THE HOVERDOCTORS OF PAPUA NEW GUINEA

By Squadron Leader Michael Cole MBE

The Fly River Delta

Across the lagoon the sun slips below the coconut palms and a pool of delicate rose laps upwards. Deep mauve streaks run out across the sky like a child playing with spilt milk splashing violet fingers of light up to the lower edges of the higher grey cloud layer. The spill of the sunset flares then gradually soaks away into darkness.

Bleak news of a boy's agony broke the evening's serenity. The snake bite need not have killed Maidame Kukupi. He was 9 years old, fit and healthy. The Mission hospital was only 20 kilometres away at Balimo. The doctors there were good and they had anti-snakebite serum. Yet Maidame Kukupi died, and he died in terrible pain.

His death resulted from circumstances common in remote areas of the undeveloped world. Medical services are often provided by an overstretched, underfunded Mission hospital or Aid Post. Staff struggle valiantly to bring comfort and healing to as many as they can. Yet the nature of the terrain and the lack of adequate communications limit the number that can be reached in time. In that reflective lagoon-side moment on Sunday 3rd May 1992, Michael Cole resolved in faith to return with the appropriate technology which could save such lives. A simple, rapid, inexpensive means of transport to speed the patient through the shallows and swamps - The British Hovercraft.

The team left Heathrow in a snowstorm on 27th February 1993 and paused briefly in sunny Sydney to collect our Australian colleagues, and then on to Port Moresby at 38 degrees C. This was matched in Papua New Guinea with the warmth of the welcome given to us by the staff at the waterside offices of **Kila Bowring**. Finally on 8th March the first group of team members were taken by light aircraft out across the Gulf of Papua, over the mouth of the Ba mu river in sight of the mighty Fly River, and past the low lying land of the delta area to the lagoons of Balimo.

At times like large inland seas, the grass triumphantly blocks off the open water and forces the canoe users to follow an intricate maze of water channels. Water levels vary by as much as 8 or 9 metres between the wet and dry seasons. Massive monsoon floods race down from the mountains, bringing thousands of tons of silt into the delta area, changing the pattern of the channels and mudbanks. Dry seasons expose large areas of swampy shallows or mud, which are impassable. The mud is too thick for canoes. When water levels are higher, floating waterweed or tough grasses grow rapidly and cut off whole communities. This was Maidame's home; the Fly River Delta, 8 million hectares of swampland. This was the communication barrier the hovercraft was able to conquer.

The work of the Balimo Health Centre extends far beyond the lagoon to 6 health site centres and 14 aid posts. The expedition planned to build a hover-garage and set up a hoverdoctor patrol for this area, using the River Rover hovercraft, and then explore the territory beyond the reach of canoe or trek.

The Team

The team of 28 included a mixture of the young and mature from the UK, Australia and New Zealand (age range 19 to 72 years). Hovercraft veterans from previous expeditions, original hoverdoctor Bill Gould, accompanied by 2 wide-eyed 'electives', tenacious engineers, hoverdriver Dick Bell, field leader Wing Commander Gordon Goodman and 10 committed, willing young people, all took part.

Trials for our Engineers

The change from petrol to diesel power seemed a promising development for the River Rovers, but none of the team were prepared for the marked loss of power at the first launch. As the skirt filled, Mike Cole, who was driving the first hovercraft, opened the elevons on the thrust fans and the craft moved forward in a swirl of dust to take smoothly to the water, to the shouts of the excited crowd. Mike turned River Rover upstream, gathering speed amid an increasing amount of spray. Impatiently the engineers on the bank waited for the spray to disappear; a sure sign that the craft had 'gone over the hump', so reducing resistance significantly. They waited and waited as the River Rover laboured upriver. The power was just not there for the craft to climb over its own bow wave. "As I opened up the throttle the 'kick in the pants' I was expecting didn't come. It just dribbled in ..." Mike commented later. Long hours of trial and error testing ensued, and after a week of mental and physical torture the sought-after power gradually returned to the engines.

At last Dick Bell, a former RAF test pilot and veteran of the Amazon and Yangtze expeditions, was able to see what really could be achieved. He began to drive River Rover with a panache that drew the applause of admiring Gogodalas as he coaxed over 30 knots out of the craft, nearly up to the specified performance, then swung the craft ashore with a plume of spray and threw back the cabin door. However, everyone's attention was instantly diverted, a Papuan Black, one of the three deadliest varieties of snake in Papua New Guinea, slithered out from under the hovercraft skirt. A dramatic response is instilled into Gogodala youngsters from the earliest age. On the shout of "snake" a handful of young boys pounced on long canes of bamboo and beat the snake to death before it had covered more than a couple of yards towards them.

Spurred on by the excitement, Dick leapt forward with his keenly honed pocket knife to attempt to slice off the head of the dead viper. He had no idea that these snakes are capable of inflicting a deadly venomous bite by spontaneous contraction of the jaw muscles for up to twenty minutes after death. Fortuitously, Dick kept his fingers clear, but his prized knife simply was not up to penetrating tough snake skin, so the viper kept his head, even if Dick did not.

Hover Patrol is Launched

The medical programme could now get under way. A Hoverdoctor patrol was planned to call at 5 villages strung out along the river. Wasapea and Makapa have no medical services at all, Kaniya and Ali each have a simple Aid Post staffed by an Aid Post Orderly. Only Awaba, where they would first break their journey, has a Health Sub-Centre staffed by 4 nursing sisters.

With a brief break to Awaba there was just time to get in a clinic at Wasapea and then to Kaniya before dark. Approaching Wasapea they were greeted by a typical village scene; thatched two-room huts of split black palm built on stilts. Heading for the church, they prepared to hold a clinic. Villagers were summoned by simply ringing the church 'bell', the ubiquitous length of steel pipe beaten with a piece of metal bar. Mothers came, clutching record cards, to have their babies weighed and measured, and gentian violet painted on their sores.

The Rugby Team

As the light was failing, River Rover approached Kaniya, turning up a narrow creek off the main river.

At one time, the whole village would have been living communally in a single longhouse. That practice has died out, but as the largest building in the village, the church seems to have replaced some of the communal aspects of the longhouse. On this occasion our female doctors and medical students found themselves sharing a church overnight with the local rugby team. On enquiring, they were told "When the boys want to 'fight' to win, they leave their wives for a few nights, and sleep

together in the church. They build up their strength for the 'game'". That used to be the practice before a raiding party would set off to storm a neighbouring village on a 'payback' mission when head hunting. The rugby version seems less threatening.

The Wantok

The 'Wantok' bond is a strong one, going far beyond the obligations of normal family relationships. It binds together tribal communities speaking the same language and stems from the past. Reflecting the difficult nature of the terrain, tribes were usually small groups, rarely moving away from their own area, and often regarding a tribe only five miles away as strangers. Suspicion and mistrust thrived on ignorance of others, even when living so relatively close by. In a culture attributing every unexplained circumstance or mishap to spirit influences, mistrusted neighbours became the scapegoats for bad fortune. Local tribal warfare was often the result. It still breaks out today. There is evidence of the deeply entrenched 'payback' system. Against these strong influences allies are needed, and the 'Wantok' system provides that. a Wantok can require any form of help from another Wantok - whether of goods, money, or even warfare, in order to exact payback revenge for the death of a relative. The obligation is a mutual one, and is honoured by strong tradition and so is extremely powerful.

Michael Pinkess took the art a whole step further by fixing the Wantok Bonds with our Gogodala friends, to the benefit of the whole expedition. A working life in the insurance work on Tower Hill - a sort of Wantok system no doubt had prepared him for a time like this - and did wonders for our budget. Further unexpected adventures awaited Michael.

A Testing Sortie

Using the amphibious capabilities of the hovercraft to cross swamps and sandbanks is essential to cutting life-saving journey times. Michael was given command of River Rover 402 to confirm such a short cut. At first the channel was wide and clearly defined. Soon it petered out and the expanse of the grass-covered lagoon confronted them. They stopped to take stock. They decided to grasp this opportunity to put the craft to the test. Without noticeable impact Michael ploughed River Rover into the reeds, finding them not so densely packed as he had imagined. They offered little resistance as they were pushed flat to the water.

After a minute of blind progress, doubts crept in as to the wisdom of taking on the towering reeds. Suddenly, without warning, the craft came to a stop. It was resting on a mat of grass over solid ground, not water. Lift pressure was being lost as the packed down grass formed a maze of outlets from which the air could escape. Cutting the engine, they got out over the side and began to pull out the grass from under the edges of the skirt. It was laborious in the blazing sun, and the coarse reeds cut into their hands.

Just as they had had enough, they became aware of a canoe coming down a hidden channel towards them. Six men landed and strode towards them, carrying long knives. Raising his hand the leading man said: "We are with the Lord". With relief, Michael's companion, Jonathan, blurted out: "Thank goodness for that, so are we", as he took the proffered hand. Two of the men introduced themselves as Pastors of the church at Makapa, where the hoverdoctors had visited. In no time at all the gang had machetted a clear swathe between the craft and the channel.

But it was no simple matter to find the route back to base. They saw women fishing in the middle of the lagoon and drew alongside to ask for help. Ever the gentleman, Michael enquired in his careful English: "Excuse me, I'm awfully sorry to trouble you, but could you tell me the way to Balimo please?" Giggles and embarrassed laughter was the initial response on that remote lagoon, but the fisherwomen guessed Michael's drift and pointed out the vital channel.

Dedicated Doctors

Australian Dr Graham Zerk's return to Balimo was an event for many people, and they turned out in style to welcome him. There was a crowd at the airfield as he arrived. Former patients, parents with children he had helped bring into the world, nurses who had worked with him. He first went to Balimo as a student at the age of 22 to do his 'elective' training. Eight years later, as a qualified and experienced doctor, he was back, complete with wife and 4 children. At that time Graham Tucker was already Medical Superintendent at Balimo, and they were to serve together for nearly 6 years until the Zerk family returned to Queensland in 1991.

During his student period in Papua New Guinea, Graham Zerk made a particular study of the medical patrols on the Aramia River. He also carried out a survey of the River Wawoi as far as the Wawoi Falls, and the length and breadth of the Fly River Delta. His boating and medical interests had combined in that work, and from it had grown a deep concern for the tribes of the area. The needs of the remote people did not go away, and there was disquiet that the Rabo tribe, living down river from Saiwasi, on the edge of the range of the Balimo work, could face extinction. The hoverdoctor could now reach these remote areas. Our immediate aim was now accomplished.

An Australian team member, Andrew Schache, is to return to Balimo as the full-time hoverdoctor/manager, to share this advance with our Gogodala friends.

Formal Handover - Hoverdoctor in Life Saving Action

The pace quickened in readiness for the formal commissioning of the hover garage, and handover of the 2 hovercraft on Wednesday 5th May. There was to be a ceremony attended by the PNG Minister of Health, Francis Koinmanrea, and the British High Commissioner, John Guy. The training of the 4 nationals had been continuing and they had now reached a good standard of proficiency both in driving and the maintenance of the craft. Ilaba and Dekame had made great progress even to the extent of Ilaba being able to take part in the training of Sabia and Olo. It was intended that on 5th May all the driving would be done by Ilaba and Dekame.

Monday started with the intention of cleaning the 2 craft thoroughly for the big occasion. That was soon interrupted. A radio call came through from Tim Schlatter at Saiwasi. A 25 year old man, Kubili, had been brought to him after being bitten on the leg by a Papuan Death Adder. Tim had applied a constricting bandage to the leg, and was about to take Kubili to the Mapodo Health Sub Centre. As there was no anti-venom there, it was essential that a doctor get to Mapodo in the shortest possible time. A canoe journey would almost certainly be too late.

Graham Zerk was alerted at the hospital. Collecting his kit, he jumped aboard River Rover 402. With Dekame driving they made a record dash of just over an hour to Mapodo. Kubili was in a bad way, unable to swallow or open his eyes, and barely able to breath. Gradually, over the prescribed period of half an hour, Graham carefully administered the anti-venom serum. Within 2 hours Kubili was well on the way to recovery.

Maidame Died but Kubili Lived

That is a matter of record, which encapsulated the work of the expedition and signified future hope on the eve of the handover.

Advance to the Rio San Juan - A New Challenge

The Nicaraguan 5 Cordobas bank note (below) depicts one of Admiral Nelson's rare defeats. His ships went aground on the Rio San Juan. He clearly needed a hovercraft.

The hoverdoctor challenge continues in the period Autumn 94/Spring 95 on this river. Dare an RAF officer seek to succeed in peace time where the Royal Navv's most famous Admiral failed in war?



Footnote

The book 'Beyond the Lagoon' by team member Cecil D Pearse (Hodder Headland) with 32 colour pages, will be launched at the Royal Geographic Society at mid-day on 3rd December 1993. If you would like an invitation to this Bowring supported illustrative occasion, please telephone 0989 82323.