It was in 1997, that Eastern Europe experienced extreme floods. 114 people died in the Czech Republic and in Poland simply because the available air rescue operations did not suffice. Although there were fifteen air-medical transport teams with thirty helicopters at hand, only a few primary air rescue missions could be accomplished. Two years after this big disaster, the Ministry of Health accepted a plan to reorganize the “old” Polish air medical service together with all other Polish medical rescue systems.

How did Polish medical air rescue begin? Polish medical air rescue was established already in 1925 and operated by the military. In 1955, after Stalin’s death, the organization was re-founded by a pilot named Tadeusz Wieckowski. Together with other enthusiasts he successfully started the organization operating from seven air-rescue bases: In the first year, they transported 2,600 people with a S-13 biplane under Soviet license. Until 1961, seventeen bases were established under Wieckowski’s leadership. The fleet consisted of many different fixed-wing aircraft: Fieseler Fi-156 Storch, Piper Cup L-4, Bücker Bü-181 Bestman, and later the twin engine Super Aero-45 and the single engine STOL airplane L-60 Brigadyr.

1958–1989: Modernization and Consolidation

In 1958, a great step was taken: Polish air rescue introduced helicopters for medical transport. First type was the WSK PZL Swidnik SM-1 piston engine helicopter, a license production of the Soviet Mil Mi-1, which the rescue service got from the army. Airplanes like the PZL 101 Gawron, YAK-12A, PZL-104 Wilga 35S and Let L-200 Morava made up the fixed wing fleet.

By the end of the 1950s, roughly 5,000 missions were flown per year, in the mid sixties the number increased to 8,000. Most of the missions were secondary missions. Primary missions were flown too, but not systematically.

In 1968, Tadeusz Wieckowski fell ill and resigned from his position as director; he passed away one year later. Zdzislaw Olszanski, the new CEO, started his job in 1968. (He resigned 31 years later, when the Polish Medical Air Rescue was dissolved in 1999.)

One of his main projects was the introduction of new helicopters. The new backbone of that fleet was the twin engine Mil Mi-2. Until 1975, more than twenty helicopters of this type were in service, and including substitutions, a total of fifty Mi-2 was operated up until today.

In the fixed-wing fleet, the PZL Mielec An-2 single piston engine biplane came into operation, supplemented in the nineties by a PZL Mielec M-20 Mewa and others.

1989 and Beyond: The End of Communism and the Consequences

The radical political and economical changes after 1989 did not leave the Polish Medical Air Rescue untouched. Severe financial problems forced the organization to close down two air ambulance bases; maintenance issues caused many aircraft, helicopters as well as fixed wing airplanes, to be grounded. For almost a decade, the medical equipment was rather simple and partly borrowed from local hospitals.

As a result, systematic primary rescue flights where rarely possible, a fact that explains the difficulties the organization faced during the abovementioned flood in 1997.
Medical Air Rescue Reloaded
At the end of 1999, the Ministry of Health accepted the reorganization of the entire Polish air rescue service. The four main re-organizational approaches were:

- Enable the new Polish Air Ambulance to effectively perform primary missions
- Cut overhead costs by optimizing administrative and operational processes
- Improve medical standard of the flying equipment
- Solid financing as a non-profit organization funded by the Ministry of Health

On March 3, 2000, the Ministry formally established the new air rescue organization as SP ZOZ Lotnicze Pogotowie Ratunkowe. The result is far from being as long-winded as its name.

In its first year, the helicopter emergency medical service flew more than 1,500 primary missions: a 480% increase compared to the previous year. In 2007, 5,685 helicopter and 550 fixed wing missions were counted. A remarkable rise that reflects that SP ZOZ Lotnicze Pogotowie Ratunkowe is indeed able to serve the huge demand for air rescue missions. “Today, we can reach about 80% of the Polish territory within twenty minutes.” The limitation to only two different helicopter types (Mi-2 and W-3A Sokol) and one airplane type (PZL M-20 Mewa) meant a reduction in maintenance costs; administrative and operational processes were gradually adjusted to Western standards.

The avionics equipment underwent an upgrade, and almost the entire medical equipment was replaced. The fourth issue, i.e. the previous lack of funding, was obviously solved by solid financing through the Ministry of Health. Hence, the publicly funded boost of air rescue capabilities is a result of the formidable overall economic boom of Poland.

And the Future
Although the nineteen Mi-2 in the fleet have all been overhauled, the type needs to be replaced. The design is of the late 1950s, and moreover, this helicopter was never meant to serve in air rescue missions. Neither can it fly in the dark nor in poor visibility. In a country where a winter night may be up to 16 hours long, and where fog is an everyday phenomenon – as maritime and continental climates overlap in much of Poland – those constraints are severe obstacles, especially for primary missions.

Consequently in 2004, the Ministry of Health set up a public tender which provoked a fierce bidding between Eurocopter and Agusta. The contest as well as a new Polish administration prolonged the decision-making process and led to a two-fold result: The purchase of one Agusta A109 in 2005 and 23 Eurocopter EC 135 P2+ including a Flight Training Device (FTD) to be delivered until 2010. The new helicopters will feature a Canadian Marconi (CMC) CMA-9000 Flight Management System, will be equipped for day and night operations with one or two pilots; the IFR capable helicopters’ avionics will be complemented by the Euroavionics IV+ moving map system. Aerolite Max Bucher will deliver the medical compartment designed especially for our project under a Supplemental Type Certificate (STC). SP ZOZ Lotnicze Pogotowie Ratunkowe, as a representative of the Ministry of Health, started the work on the medical cabin together with Aerolite in July; they are nearing the end of the design stage.
The agreement between the Polish Ministry of Health, Mrs. Ewa Kopacz and Eurocopter consortium (Eurocopter S.A.S. and Eurocopter Deutschland GmbH) represented by Gerard Pau was signed on June 27, 2008. Dr. Lutz Bertling, Eurocopter CEO, stated, “Eurocopter committed to provide Poland’s air rescue service with modern and reliable rescue helicopters in a very short timeframe to enable a seamless transition during the phasing out of the currently used older models. Eurocopter will carry out the maintenance and training of the pilots in its own center in Warsaw, that we established in 2005. This contract is without doubt only the beginning of a long-term business partnership with Poland.”

Our motto: “We fly to help!”

The Polish Medical Air Rescue SP ZOZ LPR provides medical rescue services that include:

1. Rescue flights to accidents, emergency cases, urgent inter-hospital life-saving flights, (helicopters). SAR operations and rescue operations in natural disaster situations.
2. Emergency and scheduled medical air transport (airplanes).

The Polish Medical Air Rescue SP ZOZ LPR is the only nation-wide company in Poland providing (HEMS). It operates from 16 bases in all regions of the country. Operations from these bases cover about 80% of the Polish territory. The bases are located at places guaranteeing that rescue squads can reach the accident site within 20 minutes maximum.

The medical rescue section includes:
1. HEMS: pilot, paramedic, doctor
2. Medical air transport: two pilots, paramedic, doctor

SP ZOZ LPR employs 368 people in Poland, among them, about 100 medical doctors.

The following aircraft types are used:

**Helicopters:**
- Mi-2 plus
- Agusta A109 (1)
- EC 135P2+ (to be delivered)

**Airplanes:**
- M-20 Mewa (2 machines)
- Piaggio P-180 (2 machines)

Medical Equipment FW Draeger ITI 5400 incubator Oxygen supplementation, LifePak Defibrillation system, Propaq 206 E life parameters monitoring including ECG, oxygen saturation (Sa02), capnography (oxygen dicarboxide level in respiratory tract), arterial blood pressure (invasive and non-invasive method possible), LTV Pulmonetic or Oxylog 3000 high-tech respirator and up to four automatic infusion syringes. Vacuum stretcher is available on request.