

The Royal Flying Doctor Service

by

Mr. Michael Long

An address delivered at a meeting of the Medico-Legal Society
held at the Melbourne Club on 17 November 2001.
The Chairman of the meeting was Dr. John Marum.

The Flying Doctor Service is important for it's uniquely Australian and very successful and at times such as this, it's important to reflect on something that we've developed which involves generosity, compassion and sharing. The methodology of its development is of particular interest. I thought I'd say something about my involvement through medicine and aviation because it's been personally enriching. It will also be good to share with you the visions for the future for this organisation, particularly with regard to remote medicine. I might point to some problems, but it's important to share them with a group like this, because no doubt there will be feedback and I'll be particularly happy to listen to this.

We're dealing with health in remote areas of Australia. What are "remote areas"? They're changing. But generally they are areas of the country where there are no fixed health facilities, hospitals, doctors, or nurses and many other things are also absent. The area we service is most of Australia except, curiously, the northern aspect of the Northern Territory which is serviced separately under another Government contract by the Northern Territory Aero-Medical Service, but we do work in with them. Western Australia covers about 40 per cent of Australia and is truly remote.

Soldiers in wartime do not perform at their peak unless they've got medical and nursing facilities. The same applies if you're trying to open up a country; you require these same services. This led Menzies to comment that the Flying Doctor Service was the greatest single contribution to the effective settlement of the far distant backcountry that we have witnessed in our time.

What do we do? How do we do it? Anyone requiring the Flying Doctor Service in an emergency situation can get it for nothing although occasionally third parties pay for it. We must consider this because you'll see later the horrific expense of this type of medicine. In emergencies the first contact is usually by telephone and less frequently by radio. The patient or the people caring for them can be in contact with a doctor or a nurse or medical people within two minutes. What is more, if an urgent flight sets out for these areas, it can leave within 45 minutes and be within most areas of Australia within two hours. It's extraordinary when you come to think of it. We have other cases that are less urgent and more elective cases and you can get there in a matter of hours.

It's the emergency cases that are dramatic and are potentially dangerous. You have to always ask is this flight really necessary? Does

it have to leave at night? Do you have to land at a dark airstrip that you don't often go to in the middle of the night? These things must be taken into account. We have problems with kangaroos which are incredibly dangerous. Already in Western Australia we have had a number of incidents, not only will a kangaroo wipe out an engine, and that's half a million dollars, but there's a real threat to life because of this. Airstrips must be correctly monitored and you have to rely on the people who maintain them, hoping that they've been up and down the strip and that an anthill hasn't grown over the last day. We endeavour to rationalise emergency flights, particularly at night. It's good to leave at first light or arrive during light.

We run clinics which are an amazing way of servicing people, not only in the treatment of illness, but also for health promotion and prevention screening. There's also a rural women's programme that is becoming increasingly active and is funded separately by the government. It is interesting that with that programme, like the Flying Doctor Service, when flying doctors were brought in, the local GPs of various communities were quite hostile. We've found that the introduction of female GPs where there may already be a male or a female doctor, particularly a male, has induced some hostility. But it's amazing that after one or two visits these people change, they fall in right behind these visiting doctors. Many of them realise that for the first time they can get time off.

Immunisation, child health, dental, eye and ear problems are important aspects of our work in the outback. Telehealth began with the radio, but it has developed so that now the government has promised that people living in remote areas will be funded up to \$5,000 in order, with the help of Telstra, to have an IBM set up with a satellite dish, satellite telephone modem, video and a camera. Just think of the potential of that; people living in remote areas are, from many points of view, going to be better off than the rest of us.

Inter-hospital transfer is becoming a greater problem. State governments thrust it on us as they withdraw health care from communities. In Western Australia it now amounts to nearly 80 per cent of our work and is funded from the State government not from the Commonwealth. There are these artificial lines and we have to drag the money out of the State government. We build up to a crisis and we threaten them, "We'll have to close bases" - "Don't do that", and "You can't do this", they say. With the last election in Western Australia we were given a couple of million dollars just to shut up, but we had to

spend it before the end of the financial year. It's a game.

We are always keen to do repatriation but it's not well developed. It is very difficult to fit in with teaching hospitals so we can take people back, but we won't put on a flight specifically for repatriation. We usually don't fly to offshore places, but we do provide crew to go, particularly doctors and nurses.

Training is an important aspect of our work. Not only do we train our own staff in aero-medical work but nowadays we're asked by the Armed Forces to train them as well. Captains of ships at sea also attend our courses.

The medical students usually lumber along and pick up what they can, and it's been an extraordinary experience for me over many years. I have taken many students on some of these 50 or more trips where I've flown myself to the Kimberley. It's fun to go back to these remote areas and some soul will come up to me and I'll realise that it's someone I took years before as a medical student.

Medical chests are important and we provide about 3,000 of these throughout Australia funded by the Commonwealth Government. They do contain dangerous drugs and you'd think all sorts of people would be breaking into them. We don't have great problems with that, and by a numbering system you can direct people by telephone or whatever means of communication you have, to which drug to use. It is very effective and it is fascinating to watch the doctors and nurses talking to a patient, prescribing drugs. There's something very moving about it. I've been doing it for 30 years and each time I hear it or merely talk about it, I get quite excited by it. The tyranny of distance and the "Mantle of Safety" that John Flynn spoke about have been dispelled in large measure because of the set-up of the Flying Doctor Service.

The School of the Air began during the 1950s using our radio equipment and it's been a wonderful partnership. If you've been to remote Australia and you've listened to the School of the Air in operation, it is just incredible. Now they're moving in different directions. Much of the education is now going to come from major cities and there will be other ways of dealing with that.

We employ 493 people including 91 nurses, 46 doctors and 99 pilots. Some are part-time, we have 73 administrators and some are very important fundraising people.

We have 46 aircraft. Most of them are the Kingair type, a superb aeroplane, costly to buy, twin engine, pressurised and fast. If you were flying in one from Melbourne to Sydney it would do it in about one

and a half hours. We also have the Pilatus single engine aeroplane that we're beginning to use now. Curiously, as a pilot I can tell you that the single engine aeroplane is much safer overall than a twin engine aircraft. Those of you who are aware of trying to fly a twin engine aeroplane when the chips are down, the weather's crook and it's dark, on one engine fully laden you realise your time's cut out. It's impossible in the normally aspirated twin; it is feasible in a turbine aircraft. Once you get below a critical speed the aircraft is quite uncontrollable. So the Pilatus which has a very similar performance to the Kingair is now becoming the aircraft for the near future. That was a very difficult decision for us to make, and one of these giant steps that has been made with much criticism from within the service, particularly from pilots. However, once you make the step it is incredible how everyone falls into line and becomes an enthusiast. The Pilatus is roughly the same size and if you look in the cockpit, it is as sophisticated as any airliner. It cruises at about 260 knots and it's got tons of space and the nice thing is that the pilot can get in through a separate door, which you can't in the Kingair. It has a huge door for loading behind.

We have very few of the Navajo Chieftain aircraft left. Over in Western Australia we had some Cessna Conquest aircraft, four of them. We had great trouble in selling these and then all of a sudden, a couple of weeks ago, someone turned up from South Africa and bought the lot and said they will take them back to South Africa. We received a few million dollars from that sale, helping offset the cost of some Pilatus aircraft we've just purchased. This slide shows a Kingair with a logo of CRA on the tail. We don't mind that, they help finance that aircraft. We cover vast distances, 15 million-odd kilometres in a year and about 44,000 kilometres each day.

We attended 190,000-odd patients. There are about 21 health clinics going on each day. We made nearly 24,000 aerial evacuations. 150-odd calls or contacts were made each day via Telehealth or some form of health communication.

Some will ask, "I'm a nurse" or "I'm a doctor" or "I'm a pilot, can I get a job with the RFDS?" I was just looking up the requirements for the jobs and the one thing I saw in each particular advertisement or statement was "excellent communication skills" and "empathy for the bush and its people." Certainly, if you go to the sharp end of the Flying Doctor Service, the thing that impresses you most about the people who count is the way they deal with people. No matter

who they are, they're all made welcome and they're all treated well. Nurses need general nursing, midwifery and post-graduate experience in critical care, advanced life support and trauma. They need to know IV insertion, how to take ECGs and how to defibrillate people. They need to be able to do minor surgical procedures, drain abscesses and suture. The doctors, registrable in Australia, need to know resuscitation. They might have done one of our EMST courses so that they can deal with the emergency of trauma. They need to be experienced in anaesthesia. They should have an interest in Aboriginal and Torres Strait Islander health. The pilots need an Australian commercial pilot's licence, current instrument rating, multi-engine, 2,000 hours as pilot in command, 1,000 hours pilot in command of a multi-engine aircraft and turbo prop experience. It is difficult to find people who understand jet engines, but they're much easier to operate than a normally aspirated aircraft. Communication skills and empathy are essential.

Just what does all this cost? Think of the Royal Melbourne Hospital running at between \$150-\$200 million. RFDS is a small operation you would think; yet it's incredibly important. Of \$70 million, we get \$40 million from the Commonwealth. We find the Commonwealth much easier to deal with than the States from whom we get the other \$20 million. But it's the \$10 million that we get from donations each year which is amazing and this is how the Flying Doctor Service began, through the generosity of people. There's a question mark about capital replacement and that is because by and large the Government opts out of capital replacement where it can. In Western Australia, I mentioned, they suddenly gave us a couple of million and said, "But you must spend it and buy aircraft" but they forget we have to turn around and find the rest of the money. It is a major problem for us.

We don't have helicopters. Other people operate those. They're useful just within 100-200 kilometres. Getting to Benalla is the outer limit for useful use of a helicopter. We do work in with the Air Force if they are offshore cases and occasionally with the airlines. You have to remember, if we transport a patient by airline we take six or seven seats from the aircraft and all those people are offloaded. Try doing that in a place like Kununurra and you get into trouble.

This federal set-up can lead to problems with organisation. Historically it began with sections in Queensland and Southeastern which was really New South Wales but it spread its wings into Victoria and Tasmania. Victoria did not ever have a section yet Victorians began the Flying Doctor Service. We set up the first base in Cloncurry and

then handed it over to Queensland. Victorians set up the second base in Australia at Wyndham and operated it until recently. Other sections were Tasmania and the Central section in South Australia which covers up to Tennant Creek. Within Western Australia is Eastern Goldfields, which has a group who raise money and have their own aircraft at Kalgoorlie.

There are currently four sections, Queensland, Southeastern, Central and Western, which operate the Flying Doctor Service. The other groups contribute to these sections and often are involved with fund raising. And from this group of seven come seven voting representatives. We also have independent councillors. Initially we had four but it has been scaled down to two, and I'm not sure if that's a good thing. Geoffrey Scott is an aboriginal health worker; an extremely wonderful guy who lives in Ceduna and Malcolm Broomhead is now stirring up Orica. People such as these two come with no set agenda and contribute enormously. The associate councillor, Rosemary Young, is a representative of Frontier Services which is a vestige of the Uniting Church which was the old Australian Inland Mission.

I'd like to go over the history of this organisation. John Flynn was born in Victoria in 1880 at Moliagul near Bendigo and he died in his 70s in 1951. He went through Ormond College. He was not a particularly good theology student but eventually he was ordained. He rode furiously around Victoria on a bicycle. He took to working in the Western District and was teaching Sunday School and various other things and was impressed with people working and living in rural and remote parts of Australia. Flynn was a dishevelled looking man, full of energy, tossing off ideas in all directions, some of them good, some of them bad, but he was always pushing ahead. It's probably due to Flynn more than anyone else that the outback has been opened up, because he had a feeling for it. He was concerned about health issues, trying to encourage people to go to the outback. Reverend Andrew Barber was also working in the Western District, and became friendly with Flynn, would pick up Flynn's ideas and help crystallise the thinking process. In 1911 Flynn took up his first appointment at Beltana Mission near Oodnadatta and in 1912 he was appointed as the first Superintendent of the Australian Inland Mission. It's interesting what Flynn was saying. Even though the Presbyterian Church was involved, he would emphasise that you worked in a churchlike manner but without preference for nationality or creed. He would say, "Do not tamper with the beliefs of your patients." Just amazing stuff.

The story of Jimmy Darcy really got the country going in 1917. Darcy was about 29 and was a stockman at Ruby Plains, 47 miles from Halls Creek in Western Australia when he was thrown from his horse and sustained a major injury. He was taken in a dray to Halls Creek and the Postmaster F W Tuckett saw that his injuries were serious. After trying unsuccessfully to contact doctors by telegraph in Wyndham and Derby he thought to contact his first aid lecturer Dr Holland in Perth. Holland made the diagnosis by Morse code and said, "You'll have to operate on this man." Those who deal with surgery would be horrified to hear the first operation took seven hours, using Morse telegraphy and a pen knife.

It was a perineal cystostomy, that is trying to drain the bladder by cutting up through the bottom, and it sounds simply horrific. It wasn't successful so he had to re-operate again two days later and this time he made an incision above the pubis and successfully drained the bladder. At the same time Holland caught a cattle boat to Derby and then set out to drive the 500-odd miles to Halls Creek. His car broke down 30 miles out of Halls Creek and he ended up walking the last bit only to find when he got there Darcy had just died. Darcy's brother suggested that the doctor should do an autopsy. He was found to have an enlarged but intact spleen. He did in fact have a ruptured bladder which was successfully draining. He had a huge abscess around his appendix which was not related and there was evidence that he had malaria. This incident got a lot of publicity.

The other publicity was from Lieutenant Clifford Peel also a medical student in Ormond who in 1917 went off to the First World War. While he was travelling to France he wrote to Flynn and said, "This is how we should service the outback; with aircraft and doctors." He was a major stimulus to getting the Flying Doctor Service going. Sadly, he was killed and on my exploring around the Somme and various other places, I found that he was on a photographic mission flying over German lines and was declared missing on 21 September 1918. So many people were killed at about that time. I can't even find a plaque for him in France but I will look further. If you go through the medical record, trying to understand the pathetic and incredibly sad letters from his family, he wasn't killed, he was missing in action. It took several years before he was declared dead. It's quite heart wrenching to see how people try and cope with this type of situation.

In 1921 Kingsford Smith flew a doctor from Geraldton to Carnarvon who operated on a child and then in 1925 flew a Melbourne surgeon and

you might have seen the Archibald Prize-winning picture that is in the boardroom at St Vincent's Hospital. The doctor flew from Melbourne to Deniliquin, performed an operation, and was back in Melbourne in time for his customary round of golf. That man was J Forbes McKenzie and he was my grandfather and was one of my mentors, and why I'm involved with medicine and surgery.

H V McKay gave a substantial donation to Flynn. They had been long-time friends and associates and he had set up his factory in Sunshine to make the harvester which got its name from that suburb. This donation helped Flynn to set up the first official base in Cloncurry in 1928. The first doctor was Kenyon St Vincent Welch. He was paid a thousand pounds a year and to help him they covered him with a two thousand pound insurance policy. Because the Depression followed soon after and they were having trouble finding funding, Dr. Welch said, "I'll reduce my salary, you don't have to pay me so much, I'll keep on working." This was typical of so many of these people.

John G Smith who was Lord Mayor of Melbourne, and later the son of H V McKay, C N McKay were all involved in the Flying Doctor Service. The fledging Qantas had a hangar in Cloncurry and some of you have seen the original hangar in Longreach, and it supplied the pilots and the aircraft which was a very fruitful partnership that went on for some time. This slide shows an ageing John Flynn over on the right. George Simpson in the middle was one of the pioneer flying doctors and joined the council and was on it for many years. George Simpson taught some of us obstetrics when we were at the Women's Hospital. The other man is Dr Welch.

Flynn died in 1951. He was succeeded by Fred McKay and I bet lots of you have had some contact with Fred who died last year. He's another of my mentors and christened some of our children. This slide shows Fred with the early pedal radio. He'd just become Moderator-General of the Presbyterian Church. That was fine but he said he had great trouble driving to his inauguration. He was very fussed and tense and he said he drove down the wrong way on a throughway and he suddenly realised his mistake. He was backing out when the police pulled up. He was dressed in his regalia and they said, "Get out of the car" and he put out one foot and they saw the buckles on his shoes and they said, "Where are you going to, grandpa?" Fred was always a gregarious, friendly person. He was a very close friend of Bob Menzies and conducted Menzies' funeral. No matter whom he was dealing with, whether it was the Queen, Fred was just extraordinary. Spending time

with him you realised what he did in the Second World War in the Middle East, it's incredible what padres did. He was dragging people out of crashed aircraft, burying people, and not only that, he maintained contact until he died with the widows of the people who were killed. I've never met such an extraordinary man.

My personal odyssey with the Flying Doctor Service began with a number of contacts and one was Tim O'Leary. I met him doing a refresher course at the Women's Hospital when I was a medical student, but we subsequently became very close friends and he was a longstanding flying doctor in Charleville.

My father, Arthur Long, was a pilot in the First World War. He had several distinctions. He shot himself down by throwing bombs over the side and being too low and being hit by the shrapnel, and he was the first man to fly Bass Strait, which he did just after he came back from the First World War. My father, who was a sharebroker, disliked doctors and could not trust them. There was no way I was going to do medicine. What is more, even though he was a well-known pilot and also flew in the Second World War, he wouldn't let me learn to fly. He made one mistake and that was he died two weeks before I sat my matriculation exam. Because of that I suspect people felt sorry for me. I got into medicine and Trinity College and I promptly learned to fly.

I bought my first aeroplane for 300 pounds at Moorabbin Airport. It was built before I was born in 1929. It was a Gypsy Moth, a DH60, which I flew extensively. Shortly after I had an Ostia aircraft and with Peter Johnson flew it up to Tennant Creek where we camped out and we had an extraordinary time. The old Conellan Airport at Alice Springs was significant in that it had a cemetery at the end of the runway. It was a very short airstrip but, curiously, a RAAF pilot became confused one day and landed a Canberra bomber on it and they had to completely strip the aircraft before they could fly it out again. It's all housing now. After my father died Ted Marshall DFC, became my father figure. As a medical student he had a job with Flinders Island Airlines and in my holidays I would help him fly Avro Ansen aircraft to Flinders Island, Bridport and St Helens carting crayfish. The significant thing about Avro Ansens is that it took 50 winds of the handle to get the undercarriage up. It's the only aircraft I've been in that when it rains you had to wear an overcoat because the water seemed to come in. Ted was a fantastic fellow who taught me a lot more than just flying. Sadly, he got a carcinoma of the antrum. Weary Dunlop and I looked after him for a number of years and eventually the cancer killed him.

Over the years I've been taking medical students to remote areas but I've also taken a whole host of other people from overseas on these trips. Corry Dunnife was an excellent medical student. He's a superb doctor. I quickly learned that as soon as the students got in an aeroplane they'd go to sleep and their mouth would flop open and I'm sure their oxygen levels would drop. The trouble was you'd arrive on the other side of Australia, having flown them, worried about them, fed them and they'd light up and you'd just be absolutely dead. But it was still a wonderful experience. David Bainbridge an orthopaedic surgeon, who even though when the temperature fell in the aeroplane at 25,000 feet, wouldn't even develop a goose pimple even though it was incredibly cold. He was a very fit person.

Maurice Ewing was the first Professor of Surgery. I've still got this lovely vision of him playing two-up in Wyndham. The Vicar Wakefield mentioned to Murray Stapleton and John Anstey that Ewing was dying and he had never seen Central Australia. We got over that problem by making a stretcher for him and we took him up to Central Australia. We were going on to Broome, if he was fit enough, and he hesitated and said, "No, I'm fit enough to go to Broome." So he came to Broome. He died three weeks later from the malignancy that consumed him. Taking this guy who scared the daylights out of us when we were young, made us realise that these people, particularly plastic surgeons, had, deep down, a wonderful human warmth.

Our problem is money. Certainly raising money from selling lamingtons which we're pretty good at is important, but it's the corporate dollar that we require and, as you know, if you fundraise you've got to give something back to the corporations. John Urich helped us by giving us advice about how to run the RFDS properly. We ignored this advice for quite a number of years, but I'd like to get John now and say "Come and look at us now. All those things you recommended, John, are in place." We don't mind painting an aeroplane anyway they like as long as we can get the aircraft. It is also incredible how the smaller donors later turn up with bequests from left field. If you're buying a Kingair now it costs \$6.7 million. A single-engine PC12 costs \$5.8 million. Then you have to put in the medical fit-out which costs \$700,000. Jet fuel increased 60 per cent in three years. This has created major problems, not only for us but also for the airlines, as you understand. If we buy aircraft or deal in parts we do so in US dollars. So it's not hard to see that there are enormous costs.

Before September 11 things were reasonably straightforward, but our life has become more complicated because of this event. For instance, we have five PC12 aircraft in Switzerland that we're trying to bring out to this country but in between is a war zone. If you work out how you're going to get them out, it's very difficult, indeed. What's more, you can barely get insurance. Normally, you're insured for a ferry flight, but to insure a PC12 for one of these flights costs us about an extra \$40,000 per aircraft. The flight plans are through Russia and China. You can't fly over Muslim countries, insurance companies won't let you do that, so over the Malay Peninsula, you have to fly out to sea. All this adds to costs.

Remote areas are increasing. Rural areas are turning into remote areas because hospitals banks, grocery stores and pharmacies are closing. Even though the overall population in the outback is less, you'll find that the area is bigger and these people all require medical attention in one form or another.

We are looking to the future and I have been to Prince Edward Island in Canada and I've seen a little of what they are doing there with Telehealth. In fact they have developed this form of communication to such an elaborate degree that people are returning to live on Prince Edward Island. They suddenly realise they don't have to go to a university in Toronto or Montreal; you can do quite well in a school in Prince Edward Island.

I've also had some contact with the prison system in Texas. There are about 120,000 people incarcerated in Texas. They are put in the most remote part of that State, for obvious reasons, but that brings problems with health care. Another scary thing about these people is that 50 per cent of them are hepatitis C positive. Doctors occasionally flew out or drove for long periods to treat them. Much of this has now been diminished. Treatment is working well through Telehealth and visual aids and is accepted by both prisoners and medical staff.

We need some vision for the future and, being frank, looking at the councils that come from each State, there are very few people who think nationally. We find that a lot of councillors have a State tag attached to them and they tend to compete. Any money they raise they grab it as though it's their own. They are very loath to hand over control to any national organisation like the National Council, but recently we've got this moving. Victoria has had a separate role because we have always thought nationally. For many years we ran the Kimberley health service. We raised money for the whole of Australia and we certainly

do now. 'We're in the process of raising \$15 million for our operation in Western Australia. But you can understand that there are difficulties. If you talk to other organisations, they all seem to have the same problems with organisation and State departments and boundaries. But somehow the sharp end of the RFDS keeps operating in spite of that. It's just difficult to get people to think into the future. If you say to them, "Look, fuel's going up and aircraft are more costly. How are we going to afford this? Where do you think we'll be in 20 years?" Most of them are not prepared to look at that. But it's something that we must do.

There are other things I could say but I want to come back to two of my mentors. One was James Darling, a headmaster who I was terrified of, like many of my mentors when I was young, but we became incredibly close friends for the last 20 years of his life. I can remember him saying a prayer when I was twelve years old. Fred McKay was extraordinary. He died last year at over 90 and just before he died he wrote me a letter. And to make sure I got it he faxed it as well. He always signed his letters "I, Fred." He wrote, "Stick with the underprivileged worldwide, good neighbours et cetera. Start again loving God and our neighbours. Think and act as a global family. Make past failures stepping-stones to forgiveness of others. Get cracking in a new millennium for the genuine pursuit of the wellbeing of people everywhere. Make forgiveness of others a mark of greatness. Don't be ashamed to talk about the bonus of human love towards one another." And then his final little thing which he always said, "Let's make it a moment of history and frame an Australian Magna Carta based on health, peace and respect for everybody - world mateship."

QUESTION: You said that you had trouble with the Beechcraft Twins because if one engine went out there was a problem with stability, and that you also found that the access of the single engine was a lot better. I understand that the light high wing Cessnas have a wonderful glide ratio if they should stall, but a large plane like the Pilatus would have a very good glide ratio to get out of trouble if one engine stalled, would that be correct?

MR LONG. That is correct. The Kingair is a superb aircraft and anyone knowing Beechcraft knows the product is the Rolls Royce of aircraft, they are wonderful aeroplanes and easy to fly. But if the chips are down, you are better off with a single engine Pilatus which has an extremely good glide ratio. You can come over a fence without power at about 60 knots and you can steer it in between trees.

QUESTION: DR COURT. I had a happy two months as a locum out of Broken Hill. Do you think it's possible with the development with Telemedicine that the Royal Flying Doctor Service will increasingly become an evacuation service rather than actively involved in the actual care of people in the outback?

MR LONG. Yes, I think it may be. Because you have this icon status you mustn't doggedly hang on to it if there's a better way of doing things. We should always address what is the best for the people in the bush. Even if we have to go back to funny little aeroplanes so we can get out to service them. That's what governments are pressing on us now. More and more they won't pay for inter-hospital transfers. We want to get specialists with status in a teaching hospital to work out in the periphery and they can rotate as they're doing in Broken Hill. You have to give medical people and all people who work in remote areas job satisfaction and included with that must be some sort of status. Now when I mentioned that model to the health minister on Prince Edward Island they said they're developing that same programme.

QUESTION: MR WERNE. The landing at night in these remote areas sounds a particularly hazardous experience to me. If you're stuck with a patient who has to be evacuated and you can't wait until first light, how do you arrange for lighting on the ground?

MR LONG. Yes, the lighting is important. Again, most of the people who operate strips know how to set up lighting; they've got books on how to do it. They use beer cans, and they all seem to have those and kerosene as fuel to light it. They are instructed how to put out flare paths. If the airstrip is not up to a satisfactory standard you can't go there otherwise you're risking the crew and everything else. So you go off to another strip that you can use because you know it is safe. They then truck people across to you, or you try and look after that person as best you can using the telephone.

Navigation used to be a problem. 15 years ago we were always getting lost. But now with GPS, the positioning equipment which is commonplace, you can do what is, in effect, an instrument approach and it's very accurate. It will be bring you right down on to a final approach to an airstrip.

QUESTION: MR MICKELSON. What are the criteria which you apply to invoke the sending of the flight to the site of the medical incident? Obviously a doctor is not always there. How do you know that that an undertaking should be commenced? Is there some test that you apply that makes it legitimate?

MR LONG. It's experience, and it's usually a medical person who makes the decision. In Western Australia - not so with other sections - there is one phone number which brings calls into one place at Perth. There's always a doctor locally accessible and we also know on a board where all the other doctors are. Who's on duty in Derby, Kununurra, Port Hedland and so on? You can contact these people very quickly. But, with experience, you can tell whether it is legitimate. These people have got an inherent knowledge of what's going on and you don't just pick up a doctor and say, "You're in charge of this now, make that decision." What is more, by and large, they know the experience of people at the other end and they know what's going on. It can be a difficult decision. If in doubt you go, but you don't risk lives at night if there's a danger in it.

QUESTION: MR WESTCOTT. I have the pleasure of being a Royal Flying Doctor Service pilot and it's interesting to hear you talk about certain things tonight that I wasn't quite aware of. Touching on the funding problems that the Royal Flying Doctor Service faces, you've left me wondering where the future lies for the Royal Flying Doctor Service, particularly relating to the inter-hospital transfer of patients. I'm aware that in more than one State these services are now commercial contracts. In Victoria, for example, the Royal Flying Doctor Service is fortunate to operate the contract for the Air Ambulance Service. My concern is that in the future low budget operators are going to become attractive to governments. Do you feel that the RFDS is going to survive modern business practice and do you feel that the Government gives credence to the Royal Flying Doctor Service and its experience?

MR LONG. I admire all Royal Flying Doctor Service pilots. They are some of the best pilots I've seen. This is a major problem. The ambulance contracts and other work undertaken by some of the Royal Flying Doctor Service is a business contract, that is, it is fully funded. The donated dollar is not going into these business contracts and so they'll stand on their own two feet on their merits. I am aware of the looming problems of cost of aircraft, fuel and employment of people and I don't know the answer, but I'm sure it's going to be something to do with communication. We are trying to induce people, particularly in Western Australia, to get up to Port Hedland, specialists in particular. We can get people to live in Broome but they won't live in Derby.

They're beginning to live in Kununurra. So things might change there. But you've highlighted the problem. It's enormous.

QUESTION: DR HAVERFIELD. Is there's a nexus between the air ambulance and the flying doctor? Are our colleagues active as pilots in the service itself or do you employ pilots as pilots?

MR LONG. There were flying ambulances around and most of them have disappeared after some sort of angst and hostility. Sometimes we run an ambulance service for hospital transfer, but that's a business proposition. However, over in Western Australia we have to drag money out to go flying in the middle of the night from Derby down to Perth.

There are some pilots who are qualified as pilots who are doctors, but you can't be both. You're either rostered for flying and not medicine or the other way round. There was an instance in Western Australia where the pilots were concerned that there was a doctor who was also a pilot doing a lot of flying and then doing some medicine and, quite rightly, they pointed this out and he stopped flying. The chief pilot said, "He was our best pilot!" I don't think you can do both well or safely.