The South African Red Cross Air Mercy Service (AMS)



he South Africa Red Cross Air Mercy Service (AMS) is an independent, non-profit aeromedical organisation with bases in the Western Cape (Cape Town and Oudtshoorn), KwaZulu-Natal (Durban and Richards Bay) and Limpopo (Polokwane) that provide an air ambulance network, outreach and emergency rescue service to metropolitan areas and remote rural communities. AMS also provides cross-border flights and services the whole country.

In a land characterised by vast distances, the AMS has become a vital conduit for delivery of emergency and critical healthcare services to rural and urban areas. The AMS works closely with Provincial Departments of Health and health workers in the communities to assess needs and implement appropriate healthcare programmes. "Our commitment to saving lives and changing lives knows no boundaries," said Dr Philip Erasmus, CEO AMS.

Established in 1966 with loads of enthusiasm and a Cessna single engine six seater aircraft, the AMS was established by the South African Red Cross Society; the first and only voluntary manned aero-medical service to the country. Since then, the AMS has expanded into a nationwide aero-medical network. The AMS was established as an independent trust in 1994 and shares the principles and creed of the South African Red Cross Society and Red Crescent Movement.

It is the mission of the AMS to contribute to the improvement in the quality of life of all communities, facilitate access to equitable and effective healthcare and the provision of aero-medical and other associated humanitarian services.

The AMS plays a vital role in providing not only emergency rescue and air ambulance services but also a community outreach programme taking critically needed to healthcare impoverished communities. The organisation's role includes to manage and act as the overall coordinator of the aero-medical, emergency rescue service and rural health outreach in the various provinces in terms



AMS CEO, Dr Philip Erasmus

of assessing the needs, planning, day to day operations, monitoring and feedback to provincial and national health authorities. It also accesses the volunteer network (aero-medical) of the AMS to support the provincial Departments of Health (DoH) by supplementing the skills pool and sources funding to support the development and expansion of the service.

AMS' vision is to be the most professional and effective aeromedical rescue, healthcare support and relief network to all communities in need. Its mission is in accordance with the principles and objectives of the International Red Cross and Red Crescent Movement and in support of the National Health Systems to:

• Contribute to the improvement in the quality of life of all communities >



Emergency medical service



A patient being loaded in the Pilatus PC-12 fixed wing air ambulance



Dr Erasmus chatting to a patient while the air ambulance is being readied



Pilots Jesse Roos and Jaco van Zyl preparing for take off



The Western Cape Department of Health EMS/AMS search and rescue helicopter with Jody Frantz, Jonathan Groenewald and pilot Donovan Köhl

- Facilitate access to equitable and effective healthcare
 - Provide aero-medical and other associated humanitarian services.

The company's core values are based on humanitarian principles, achieved by integrity, caring and commitment. The organisation is managed by a board of trustees who governs and oversees the activities of the organisation and consists of seven trustees.

Core services and resources

The organisation currently has a fleet of seven fixed wing aircraft ie Pilatus PC 12, six rotor wing (helicopters) aircraft ie two Eurocopter EC 130 B4 and four AgustaWestland 119Ke helicopters, which operate seven days a week.

The Pilatus PC-12 fixed wing is a single turbine aircraft and is a fully equipped, 24-hour air ambulance, with a dedicated, medical intensive care-type interior. This nine seater aircraft has a pressurised cabin and has the capacity of up to

three stretcher patients. It cruises at approximately 450km/h, can reach an altitude of 30 000ft (9 144m), and has an ideal operating range of more than 250km. It is perfect for short striplandings and is utilised for transporting personnel on the outreach service.

The single engine AgustaWestland 119Ke rotor wing is used as an air ambulance and for rescue missions. It is fully equipped with a dedicated, intensive care-type interior, with sling, winch capacity and emergency floatation gear for operations over the sea. This helicopter cruises at 250km/h and has an operating radius of 200km but can be utilised for further distances. It has the capacity for two pilots, three crew members and one stretcher and is mainly utilised for mountain and surf rescues, as well as interhospital transfers and primary calls.

The Eurocopter EC130 B4 rotor wing is a single engine air ambulance and

is fully equipped with a dedicated, medical intensive care-type interior and sling operations with emergency floatation gear for operations over the sea. It has a cruising speed of 200km/h and an operating radius of 200km. It has a capacity for two pilots, two crew members and one stretcher and is utilised for interhospital transfers and primary calls.

The AMS provides a comprehensive emergency aero-medical and rescue service in the Western Cape, Limpopo, Kwa-Zulu Natal, and rural health outreach programmes (known as the 'flying doctors') to remote communities in Kwa-Zulu Natal. The work includes airlifting critically injured car crash victims or injured sailors at sea to flying teams of doctors to rural communities to provide specialist care.

The 'flying doctor' services are directed at communities in isolated areas who have little or no access to basic health care services. The emergency aero-

medical rescue service aids anvone who is critically injured and the teams will respond once dispatched by the provincial emergency services.

The flying doctor and rural health outreach service (KwaZulu-Natal)

- Provides delivery of appropriate and effective healthcare to rural communities, by flying specialists many of whom are volunteers, as well as support personnel to outlying hospitals
- Provides specialist support to district and secondary hospitals
- Decreases elective referrals from district hospitals to higher level facilities
- Addresses acute backlogs at district hospitals for patients in need of specialist care
- Addresses important community primary healthcare needs
- Improves rural skills by training local and medical personnel
- The KZN service has been extended to include ground support units to access areas that have limited access by aircraft. The ground support vehicles are also used to get to hospitals that are in close proximity to doctor's supply.

The flying doctor and rural health outreach service flies healthcare professionals to remote areas. Doctors, nurses, dentists, specialists and allied healthcare workers, many of whom are volunteers, visit rural hospitals to render clinical services to thousands of patients each year. Programmes include HIV/ AIDS management; ophthalmology; orthopaedic appliances; ear. nose and throat; speech therapy; occupational therapy; audiology; surgery; dental work; optometry; primary healthcare; obstetrics; gynaecology; teaching and training; trauma care etc.

Air ambulance service

The air ambulance service is provided at all the bases from which AMS operates via rotor and fixed wing aircraft. It complements the local road ambulance services by providing rapid emergency aeromedical transportation of patients who are critically ill and injured.

The air ambulance fixed-wing services provide a 24-hour emergency medical service and inter-hospital



Precision flying skills demonstrated by pilot Donovan Köhl

transfers to hundreds of critically ill or injured patients each year.

The rescue service (Western Cape)

The rescue service, which is only available in the Western Cape at this stage, provides specialised medical, mountain and surf rescue services, working closely with local metro and affiliated rescue organisations.

"Our crew extricate patients from threatenina situations and provide advanced life support (ALS) at the scene or in the air. Our air ambulance and rescue helicopters are crewed by specially trained pilots, flight paramedics, doctors and rescue specialists. Each aircraft is equipped with an intensive care unit (ICU) medical interior and can be configured with rescue capability ie hoist and slina, for mountain and surf rescues," stated Dr Frasmus,

"We currently have 106 staff members and a team of highly professional medical, nursing and paramedical volunteers and commercially rated pilots," said Dr Erasmus.

Volunteers

AMS has many volunteers from pilots to medical specialists, paramedics, nurses and non-medical professionals who assist with coordination and administration duties. The volunteers are vitally important to the functioning of AMS and they work tirelessly to perform emergency missions, often in inaccessible and inhospitable terrain.

Because AMS operates a specialised service, there are stringent criteria for volunteer medical, rescue and outreach crews. Visit their website to obtain further details on becoming a volunteer.

"Together with our provincial partners in government and the corporate sector the AMS continues to provide an integral service to the communities in which we operate," added Dr Erasmus.

"As part of our commitment to support the vison and mission of the National Department of Health by providing access to healthcare and contributing to the improvement in the quality of life of all South Africans, in this regard as far as we are aware the AMS is the first civilian organisation on the African continent to introduce night vision systems into its aero-medical operation in partnership with the KwaZulu-Natal Department of Health and the Anglo American Chairman's Fund. This system will impact positively on one of government's national development plans; reducing the maternal and child mortality rates in our country," concluded Dr Erasmus. Λ