of Their Royal Highnesses The Grand-Duke and Grand-Duchess of Luxembourg, together with other eminent guests from the world of diplomacy and politics.



#### December

LAR-group secures its exclusive contract for the transportation of organs in France for a further five years. The decision to select LAR again for the transportation of organs in France (except Paris) reaffirms

LAR's reputation as one of the leading air rescue services in Europe and worldwide. France's Biomedicine Agency entrusts around 1,600 cases from 67 hospitals in France (including about 20 transplant

centres) to the care of LAR-Control Centre in Luxembourg every year. That results in around 800 missions per year and the saving of two lives in France every day on average.

## 2019



#### 30<sup>th</sup> July

A sixth Learjet 45XR has been added to the air ambulance fleet of the LAR group. The aircraft with registration "LX-TWO" was welcomed onto the tarmac of Findel Airport where firefighters baptised it with water cannon in the time-honoured tradition.

René Closter, CEO and president of LAR, says the latest addition is an investment for the future: "Our Learjets 45XR are among the most modern ambulance aircraft in the world and feature the most advanced medical equipment. This acquisition allows us to assure our members

and patients that over the next few years they will continue to receive professional and reliable help. Our members drive everything we do."

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# 28th March 2020

LAR is on the front line of the Corona crisis, transporting a large number of highly infectious patients by helicopter and by ambulance jet, sometimes under extremely difficult conditions, both at home and abroad.



#### March

The Grand-East region (Eastern France) has been particularly hard hit by the pandemic and the region is in a state of emergency. Doctors and hospital staff are fighting for the lives of seriously ill patients in crowded hospitals.

On behalf of the Luxembourg government and the French health authorities, LAR is evacuating patients from the region and flying them to Luxembourg, or other neighbouring countries for medical treatment. This is helping to ease the pressure on hospitals in the worst-affected areas of France. Patients are also transferred between different locations in France with the help of LAR.

"In air rescue, there have been no political boundaries for LAR for a long time. It is normal for us to help our neighbouring country in this emergency situation," says René Closter, CEO and president of Luxembourg Air Rescue.

For a long time now, LAR has had in place the trained personnel and the equipment needed for the air transport of seriously ill and highly infectious patients.

"For these missions, we benefit from 30 years of experience and around 50,000 successful missions, as well as the experience gained during the Ebola missions carried out in 2015," says Closter.

The transport of COVID-19 patients places high demands on the specially trained LAR crews. Without exception, they all work in airtight protective clothing, including a polyethylene protective suit, respiratory mask, protective gloves and goggles.

2020





After each mission there follows a painstaking three-hour routine of cleaning and disinfecting the helicopter, or ambulance jet, as well as the crew at LAR's operational base. The aircraft and all medical equipment are cleaned and disinfected with a special solution. The removal of protective clothing follows a strict procedure, conducted by a specially trained employee. (watch the video: https://bit.ly/3hwRENI).

By the end of June, LAR will have flown about 50 COVID-19 missions.



# 21st May 2020

"Air Rescue 3" celebrates 15 years with LAR on May 21.



#### 1st April

For almost 30 years, the rescue helicopters of Luxembourg Air Rescue have been integrated into the SAMU national emergency and rescue system.

This partnership with the government and the health authorities has been further strengthened recently by the creation of a fifth additional SAMU unit, permanently stationed at Findel Airport. Since April 1st 2020, the AR1 team has been supporting the Luxembourg emergency medical service with an MD 902 helicopter and its own dedicated LAR crew (pilot, emergency doctor and specialised intensive-care nurse).

Minister of the Interior Taina Bofferding says, the agreement to intensify the already close cooperation between SAMU and LAR provides proof of "the professionalism and good reputation of the LAR" and represents "a continuation of the good and long-lasting relations between the parties".

The new contract was agreed and signed by the government, represented by the Ministries of the Interior and Finance, Luxembourg Air Rescue and the Grand-Ducal Fire and Rescue Service (Corps grand-ducal d'incendie et de secours, CGDIS).

The helicopter is now operating from the Luxembourg Air Rescue base at Findel and no longer from the hospital on duty heliport (CHL or HOKI), as was previously the case.



#### 21th May

Responding to requests from the Trier control centre, our AR3 rescue helicopter stationed at Findel airport flies more than 1,100 rescue missions a year in the German federal states of Saarland and Rhineland-Palatinate.

2020

#### June

Regular ongoing training is essential for LAR. Several LAR employees have been successfully trained as instructors for special operations with the winch. Experts from a highly specialised company have travelled from Canada to train them according to the "Train the Trainer" principle.

There are always interventions where patients find themselves in situations that are difficult to access. The use of a helicopter with a rescue winch can be a good option for fast and gentle rescue from exposed locations. From now on, the instructors will pass on their knowledge to other rescue services.

(Video: https://youtu.be/g\_TH3raPsVU)





# 9th July 2020

LAR invites the press to present its EpiShuttle and to thank its generous donors who have made possible this essential investment for more security.



## 2020

#### 9<sup>th</sup> July

Solidarity in this period of extraordinary health crisis has paid off. Just eight weeks after its appeal for donations, LAR managed to raise the necessary funds to finance its EpiShuttle, dedicated to the fast and safe transport of contagious patients.

In an EpiShuttle, the patient rests on an isolation stretcher under a transparent plastic dome. Air-tight tubing allows the patient to be connected to an intensive care ventilation system, while being treated and monitored at the same time. He can also be safely connected to other ventilation hoses and supply lines outside the isolation stretcher.

Patrick Adamczuk, deputy head of the medical department, states during the official presentation on July 9<sup>th</sup> 2020, that this new equipment will not only improve the protection of the crew and future patients from infections, but will also increase the speed of intervention of the rescue helicopters, since it is not necessary to disinfect the entire helicopter cabin.





Two additional "Isolation Chambers" have also been purchased for the transport of highly infectious patients in the Learjet. This equipment was financed with the kind support of the COVID-19 Foundation, under the aegis of the "Fondation de Luxembourg".

(Video: https://youtu.be/hGcnwiutS6s)

Since the beginning of the pandemic, LAR has transported a large number of COVID-19 patients, both within and outside Luxembourg's borders, thanks to unprecedented cross-border solidarity and cohesion.

"We thank our donors from the bottom of our hearts for making possible such an important investment in improved safety", said René Closter, CEO and president of Luxembourg Air Rescue. "Special situations, such as the Corona crisis, require special action."

(Video: https://youtu.be vfiSF8svi3E)

#### 16<sup>th</sup> December

Luxembourg Air Rescue has been awarded the **2020 Adenauer-De Gaulle Prize** together with the DRF
Luftrettung for their outstanding cross-border achievements during the Corona crisis. In granting the award, the prize judges paid tribute to the enormous professionalism and solidarity shown by both organisations in transporting French patients with COVID-19 to German hospitals and back as a special sign of neighbourly help in Europe.

The Adenauer-De Gaulle Prize was established on the 25th anniversary of the Elysée Treaty on January 22<sup>nd</sup>, 1988 and is awarded to persons, initiatives or institutions who, through their work, have made an outstanding contribution to the consolidation of Franco-German friendship. A binational jury, co-chaired by the Commissioner for Franco-German Cooperation selects the award winners. LAR shares the 10,000-Euro prize with Germany's DRF air rescue team.

#### 1<sup>st</sup> May

René Closter, founder, long-standing CEO and President of Luxembourg Air Rescue, is retiring. He retains his position as Chairman of the Board of Directors and thus also the responsibility for strategy, political relations and marketing. Frank Halmes takes over as CEO with the same enthusiasm as his predecessor.



# 13th September 2021

After 15 months of construction, the new Hangar 3 is put into service on 13th September. The new building, which also houses separate offices for the Air Rescue 1 team, the SAMU garage and the spare parts warehouse, was designed and planned in collaboration with LAR staff.



# August

LAR is always looking for ways to help its members in need as quickly as possible. That is why LAR is very proud to welcome the Bombardier Challenger 605 as its newest fleet member in August 2021. The aircraft enables longer range repatriations, more flexible operational capabilities, as well as greater space for patients and specialised medical equipment.

2021

## July

Following the severe flooding in Rhineland-Palatinate in July 2021, LAR provides a rescue helicopter to assist its German neighbours with search and rescue flights. Due to the extensive flood damage, LAR offered immediate cross-border assistance, thus proving that the motto "air rescue without borders" is a lived reality.



#### December

In collaboration with its German partner DRF-Luftrettung, Luxembourg Air Rescue participates in relocating COVID-19 intensive care patients within Germany. Assisted by LAR's highly specialised medical staff, COVID-19 patients are flown from various heavily overburdened hospitals to clinics in other German states. The patient transports are carried out using specially equipped LAR ambulance jets.

