

# AUSTRALIA'S ROYAL FLYING DOCTOR SERVICE

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## Introduction

Ninety minutes after being summoned, night or day, a doctor of the Royal Flying Doctor Service of Australia (RFDS) can attend a patient anywhere in the most remote parts of Australia. This quick response to a call for help from the sick or injured covers an area of more than six million square kilometres, four fifths of the Australian continent.

The Royal Flying Doctor Service aircraft, based at 13 remote locations, can reach in 90 minutes or less any of about 5000 outposts scattered through the most remote and isolated areas of Australia. Duty officers are on call 24 hours every day of the year to receive calls for help either via telephone or HF radio.

No other service in the world operates over such a vast territory and provides such a comprehensive health service. For the RFDS is not merely an aerial ambulance. It is a remote area health care provider. This means that in addition to its famous 24 hour a day emergency services, RFDS routinely provides a continuous schedule of consultations and clinics for thousands of outback people.

Every day most RFDS doctors or flight nurses fly out to conduct clinics under wing tips, at homesteads, outstations, mine-sites or small communities. Nurses conduct women's and infants' health programs with a strong emphasis on preventive health, give injections, patch up minor injuries and illnesses, and provide a regular caring supervision of outback families. The Service also flies in specialist health care workers and doctors to remote areas when they are needed.

The demands on the RFDS are growing year by year as the population of remote residents is increased by anthropologists, archaeologists and surveyors. Significantly, the Service is now a lifeline for the huge numbers of international as well as Australian tourists who visit the inland.

All these people are completely dependant on RFDS for their medical emergency and health care needs in the bush. There is no other provider.

## **Network of mercy**

The 38 aircraft of the Royal Flying Doctor Service flew 8,691,540 km in 1993-94, crisscrossing the arid inland and the tropical northern and western coastlines with a vast network of mercy which, at its most dramatic, saves lives and, at its most routine, provides the same reassuring and preventive medical service as a family general practitioner. This general practitioner's patients, however, consult by radio when they are hundreds of kilometres apart, and are visited by aircraft.

In a typical year, the aircraft make almost 30,000 landings, treat around 150,000 patients and aeriaily evacuat some 13,885 people. The Service's doctors give over 40,000 radio and telephone consultations and hold some 5,000 field clinics.

## **Beginnings**

The Royal Australian Flying Doctor Service was established in 1927 by the Very Reverend John Flynn, an energetic and visionary Presbyterian. Flynn had lived in outback Australia since 1911, the year he was ordained, when he

took charge of a mission station in semi-desert country 550 km north of Adelaide.

In 1912 Flynn established the Australian Inland Mission and was appointed its superintendent, looking after the welfare of pastoralists, miners, road workers, railwaymen and the few other settlers and their families scattered over a vast area of South Australia, the Northern Territory, Western Australia and Queensland.

Flynn and his missionaries set up hostels and bush hospitals and, by going out to the remote areas, helped to banish much of the dread associated with the loneliness of the inland.

But they could not banish the greatest fear of all - the anxiety about becoming ill or hurt far from doctors and hospitals, with no way of summoning aid.

Flynn and his men found many instances on their patrols when lives could have been saved if medical attention had been available and he dreamed of a flying doctor service which would spread what he called “a mantle of safety” over the outback.

His dream became possible after World War One as the experimental technologies of aviation and radio, then in their infancy, began to improve. Aircraft could cover the vast distances and radio could be used to summon them.

Flynn interested Alfred Traeger, a young electrical engineer, in the scheme and asked him to develop a portable radio which could generate its own power.

The result was the pedal radio, a simple device which used pedal power to generate electricity. It became one of the great contributions to the development of inland Australia.

Cloncurry, in western Queensland, was chosen as the first base and in May 1928, Dr K. St Vincent Welch was selected as the world's first flying doctor. He made his flights in a small De Havilland DH-50 aircraft.

It was flown by Arthur Affleck, a pilot with the small bush airline Queensland and Northern Territory Aerial Services Limited, which later became Australia's international airline, Qantas.

In its first year, the Aerial Medical Service, as it was called, flew 32 000km from the Cloncurry base and treated 259 patients. The Service grew quickly, and by 1933 Flynn saw that the vast organisation required was placing a heavy financial burden on the Australian Inland Mission.

He planned a new organisation, the Australian Aerial Medical Service, with sections in each state coordinated under a federal organisation.

It worked smoothly, and in 1941 the name was changed to the Flying Doctor Service of Australia. In 1955 it became the Royal Flying Doctor Service when the Queen granted the use of the royal prefix.

Flynn, who was twice moderator of the Presbyterian Church, died in 1951. He was buried at Mt Gillen near Alice Springs at the geographical heart of the huge territory for whose people he had provided communications, reassurance and a reliable medical service.

## **Vast communications system**

Today, the operations of the Service are in the hands of six mainland sections, each of which has one or more radio base control stations. These stations are in Cairns, Charleville and Mount Isa in Queensland; Broken Hill in New South Wales; Port Augusta in South Australia; Alice Springs in the Northern Territory; and Kalgoorlie, Carnarvon, Port Hedland, Meekatharra, Derby and Jandakot in Western Australia. A section centred on Launceston in Tasmania operates a restricted service.

Many mixed transceivers and portable sets are in regular radio contact with the 13 bases. Outposts may be a station (ranch) homestead, prospector's camp, a mission station, nursing home or a small hospital.

The base radio networks have other uses but medical calls have immediate priority. The Flying Doctor Service transistorised receivers have replaced the pedal radios and now provide a general communications system for the inland.

With the completion of a re-equipment program and changeover to single sideband operations in 1978, the Service has probably the largest high-frequency radio network in the world, and one of the most modern.

Each year more than 40 000 messages are transmitted over the network. The Schools of the Air, which are established at Flying Doctor Service bases in all states, are among the biggest users of the network. Run by state Departments of Distance Education, these schools supplement correspondence lessons sent to outback children who live hundreds of kilometres beyond the

reach of normal schools.

In off-peak hours, the networks have been used for exchanging news and gossip, much the same as city dwellers use their telephones. In the inland, however, there has been no privacy. Each network has had its own frequencies and everyone on the network could listen to conversations - whether they were with the flying doctor or between neighbours.

But inland people have not resented this lack of privacy. However, telephones are steadily being installed throughout the inland each year, seeing a steady fall in the use of HF radios.

Since the introduction in 1980 of a Radphon system, outposts can be connected through the Service's bases by a combination of radio link and the national trunk telephone network to telephone subscribers throughout Australia and elsewhere in the world.

## **Staffing**

The Royal Flying Doctor Service aircraft include Beechcraft Kingairs, Cessna 11s, Piper Chieftains, Navajos and one Nomad. The Service employs around 27 doctors, 58 flight sisters and nurses, 65 pilots, and 34 engineers among its staff.

## **Radio clinics**

Doctors working for the Service may typically conduct radio clinics twice daily Monday to Saturday and once on Sunday, when they are on call to outposts

and available to discuss ailments. They also conduct regular preventive medical clinics when they fly to homesteads, small communities, missions, even roadside water tanks at an appointed time to make routine examinations, give injections or other treatment against preventable diseases such as poliomyelitis and diphtheria, and to conduct the same kind of consultations as a city-based general practitioner.

Consultation during the daily radio clinic is easier than it seems. Each outpost has a standard medical chest arranged by the Flying Doctor Service which contains medical items supplied free by the Australian Government, anatomical charts and an index of the contents.

All medical items are numbered on the container and on the list and the list index tells exactly where each item is. People with no medical knowledge can give expert aid on instructions from the doctor, using the standard medical chest.

The doctors also provide a 24-hour, seven-days-a-week emergency service. Outposts can contact the doctor by operating an automatic signal which switches on the base station equipment and rouses the doctor or duty radio operator. The doctor can speak immediately to give advice to the outpost.

## **Tough job**

Royal Flying Doctor Service pilots have a far tougher job than the smartly uniformed airline pilots who fly on a radio beam and hand over to ground engineers when they land. Away from the base, they must do their own refuelling, handling heavy drums at isolated strips, and sometimes they must



carry out emergency repairs.

Most of the air strips they operate from are poor compared with the strips used by commercial airlines. There are few, if any, radio aids. Landmarks are rare in the flat interior, and navigation often depends largely on the pilot's instinct and knowledge of the country.

It is not easy at times for the pilot to locate a tiny pin-point on some featureless landscape - one tin roof in the centre of a bare plain, a ragged line of timber half lost in dust haze, the fine thread of a boundary fence, a water hole among the sand hills, a sun-baked claypan that is the landing strip.

Night flights are made only in an emergency because many landings must be made in the beams of headlights of motor vehicles lined up along the strip.

For long periods the weather is ideal for flying in Australia's remote inland but sometimes the elements can make the going tough. Dust storms can abruptly shut out the pilot's vision - huge and swollen red cloud-banks rising 3500 metres and more.

A Broken Hill pilot caught in such a storm had to find his way to a lonely sheep station by flying three metres above a border fence that he could barely see.

In the tropical north, in areas serviced from Cairns, Derby, Port Hedland and Wyndham, the monsoons bring other difficult conditions - fierce heat and humidity, great rolling thunderheads known as cock-eye bobs, torrential rain, cyclones which have flattened townships of the north-west coast and forced pilots to peg down their aircraft on the ground to stop them being blown away.

The sluggish, mangrove-lined rivers flood many kilometres wide, transform half the country into one huge swamp. Rank grasses grow three metres high and conceal tree stumps and snags which would wreck an aircraft on landing. Even the higher land has to be surveyed cautiously before touchdowns so that aircraft do not lie bogged for months.

Because of difficult conditions like these, the Flying Doctor Service is limited in the type of aircraft it can use. In general terms, it is re-equipping with modern pressurised turbo-prop aircraft which can fly above the weather, are faster, and provide greater patient comfort. Usually they can hold six to eight passengers and cruise about 350 km/h.

## **Funding**

The RFDS is a charitable body providing its services free of charge. It receives operating grants from state governments and both operating and capital assistance from the Federal Government. It has always been reliant on public, private and corporate donations and in 1993-94 raised \$6.342 million.

In the 1993-94 financial year the Australian Government provided capital and operating grants of \$13.398 million. The six state governments contributed \$15.480 million.

*Source: DFAT*