

paradise

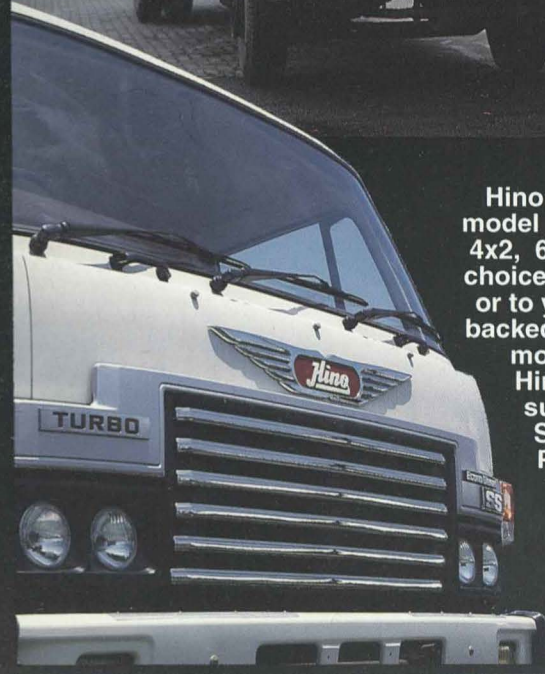
in-flight with Air Niugini



Take this
copy with you
**RARE BAT
REDISCOVERED**

HINO

KING OF THE ROAD



Hino offers 10 specific model variations covering 4x2, 6x4 and 8x4, with a choice of flat-deck, dump, or to your specifications, backed by the largest and most comprehensive Hino Genuine Parts supply and Quality Service network in Papua New Guinea through Ela Motors Nationwide

Hino



Ela Motors

YES...ANOTHER
HINO

ENQUIRIES PLEASE CONTACT
STAN FREEMAN MANAGER TRUCKS & EQUIPMENT DIVISION
PH 229446 FAX (675) 217268 TELEX NE22125 PO BOX 74 PORT MORESBY
FIELD SALES SUPPORT
COLIN OZANNE PH 433660 FAX 422463 PO BOX 3182 LAE
PETER HEYSTRATEN PH 521888 FAX 521937 PO BOX 93 MT HAGEN



paradise

No 96 Jan-Feb 1993

Paradise is published bi-monthly by Air Niugini, PO Box 7186, Boroko, Papua New Guinea (telephone 273415; fax 273416).

Welcome aboard!

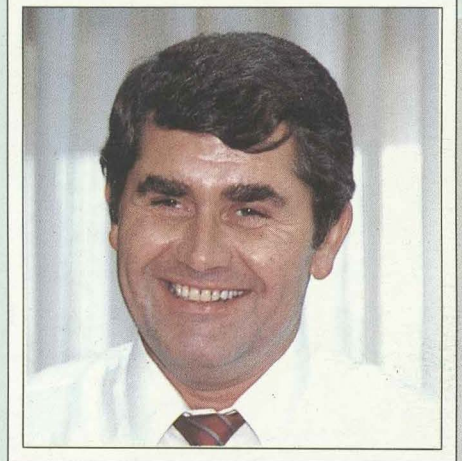
Join us in visiting the people of the Upper Sepik, who are living in a remote area along the headwaters of the great river and have art, culture and traditions uniquely their own.

Bulmer's fruit bat, thought to be extinct since the last ice age, has been discovered in a single roost in a cave above the Hindenberg Wall. We look at the history of this recently rediscovered creature and report on efforts by Ok Tedi Mining Company and local landowners to build up its numbers once more.

Obsidian is a glass-like volcanic rock used in Manus Province for thousands of years to provide the 'sharp end' for arrows, spears and knives. We look at the remnants of this ancient craft.

Enjoy these articles and other items of interest. And have a pleasant flight.

DIETER SEEFELD
Chief Executive & General Manager
Air Niugini



Dieter Seefeld
Chief Executive & General Manager
Air Niugini

Editor — Geoff McLaughlin MBE
Consultant — Bob Talbot
Editorial — Ross Waby
Art Director — Robin Goodall
Subscriptions — Maggie Worri

Advertising

Papua New Guinea —
c/- The Editor,
Paradise Magazine,
P.O. Box 7186, Boroko.
Australia —
Samuelson Talbot & Partners Pty. Ltd
4/312 St. Kilda Road,
Melbourne, Vic. 3004
Telephone Melbourne (03) 693 1400

Subscriptions

Annual subscription rates for six issues are: NGK30, US\$30, A\$40
Papua New Guinea subscription K15.
(Payment by international bankdraft).

Printed in Hong Kong by
Progressive Printing Agency.
Block C, 2/F, Kam Ming Yuen
No. 11, Kam Ping Street
North Point
Hong Kong

Tel: 563 0145
Fax: 811 1344


While every care will be taken, no responsibility will be accepted by Air Niugini for the return of manuscripts, photographs or artwork.

No responsibility is accepted by Air Niugini for the accuracy of information contained in the text, illustrations or advertisements.

IN THIS ISSUE:

- 5 **SEPIK ASSIGNMENT**
Beautiful and majestic, the Sepik River can be dangerous to the unwary.
- 9 **ORIGIN OF THE GREAT RIVER**
Insect cults distinguish clans living along the Sepik's mountain headwaters.
- 15 **ANNA AMOS**
Native plants inspire the colors and designs of an artist's textiles.
- 21 **STONE OF TRADE**
Islanders of Manus Province have a mining industry going back thousands of years.
- 27 **RARE BAT REDISCOVERED**
Twice thought extinct, Bulmer's fruit bat survives in a lofty retreat.
- 35 **ONE HORSE TOWN**
Sole survivor of the mountain pack ponies is a celebrity.
- 41 **THE MAGNIFICENT SEVENS**
Rugby football's greatest annual tournament brings the world together

Cover: Unstriped tube-nosed fruit bat (see page 27).
Photograph by Pavel German.



WE KNOW PNG...
BECAUSE WE ARE PNG.

We know...
Our People...
Our Resources...
Our Businesses....

We are...
KILA BOWRING
Being expert in our
field is your bonus.

**MOST PEOPLE
CALL IT PARADISE...
WE CALL IT OUR
COUNTRY.**



Kila Bowring Insurances Pty Ltd

A MEMBER OF THE MARSH & McLENNAN GROUP
INTERNATIONAL INSURANCE & RISK MANAGEMENT CONSULTANTS
Ph: 21 1811 Fax: 21 1324

SEPIK

assignment

Story and photographs
by John Ross

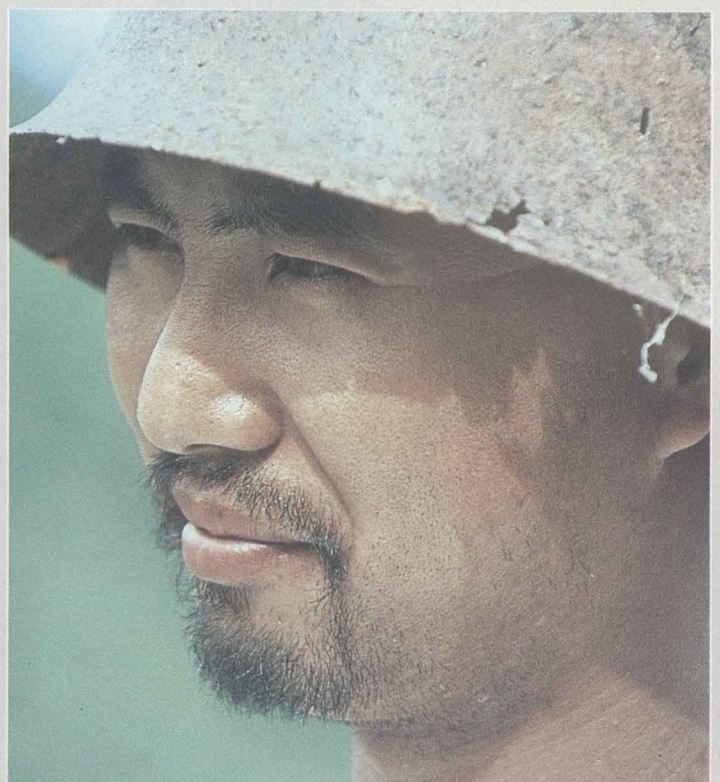
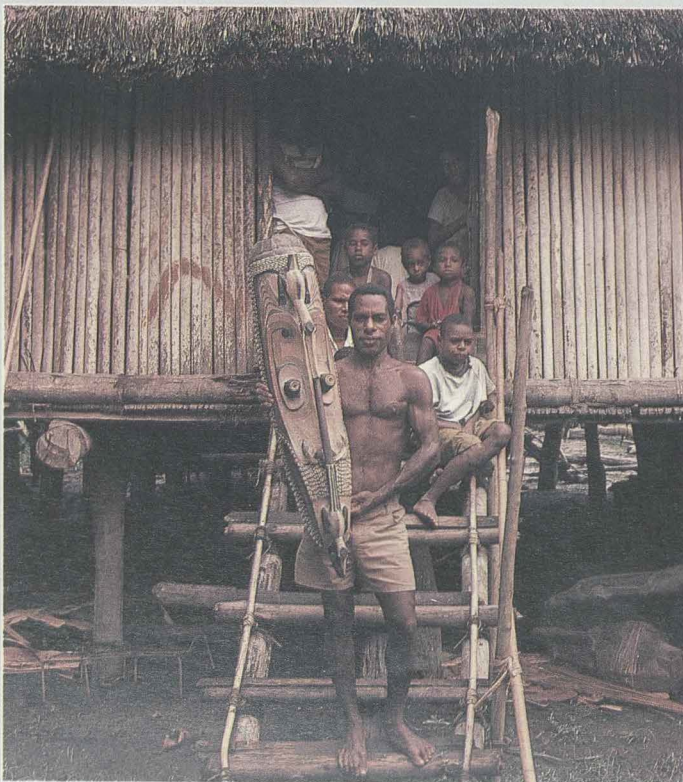
Masao Endoh, one of Japan's leading adventure-war photographers, quietly passed through Papua New Guinea, in the course of his continuous odyssey around the world. Our paths crossed at the coastal town of Wewak, gateway to the Sepik. I had bought a dugout canoe in the upper Sepik, paddled down to Pagwi, then left the river to replenish supplies. Masao was also on his way to the river so I asked him to join me. For an aspiring 21-year-

old photo-journalist it was the opportunity of a lifetime. For Masao it was an ill-fated encounter that almost cost him his life.

Masao was in Afghanistan within weeks of the Russian invasion and has been returning every year. Tibet, the Amazon, the Gobi Desert and other exotic locales are his beat. His assignment to photograph the Sepik and Japanese logging near Madang should have been easy in comparison with earlier assignments.



Below left Carver holds the Korogo mask which almost cost the life of Japanese photographer Masao Endoh. **lower right** Endoh wearing World War II Japanese battle helmet found near Wewak. **far right** Traversing a floating island of pitpit.



Observing a professional in action was fascinating. Masao emphasised that photography is simply painting with light. "The quality of light is the key," he told me.

At Korogo village, Masao and I photographed a carver at work on canoes and artefacts. Masao felt guilty to have disrupted the carver yet the idea of a payment seemed insulting so he bought a large mask instead.

Masao has strong views on the damage and mistrust caused by aggressive photo-journalists (and particularly television crews) in developing countries such as PNG. Having villagers dress up in traditional clothing to convey the idea that they remain in a primitive state is disturbingly common among foreign photographers.

On our third day we made a detour into the breathtakingly beautiful Chambri Lakes. Picturesque villages look out on a lake carpeted in pink and white waterlilies and teeming with bird life. Passing canoes spur flocks of white herons to flight against the backdrop of distant blue foothills. On land, the haus tambarans (spirit houses) match the aquatic beauty. Just a pity most of my film was water damaged - a long story!

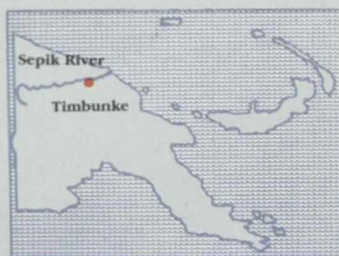
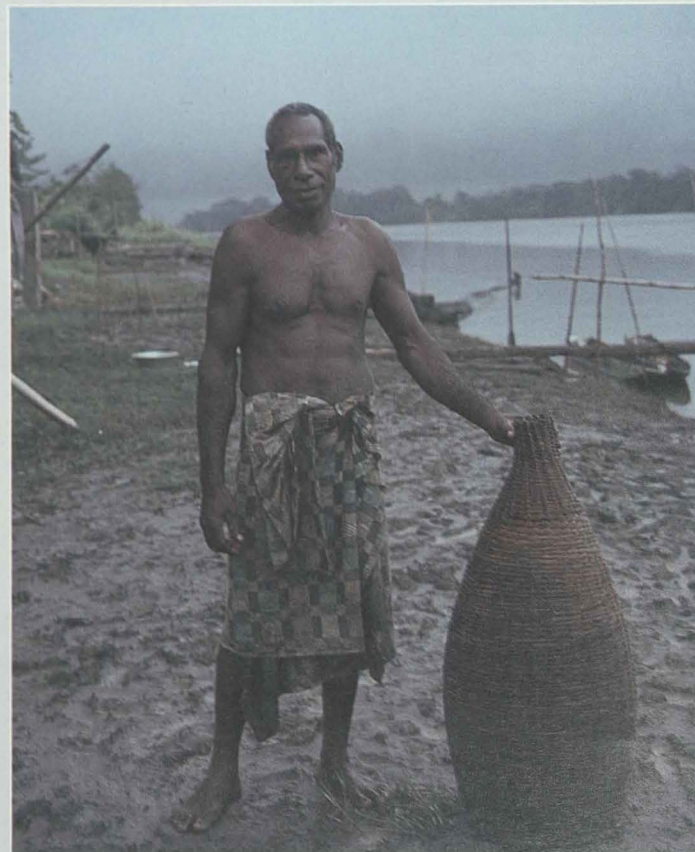
Early in the morning of our sixth and last day we swung around a loop in the Sepik into a strong breeze. Our canoe was almost swamped by waves whipped up by the wind and Masao's Korogo mask was swept overboard. We pulled into shore, unloaded most of the luggage, bailed out the water, then set off after the mask.

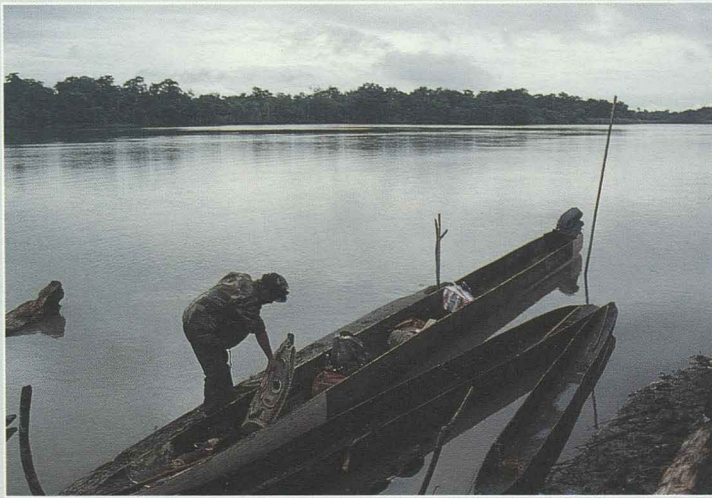
Our canoe began to fill with wave splash again. The lower it sank, the quicker it filled and the slower it moved. Masao stripped to his underwear and slipped into the water to lighten the load, but clinging to the canoe he threatened to capsize it.

Masao decided to swim for the shore and the deceptively swift current carried him past the solid bank towards an endless swamp. I lost sight of him as my attention was buried in every aching paddle stroke.

I clawed my way to the river's edge - not firm land, not even mud, just pitpit - floating reeds that harbor mosquito hordes. While using my hands to grab luggage that threatened to float away, I lost my paddle. My shouts for Masao were answered by silence.

After bailing out the canoe, I went in search of help, paddling the canoe with my arms. Two hours later, I saw a few houses on the distant shore and made an exhausting crossing. The river must have been a kilometre wide and I





missed my target, drifting downstream. Luckily someone saw me, paddled out and pulled me in.

We set off to find Masao. For over an hour, we searched along the pitpit shouting until hoarse. I was beginning to think he had drowned or been taken by a crocodile; even the Sepik men were pessimistic. Suddenly one of them noticed a few broken pitpit stalks. Rejuvenated, we began shouting and from a distance came a smothered reply. Masao had made it to firm land, to be precise mud still under 30cm of water. Although only a few hundred metres from the river it had taken him about three hours to get there.

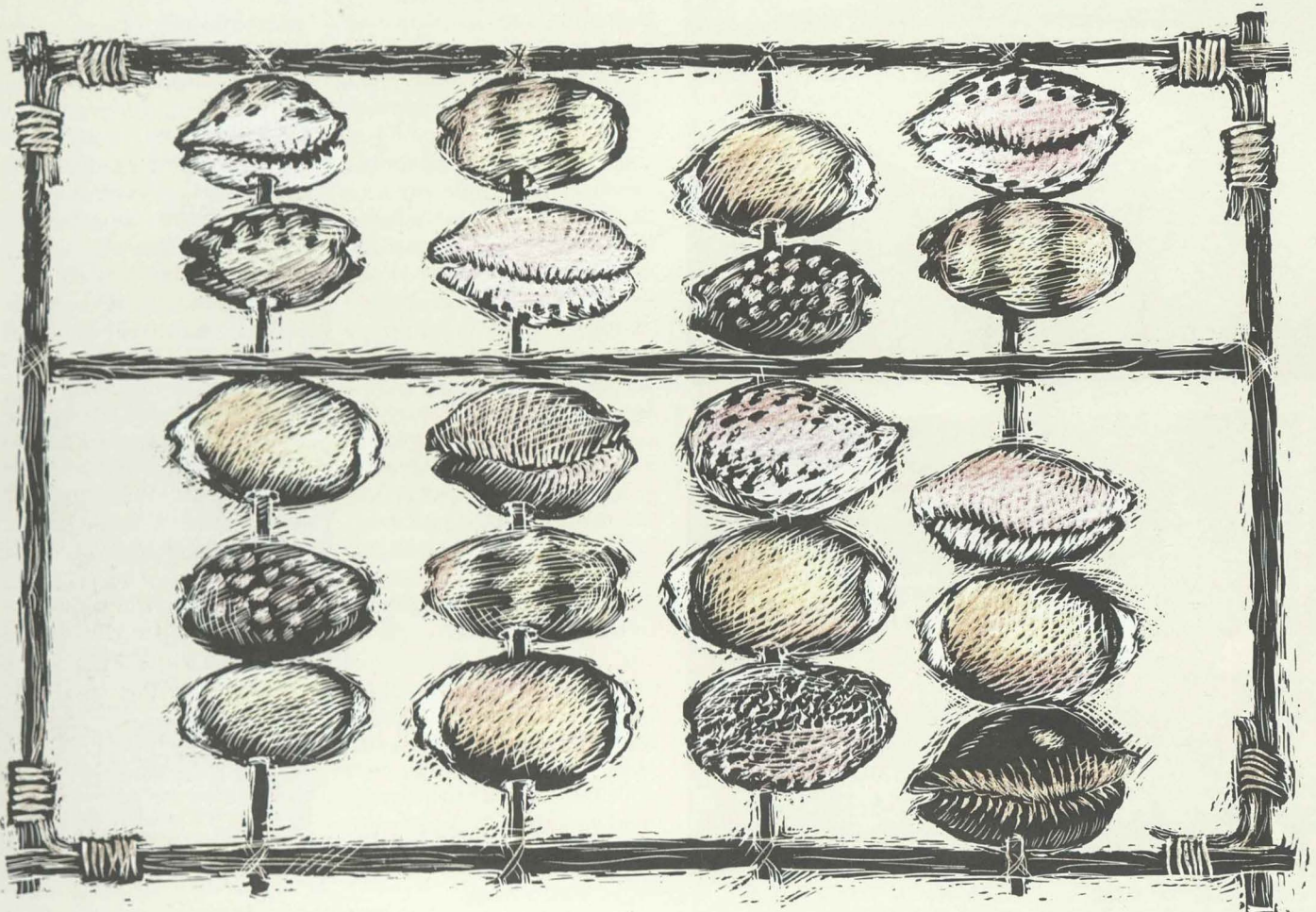
From head to toe his body was raised in thousands of mosquito bites, literally head to toe because Masao shaves his head as a professional trademark. I started counting bites and gave up because there were probably between five and seven thousand. I gave the canoe to the rescuers who took us to Timbukne in a motorised dugout. The

lengthening shadows of late afternoon were a reminder that the ordeal had lasted seven hours. Masao came down with malaria that night and never have the words 'I'm sorry' felt so inadequate. The following day our luck changed. A civil aviation plane landed to check out Timbukne airstrip and we were the first passengers to leave the airstrip in more than two years.

The plane rose and a Sepik vista unfolded. The sense of occasion was not lost on us. We broke into insults directed at the Sepik and cursed the mosquitos. But even in the thick of our insults I had to admit the river looked magnificent, a huge brown coiled serpent upon a batik of greens. I turned my head to Masao. "Beautiful isn't it?" I asked. No need to answer. We just sat back and enjoyed the moment.

Far left Youngsters from the village of rescuers. **top** Endoh loads the fateful mask into a canoe. **centre** The carver's workshop. **bottom left** Sepik fish basket. **below** Chambri Lakes spirit house.





After more than three decades in Papua New Guinea, Coopers & Lybrand accounts for more business than anyone else.

Coopers & Lybrand is the largest and most established accounting firm in Papua New Guinea business today.

Our broad range of services covers taxation, finance, auditing, accounting, executive and staff

recruitment, management consulting, and training.

We even assist with work permit and visa applications.

For specialist business advice, call Coopers & Lybrand, the experts in Papua New Guinea.

If you would like more information on doing business in Papua New Guinea, please fill in and return this coupon to:
Barry Hastie, Managing Partner, Coopers & Lybrand, Mogoru Moto, Champion Parade, P.O. Box 484, Port Moresby, PNG.

Name _____ Company _____

Address _____ Postcode _____

Tick appropriate box: "PNG - Mining & Petroleum Taxation" "PNG - Tax Facts & Figures"

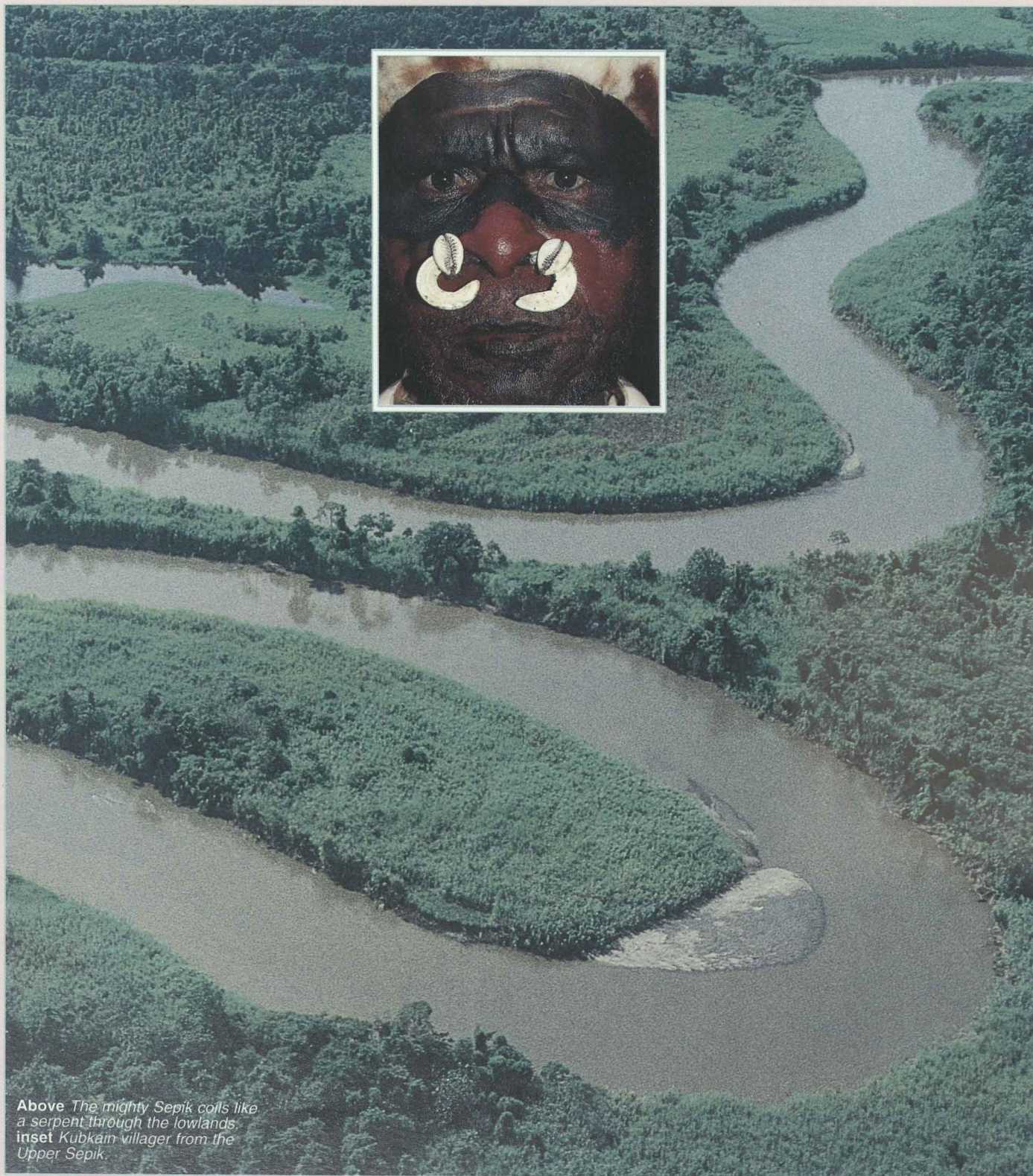
"PNG - Taxation for Foreign Contractors" "PNG - A Land of Challenge and Opportunity"

**Coopers
& Lybrand**
Solutions for Business

ORIGIN OF THE

Great River

Story and photographs by Georgie and Ron McKie



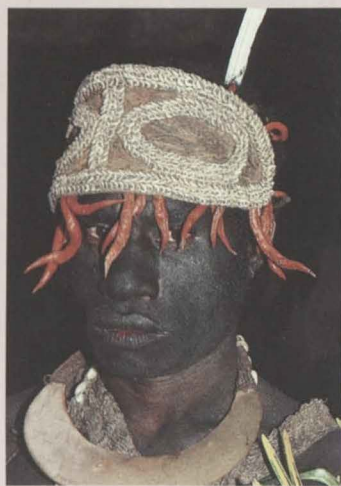
Above The mighty Sepik coils like a serpent through the lowlands.
inset Kubkain villager from the Upper Sepik.

In 1916, Jacob Le Maire and William Schouten, surveying the north-east coastline of the island of New Guinea, reported finding the mouth of a fine river. However, it was not until 1885 that Dr O. Finsch, a German zoologist, entered the mouth of the river, rowing 48km upstream in a whale boat. He called the river Kaiserin Augusta. In 1886, Vice Admiral von Schleinitz steamed 320km along the river. By 1888, a year of high river levels, over 600km had been navigated by Dr C. Schrader, who sighted and named several mountain ranges. In 1910, the Dutch-German boundary expedition ascended the river on the German New Guinea side of the border, reaching a point some 960km from the sea. When the Australian Administration assumed responsibility for New Guinea at the end of World War 1, the river reverted to its local name, Sepik, meaning great river.

No-one can doubt the accuracy of its name. The Sepik is one of the largest rivers in the world in terms of annual waterflow. It is also highly significant in terms of an avenue of communications, in cultural and artistic substance, and as a reservoir of plant, animal, insect and birdlife.

The headwaters of the river rise in the Victor Emmanuel Range and the Drei Zinnen Mountain, flowing north-west, crossing the border with Irian Jaya four times. It finally crosses back into Papua New Guinea and takes an easterly path to the coast, emptying into the Bismarck Sea 90km south-east of Wewak. As it flows out of the mountain on its 1,100km journey, the river is only some 85m above sea level. In spite of the input from numerous tributaries, the Sepik frequently backtracks and changes course to form lagoons, ox-bow lakes and vast swamp areas.

The Sepik River Region is generally divided into three



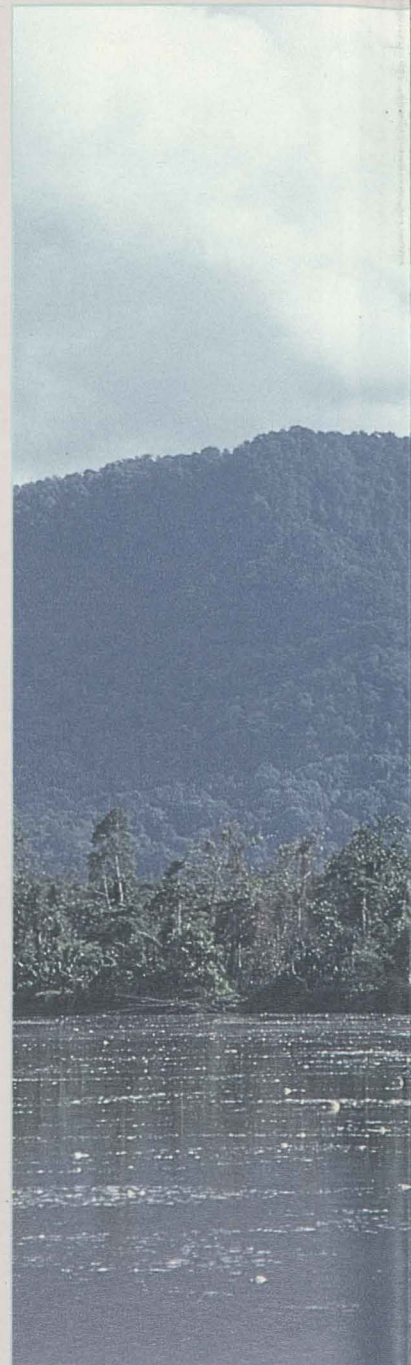
distinct areas. The Lower Sepik covers the area from Kambaramba, a little upstream from the town of Angoram. The Middle Sepik, long regarded as the cultural treasure trove of PNG, covers the area from Kambaramba to Pagwi. Angoram, Timbunke and Pagwi are the only villages on the Sepik which have road access. All other villages must rely on the river for transport communication. The Upper Sepik, from Ambunti to the headwaters, becomes increasingly remote and inaccessible, and consequently, life is more primitive.

Canoe transport is possible year round, but large vessels can enter the Upper Sepik only during the 'wet' when river levels rise as a result of heavy rains in the mountains.

The river has dangers. As the river rises, great chunks of earth are torn from the banks, often dropping large trees into the water. This happens without warning, and is hazardous to anyone paddling a canoe near the bank. These tree trunks can jam together, blocking sections of the river. There are many whirlpools which should only be navigated by the experienced, in daylight.

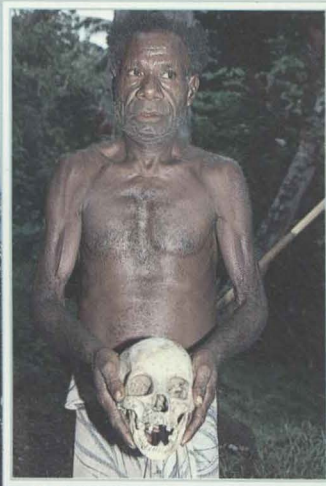
The people of the Upper Sepik are not noted for their artwork, but this is not to say there is no artwork. Indeed, exquisite carving skills exist, accompanying the very different cultural beliefs and traditions. In the middle and Lower Sepik regions, the crocodile dominates cultural life. In the Upper Sepik, insect cults dominate, with clans adopting an insect, such as a praying mantis, as their totem. Not so long ago, when an important person died, natural causes were discounted. It was believed that the death would have been caused by sorcery. To find the culprit, the body was buried in a shallow grave and after a few days, dug up. Careful examination of the

Top left and centre left *Kubkain village dancers*. bottom left *Bawonbil village child*. right *Brumai village sago making*. below *May River, an Upper Sepik tributary*.





Top inset Praying mantis design on woman's canoe paddle.
bottom inset Villager with heirloom skull of father.



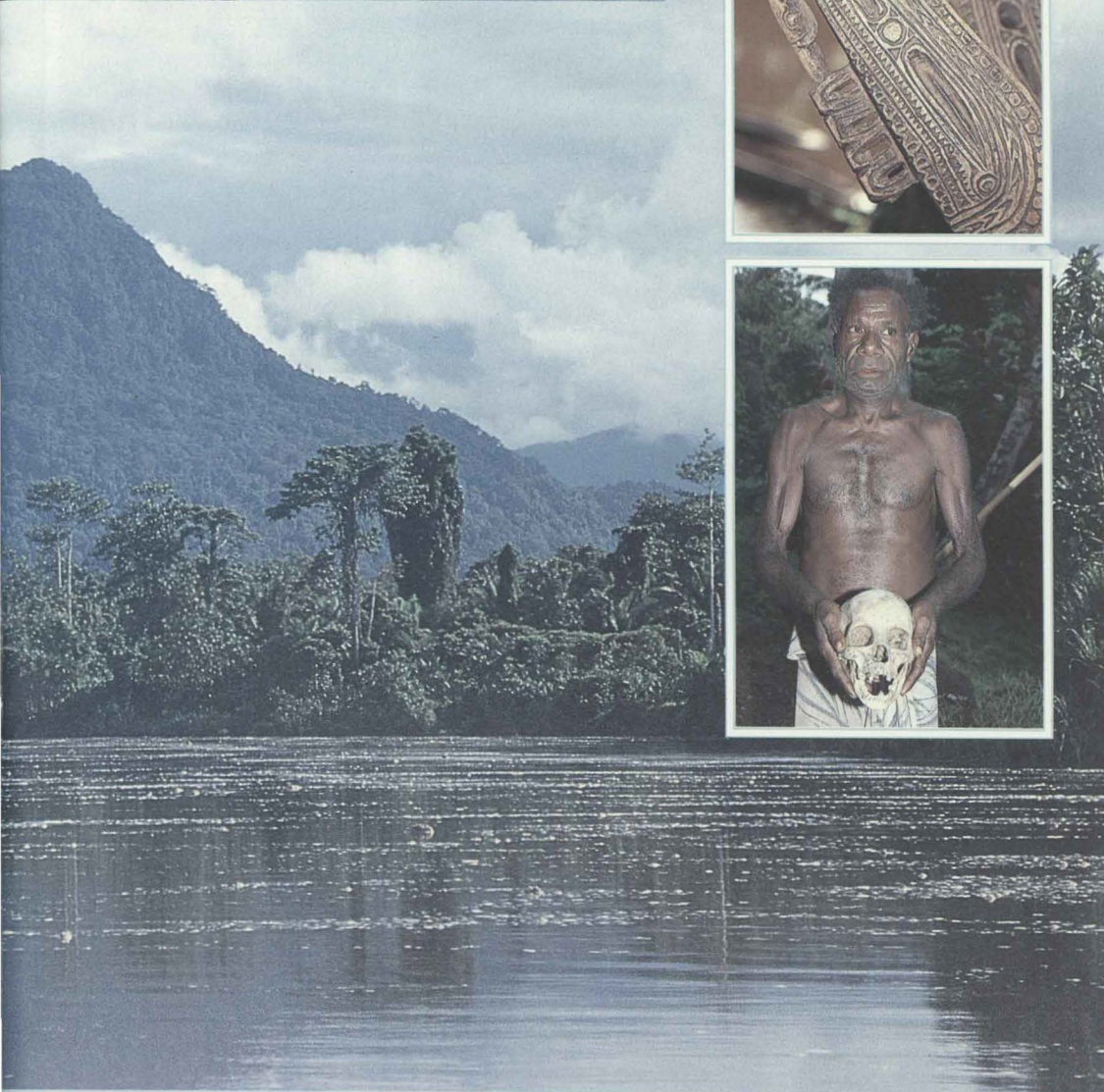
corpse would reveal the number and type of insects invading the body. The largest single group of insects present was read as an indication as to which insect cult and clan was responsible for the sorcery. Retaliation would then take place against that clan.

Some of the carved cult figures are easy to recognise, but many are very stylised. Cult figures usually appear on houses, on canoe prows, on the ends of garamut drums and in the simpler styled haus tambarans (spirit houses).

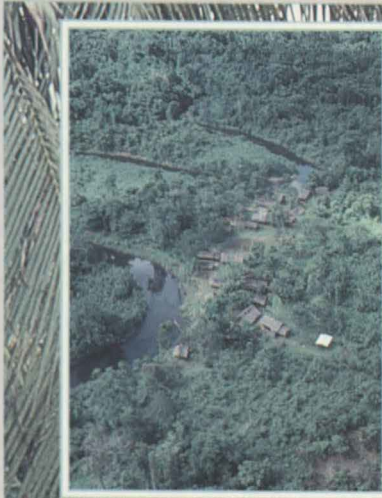
Exquisite carving may be found on practical, everyday tools. A young man may carve a superb design into the handle of a young woman's canoe paddle. This is something she will use for many years. Hunting arrows exhibit meticulous craftsmanship in design and construction. The barbs and decorations are works of art themselves. The carvings carry totemic significance. Large pots usually feature a decoration applied by the potter to her work. Even storage pots carry such a trademark.

One unusual custom associated with Upper Sepik people, is the distribution of the bones of a deceased loved one, among the family and friends of that person. A son may keep the skull of his father. Indeed, one elderly man kept the skull of his favorite wife in a bilum. He carried her with him in this manner for 25 years.

With the availability of large trees, Upper Sepik village houses are generally very large constructions, elevated and supported on large trunks. They are generally based on a large rectangle and some interesting variations have emerged over time. In villages close to the mountains, the basic rectangles are fitted with semi-circular ends, with enclosed entrances. It is believed that this area was peopled from the Highlands and that the curved structure



Right Kubkain village singsing. **bottom right** Fufi village on the PNG-Indonesian border. **top inset** Bawonbil village. **bottom inset** Kubkain village woman with earrings made from bat wing tendons.



is the result of the Highland influence.

Because of this remoteness, singsing bilas (finery) has not been influenced by glitzy bits of plastic and tinsel. It is generally refreshingly traditional. Dancers use a spectacular combination of clay, charcoal, feathers, shells, tusks, bone, leaves and bright peppers and gourds. Ingeniously assembled nasal septum decorations are common for the men. Less common are the women's earrings made from the wings and tendons of flying foxes strung with little hard black faeces of the sago grub.

At the point where the Sepik crosses the border, it braids out into a flat valley. There is a border village at the point where it turns back and enters PNG. This village is Fufi, and it is built on a broad sand bar. Apart from a marker and small building, there is no other indication that this is an international border. In recognition of the traditional movement of the indigenous people in the area, there is a 40km 'no man's land' where people from both sides of the border are free to enter and leave at will. Even given its importance as a border post, Fufi is remarkably unchanged and undeveloped.

The experience of the Upper Sepik is truly daunting. Everything about the area conveys an enormous challenge for the future, both for the people and the development of the region. The impact that the big river has on its people and its land is truly immense, from its remote beginnings to its entry to the sea.






LAE
INTERNATIONAL
HOTEL

Prestigious
International Hotel

Lae International Hotel is situated in the centre of Lae City on nearly four hectares (nine acres) of beautiful surrounding tropical gardens. It offers affordable luxury for people who expect first class standards, with the added touch of friendly, professional service.

The hotel's 100 deluxe rooms, including three suites and a recently opened additional wing, feature private bathrooms, international direct-dial telephones, satellite television, in-house movies, tea and coffee making facilities, a minibar on request and 24 hour room service.

Tempting cuisine is offered at a choice of three superb restaurants. The Vanda fine dining restaurant has tantalising, world class cuisine in a selection of local and international dishes. The International Coffee Shop is less formal, with the emphasis on speedy service, and the Pizza Restaurant continues to be a favourite for relaxed, casual dining or a meal on the run. Poolside barbecues on weekends are a relaxing way to soak up

the sun and the Lounge Bar is the place to meet friendly faces, while the Aero Bar promises a private, guests only, atmosphere.

Lae International Hotel's newly renovated convention centre caters for as many as 300 people for a private dinner or banquet, 500 for cocktail parties, or 400 for theatre or seminar style functions. The Bulolo Banquet Room also caters to guests on a slightly smaller scale and the Boardroom is popular for meetings of up to 24. The hotel also offers special package conference rates.

Sporting and leisure facilities at Lae International Hotel include a swimming pool, tennis court, aerobics, a gymnasium, and a sauna.

General services include concierge/porterage, 24-hours laundry and dry cleaning, a boutique gift shop, Lae International Travel Agency, Avis Rent a Car, safety deposit facilities and ample free car parks.

The hotel offers a courtesy bus service to and from Nadzab Airport.

For reservations and further information, please contact:

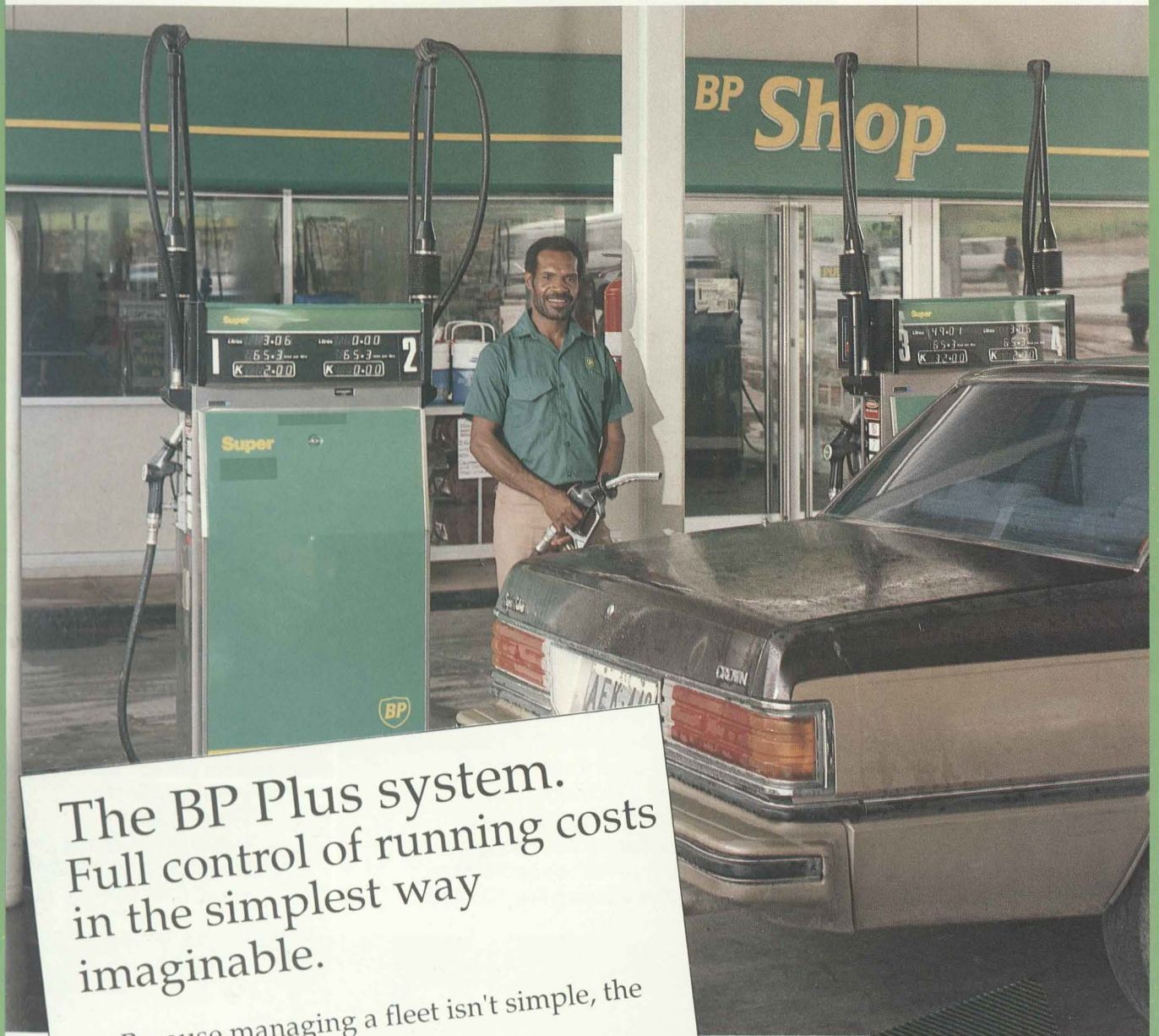
Lae International Hotel
PO Box 2774

Lae Papua New Guinea
Telephone: +675 42 4200
Fax: +675 42 2534





BP PAPUA NEW GUINEA PTY LTD



The BP Plus system. Full control of running costs in the simplest way imaginable.

- Because managing a fleet isn't simple, the BP Plus system is.
- Deciding what to give your drivers is simple.
- Controlling the type of purchase is simple.
- Your administration and management reporting is simple.
- Your drivers will find filling up is simple.
- Paying the lowest price for fuel is simple.
- Obtaining the best service and support system is easy.
- Deciding which fleet management system is the best for you is simple.



BP OIL PAPUA NEW GUINEA AREA MANAGERS

LAE PH: 42 2200 FAX: 42 3556
 PORT MORESBY PH: 21 1129 FAX: 21 1553
 RABAUL PH: 92 1686 FAX: 92 1918

Yes it's simple to use.



Anna Amos

There is a new wave of activity at the National Art School in Port Moresby and the powerful influence of several African teachers has brought with it a huge energy and determination. Much is happening in the textile department, headed by Grace Ochero, from Nigeria.

Africa has been through and is still going through a process of transition and Ochero understands how important it is to harness the arts and creative expression; to encourage the development of new and contemporary ideas where, in an urban setting, tradition is breaking down.

**Story and
photographs by
Liz Thompson**

Above Colors and patterns derived from nature in Anna Amos' textile designs.



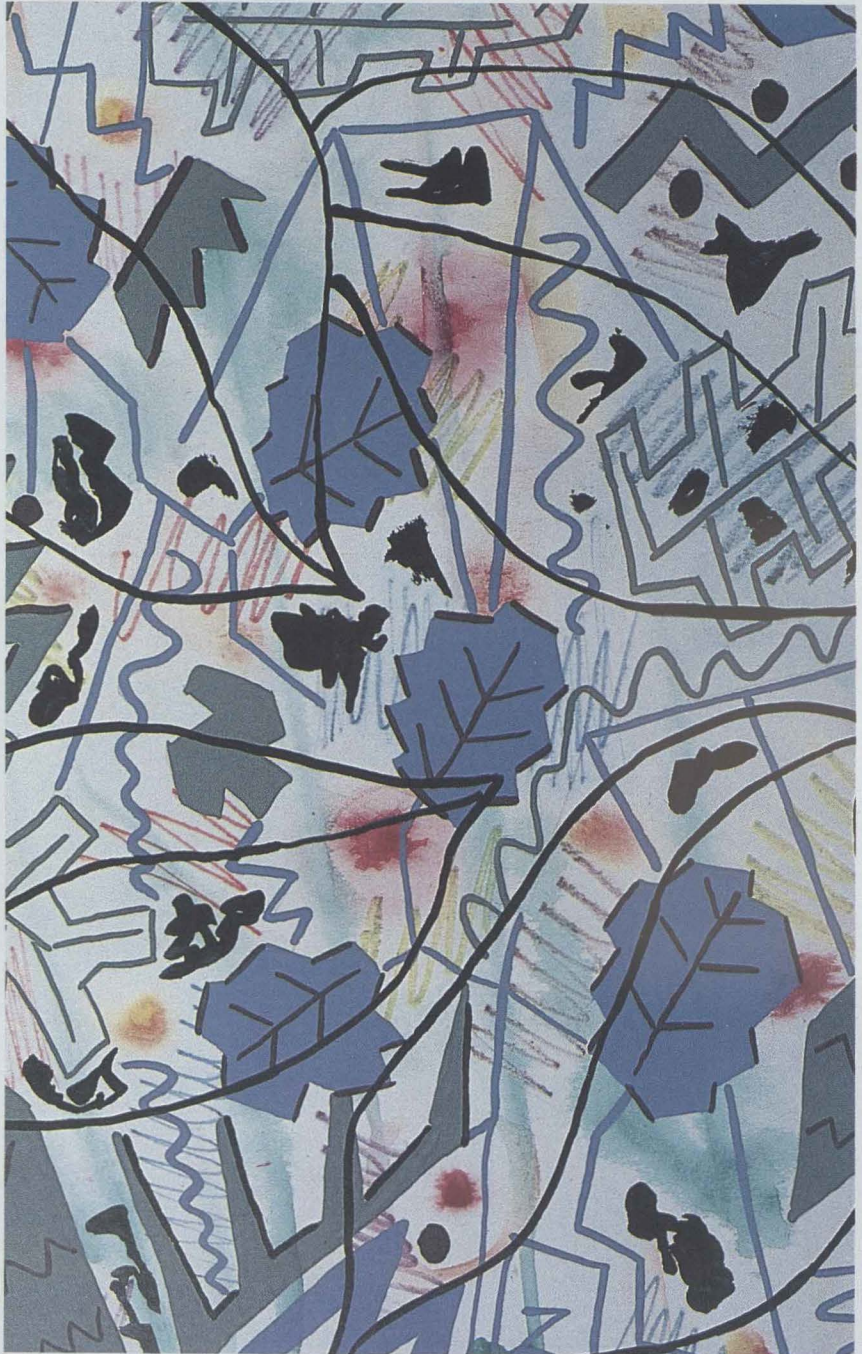


Returning many times to the same spot, the research for a single design is often lengthy. Ochero has stressed the importance of working and re-working, of developing ideas and taking them somewhere new. She has also insisted on a theoretical element within the design course which encourages a broader understanding of textiles.

Long strips of brightly colored fabric decorate the walls of the textile department. Ochero's face, her hair adorned with colored beads, peers from the front of a magazine cover which has been stuck on one of the walls. Students sit drawing at small tables and music hums from the radio.

One of the department's most successful students has been Anna Amos. Her work is extraordinarily vibrant. With images of flowers and leaves, she celebrates nature on fabric. An extremely dynamic personality, her huge smile, dreadlocks and batik trousers are easily distinguishable in a crowd. From a small village in Chimbu she applied to the National Art School after dropping out of Year 10. She now lives in the urban sprawl of Port Moresby but her inspiration is drawn from the bush, particularly that of her home.

Working with silk screen, tie dye and batik, Amos spends many hours sitting and looking at the plants which inspire her. She observes the patterns they make up, sketches them and takes them back to the studio to study. She emphasises the importance of sketching from nature as opposed to photographs or imagination.



Above The artist Anna Amos models cloth she designed. **facing page and this page** Vibrant colors and bold designs are the artist's hallmarks.



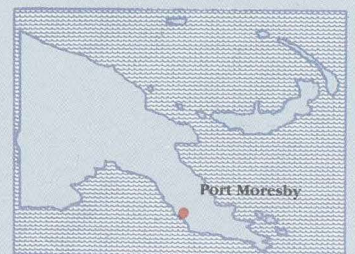
Striking colors are a feature of Amos' work. They move across a range of deep, subtly muted browns and greens, muddy ochres to more intense and vibrant oranges and electric blues. Colors, she points out, are one of the most important areas of her research.

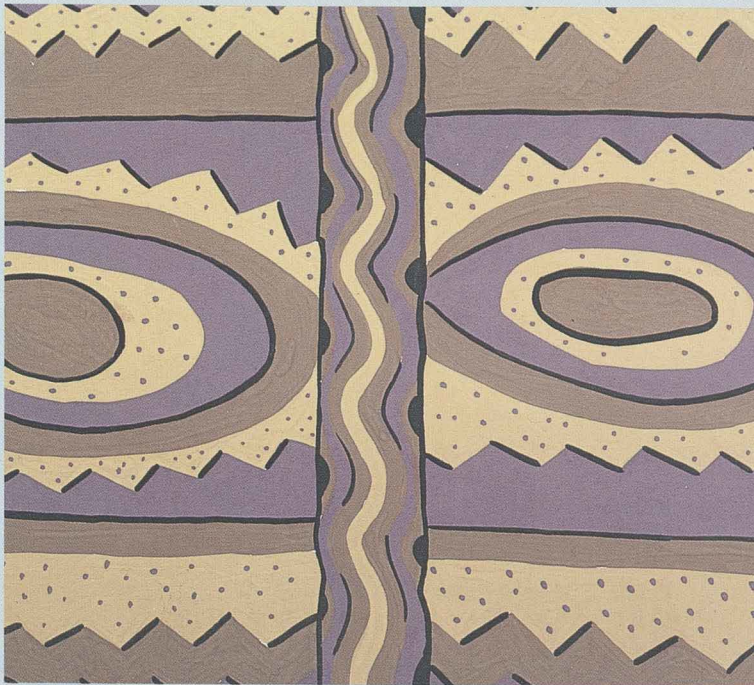
A leaf, she says, is not necessarily green. "When I draw, I go back again and again and sit with all the colors. I get very close

and study the colors, something might look yellow but it's not yellow, it's a combination of yellows." The fresh and unique colors she creates pay tribute to the rich and subtle diversity she sees occurring within nature.

She, like many of the artists in Papua New Guinea, are concerned with the environment and the increasing changes caused by resources development. She

Above Plants and blossoms inspire textile designer Anna Amos.





laments the speed of change and the corresponding rejection of village life and respect for the environment. She describes the feeling of being in the city as being somehow naked with people everywhere as opposed to the security and sense of belonging in her home.

Her work, she says, is in some respect paying tribute to village life. Returning home intermittently, she takes a small camera with her and photographs the plants. In some ways, now urbanised, she feels her work is a way to link her with her people and her family. The fabrics she unfolds in her small back garden pay tribute to nature, celebrating the life she sees within it.

Amos is extremely talented and dedicated to textiles as a medium. Unfortunately, like many, she has been unable to find work after finishing her course. However, as a result of some of the stunning end-of-year exhibitions put on by the department, the Australian High Commission has displayed a serious interest in the students' work. The High Commission has requested that Ochoero present a project submission for a textile design print studio workshop which it would fund. The idea is to help create some employment for textiles graduates. There is enormous scope, creatively and economically, in the development of a serious textile industry, just as there is clearly the talent and commitment necessary for the continued production of innovative work.

Above Colors of nature are isolated and refined in the artist's workshop. *bottom left* Anna Amos. *bottom right* Artist's teacher, Grace Ochoero.

COMMERCIAL & DOMESTIC

World Class Ceramic Wall & Floor Tiles

Manufactured
in Australia,
featuring
stunning new
colours and sizes
with unmistakable
Italian flair, plus a
7 year warranty.



Rebma

REBMA PTY. LTD.
(INCORPORATED IN NSW)

P.O. Box 912, Parramatta, N.S.W. 2124, Australia.
Telephone: (02) 481 9399. Fax: (02) 481 9416. Telex: AA25292.

CONSULTANTS AND EXPORTERS OF INDUSTRIAL COATINGS, CHEMICALS AND CONSTRUCTION PRODUCTS

Samuelson Talbot 992

Exported to P.N.G. and the Pacific Islands by Rebma.

Camera in hand I leaned over the seemingly bottomless shaft, trying not to think about the strength of my shirt buttons - all that was supporting me. The man whose hand was holding the scruff of my shirt collar, assured me that only a few people had fallen into these mining pits in recent years. It did not help that I could not see the bottom of the small diameter shaft which must have been at least 10 to 20m deep.

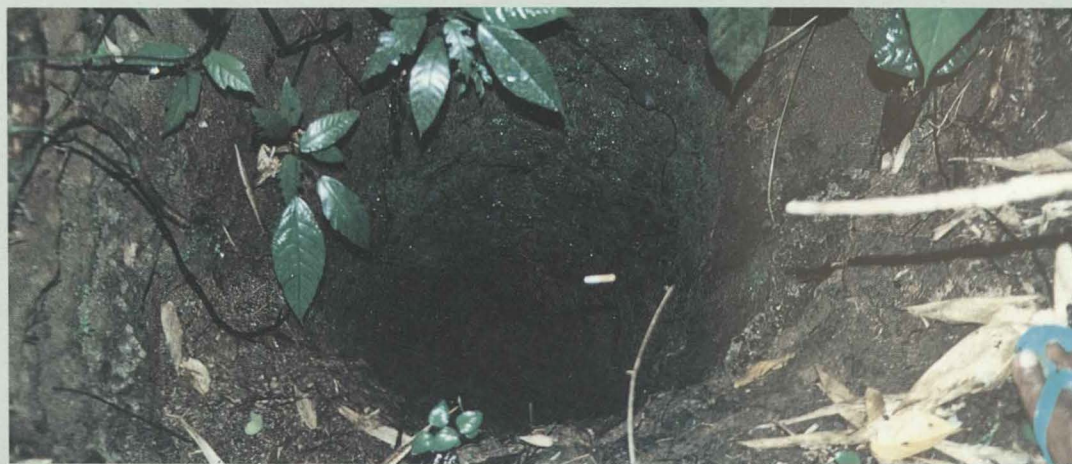
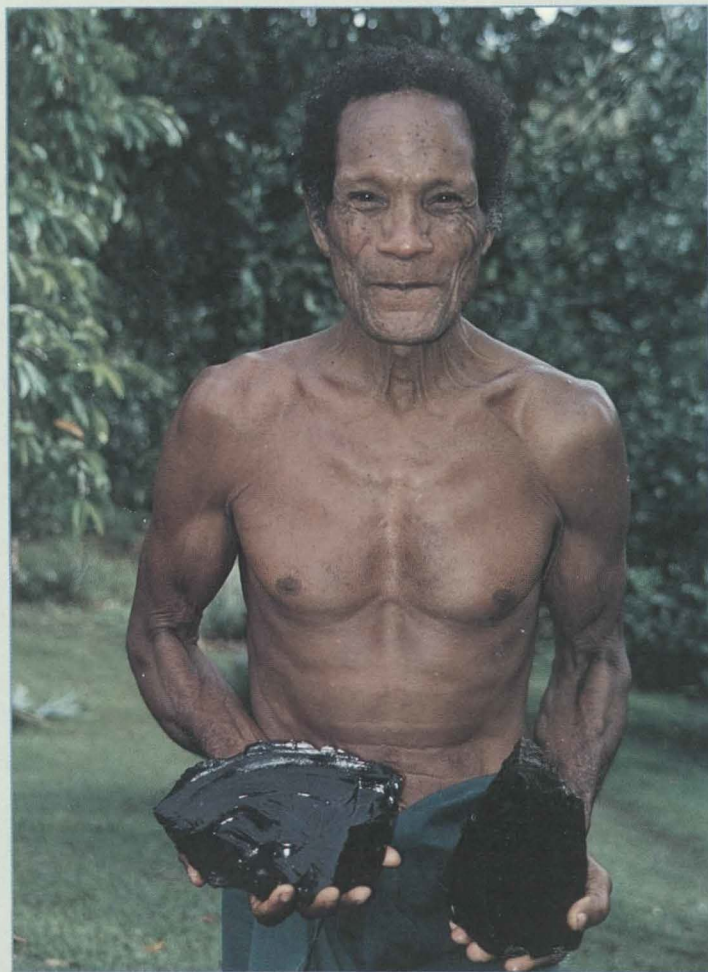
I was near Rei village on Lou Island in the Manus Province and the numerous shafts that dangerously honeycomb this area are all that remain of a centuries old obsidian tool manufacturing industry that once thrived here. The natural sharpness of worked obsidian blades made them valuable items in the households of early Melanesian communities.

Underground obsidian mining had been carried out here since time immemorial and stopped in the early 1900s when steel replaced stone as the preferred material for weapons and tools. Also, the Australian administrations of the time had successfully managed to control the level of interclan fighting, thus reducing the need for sharp weapons.

It is amazing to think that in pre-contact times, before the advent of any type of metal tools, people dug these holes in the ground. Miners climbed in and out of them on steps cut into the shaft walls, using a technique modern rock climbers call chimneying.

Traditional belief tells that only select elders of the local Umbuangkoe clan could locate the boulders of obsidian and tell others where to dig the access shafts. Apparently ginger was chewed and spat onto a certain magical stone which, when carried, could tell the holder the location of boulders. Often closely spaced shafts were interconnected by horizontal underground galleries.

Right Kavan Kekes with two pieces of unworked obsidian.
below Mouth of deep shaft, a source of obsidian.



Story and photographs by John Brooksbank

Stone

OF TRADE

Once located, the boulders of black obsidian were dug out and hauled to the surface using a basket and rope of strong bush vine. Using a particular strong stone, pieces of obsidian were flaked into shapes suitable for use as spearheads, knives or scrapers, work only carried out by certain clan members in the community.

Sadly, like the manufacture of other traditional Manus crafts such as wooden bowls and ceramic pots, the skills necessary to produce obsidian tools have been lost. This has been one of the unfortunate side effects of Manusians embracing modern Western materials and lifestyle.



An indication of the volcanic heritage of the Admiralty Islands, this razor sharp obsidian, or 'spia botel' as it is known in pidgin, was an important commodity in many of the pre-contact trading networks that operated throughout Melanesia. Within Manus there was a complex system of exchange between separate ethnic groups in the interior, coastal and offshore island communities. As artefacts associated with other ceramic products of the lapita culture, active about 1500 BC, obsidian tools manufactured in Talasea on the Willaumez Peninsula of West New Britain Province have been found as distant as islands in New Caledonia, 2,600 kilometres away.

Today Kavan Kekes, one of the elders of the Umbuangkoe clan, grows cocoa in the rich volcanic soil of the Umlayang area and keeps a visitors book to record the names of those who find

their way to this relatively remote part of Manus. The once vital mining shafts remain overgrown, one pragmatically being used as a village pit toilet.

Nowadays there is increased awareness of the benefits to be derived from properly controlled mining and much discussion of the ownership rights of traditional

landowners and the national government. The existence of relatively sophisticated and organised underground mining of obsidian in Manus and elsewhere in Papua New Guinea, the traditional economic exploitation of minerals under the ground, provides interesting material for constitutional lawyers to ponder on.



Right
Obsidian, partly shaped into a sharp cutting edge. below Typical Manus outrigger near Tulumwan Island formed by volcanic action nearly 50 years ago.





Air Niugini

International routes



MONGOLIA

GOBI DESERT

Beijing

NORTH KOREA

Seoul

SOUTH KOREA

YELLOW SEA

EAST CHINA SEA

SEA OF JAPAN

Hokkaido

Honshu

JAPAN

Osaka

Tokyo

Shikoku

Kyushu

Taipei

TAIWAN

NORTH PACIFIC OCEAN

PACIFIC OCEAN

OCEAN

LAOS

Hanoi

HONG KONG

Hainan

Luzon Strait

PHILIPPINE SEA

THAILAND

Bangkok

CAMBODIA

Phnom Penh

Gulf of Thailand

Ho Chi Min City

VIETNAM

CHINA

Palawan SEA

Manila

PHILIPPINES

Luzon

Mindanao

CELEBES SEA

MALAYSIA

SINGAPORE

Sumatra

BRUNEI

Borneo

KALIMANTAN

Balikpapan

INDONESIA

JAVA SEA

Bali

Flores

Java

REPUBLIC OF PALAU

Koror

BIAK

IRIAN JAYA

Moluccas

BANDA SEA

ARAFURA SEA

TIMOR SEA

Torres Strait

Timor

Darwin

Gulf of Carpentaria

NORTHERN TERRITORY

Alice Springs

WESTERN AUSTRALIA

GIBSON DESERT

NULLARBOR PLAIN

Kalgoorlie

Geraldton

Perth

GREAT AUSTRALIAN BIGHT

QUEENSLAND

WALLES

NEW SOUTH WALES

VICTORIA

Melbourne

Adelaide

TASMANIA

Hobart

King Island

Flinders Island

GREAT DIVIDING RANGE

Rockhampton

Brisbane

Sydney

Canberra

TASMAN SEA

Lord Howe Island

Norfolk Island

Auckland

North Island

Wellington

South Island

Stewart Island

Commonwealth of the Northern Mariana Islands

Saipan

Mariana Islands

Guam

Federated States of Micronesia

Caroline Islands

Republic of the Marshall Islands

Majuro

Nauru

Yaren

Santa Cruz Islands

Vanuatu

Port Vila

Fiji

Suva

New Caledonia

Noumea



Papua New Guinea



Air Niugini



RED-HOT NEW YEAR DEALS.



For the months of January and February, enjoy a red-hot 1993 Deal, but only at AVIS.

Please call our Reservations on 25 8299, and let us try harder and get you moving. Ask about our special long-term rental rates or our great weekend deals all over Papua New Guinea.

If you are planning an overseas holiday call us about AVIS "SUPERVALUE RATES". We can quote and pre-book a vehicle for you at any of our offices, worldwide.

At AVIS, we wish you a very Happy New Year and look forward to trying harder for you in 1993.

AVIS

try harder.

Port Moresby, Lae, Mt Hagen, Madang, Rabaul, Wewak, Goroka and Manus.

A photograph of a Pacific flying fox bat hanging upside down from a branch in a tropical forest. The bat's wings are spread out, and its face is visible at the bottom of the frame. The background is filled with large, green, elongated leaves.

RARE *BAT* REDISCOVERED

Story by Dr Tim Flannery
Photographs by
Pavel German

Very occasionally an animal species is found that we thought to have become extinct long ago. In recent years a fish, a peccary (an American pig-like creature), and an Australian pygmy-possum have been found after having been originally known only from fossils. The most recent such discovery occurred in Papua New Guinea last year.

Above Pacific flying fox, found only on small islands of the southwest Pacific.

The species, known as Bulmer's fruit bat, is a large member of the flying fox family. It remained unknown until the early 1970s when an archaeologist excavated sediments from a cave in Chimbu Province. The cave was high in the mountains, and New Guineans had used it for over 12,000 years as a shelter and a place to cook their meals. They had thrown their dinner scraps onto the cave floor, and the bones became fossilised.

Dr James Menzies, of the University of PNG, examined the bones and quickly realised that a large number of them

were from a large and previously unknown species of fruit bat. One of the most curious features of the fossils was that the jaws lacked any sign of front incisor teeth. This unusual feature makes the species easily recognisable from jaw bones alone, so Menzies called his new discovery *aproteles* (meaning in Greek, incomplete at the front) and *bulmerae* for Dr Susan Bulmer who excavated the bones.

Menzies was intrigued with the distribution of the bones in the deposit, for the bones of his new species were abundant in levels dating to

the last ice age 10,000 years ago and earlier, but only the bones of other species were found in the more recent deposits. Menzies concluded that, although it was common earlier, Bulmer's fruit bat had become extinct at the end of the ice age.

Nothing more was heard of this intriguing bat until Dr David Hyndman began investigating the hunting habits of the Wopkaimin people in the mid 1970s. The Wopkaimin are a small group living in the then remote Star Mountains of far western PNG. Although their homeland had remained one

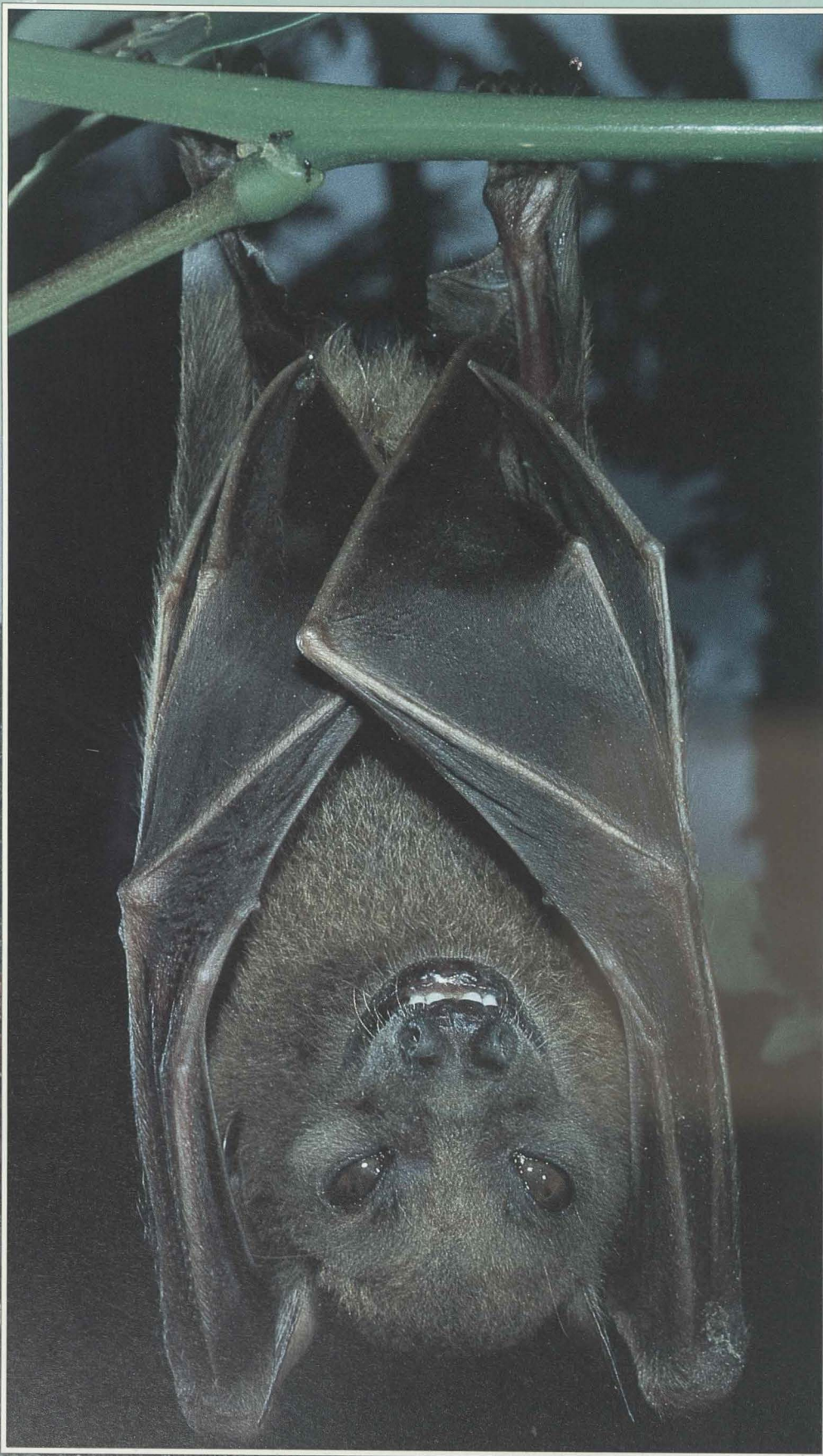
Far right Lesser bare-backed fruit bat. **below right** Base camp was an old hunting lodge. **bottom inset** Author setting a mist net to catch and study fruit bats. **top inset** Fruiting taro near the Bulmer's fruit bat roost.



of the most isolated places on earth, by the 1970s the 20th Century was finally catching up with them.

At about this time the PNG Government was extending its influence into the rugged ranges, and exploration of the Ok Tedi mine was beginning. For the first time, Wopkaimin people could work for cash and buy shotguns and rope, and their hunting strategies were rapidly changing.

One day, Hyndman accompanied some hunters to an enormous cave perched high above PNG's spectacular Hindenberg Wall. Large fruit bats were screeching and





**NEW GUINEA
MOTORS**



circling the roost in their thousands. The cave appeared to be inaccessible but with the aid of store-bought rope, the hunters entered. They fired a shotgun repeatedly into the mass of flying bats. Many hundreds were killed and the people of nearby villages enjoyed an enormous feast.

Hyndman wished to identify the bats and cleaned two skulls to be identified later. Imagine his surprise when he unpacked the bones to find that the skulls were from the Bulmer's fruit bat, a species that he had described as being long extinct! He related the news to Menzies, who returned to the great cave some months later. Tragically he found it silent and almost empty with just two bats circling the roost. Apparently hunters had exterminated virtually the entire colony.

Various people visited that cave on later occasions, but all found it deserted. By early

1990 it appeared that for a second time the Bulmer's fruit bat was extinct. At about this time I resolved to carry out a search for the species. It was, after all, the only PNG mammal which was thought to have become extinct in historic times. Also, it had survived in one cave until the 1970s. I felt

that it was possible that a remnant population existed somewhere and that if I acted quickly enough it might be possible to protect it.

Ok Tedi Mining had kindly offered to fund the search and in May, 1992, a small group headed by myself and Lester Seri from the PNG Department of Environment and Conservation headed for the cave above the Hindenberg Wall. We had expected we would find it empty. We were stunned when, as we approached it, we heard the cries of fruit bats rising from the floor. We raced towards the end, then clung onto trees in fear, for the cave forms an enormous vertical-sided shaft that, because of the thick vegetation, can only be seen when one is about to fall into it.



Left Common tube-nosed fruit bat.
below Entrance to the cave housing the only known colony of Bulmer's fruit bats.



It is a truly enormous cave - its southern side formed by a vertical cliff perhaps 1,000m high, where on its northern side there is a vertical drop for around 200m. At the bottom of the shaft there is a flat floor and opening into the south wall is a huge cathedral-like cavern which is the roosting site of the colony. That evening we watched 137 bats exit the roost. This tiny remnant had somehow survived the massacre of the 1970s and had re-established in the cave.

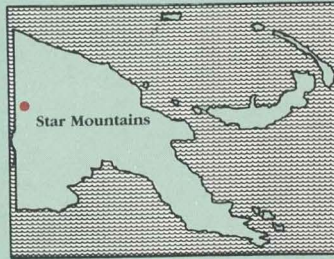
The reasons as to why Bulmer's fruit bat had survived for the last 10,000 years only in this one cave were not hard to determine. The cave is large enough to shelter thousands of these large bats and they have easy access to it. Its sides are so sheer and it is so deep however, that until recently, humans have found it virtually impossible to enter.

Even if one or two of the bravest hunters did get in, the bats roost so high on the roof of the cavern that a bow and arrow is barely able to reach them. The bats are clearly very sensitive to human hunting, and as the numbers of humans

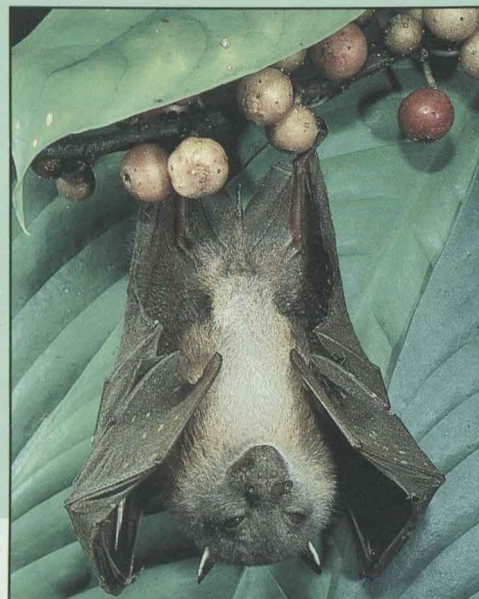
in PNG increased they were driven out of every roost except this one.

The bats had many surprises in store for us. It is a large, blackish colored bat whose wings meet in the middle of the back. This makes the back appear naked and it gives it extreme manoeuvrability in flight. Thus it is one of the few bats that can hover and even fly backwards.

It is also the largest bat species to roost in caves and because it must rely on sight in the dimly-lit environment, this manoeuvrability must be



Bottom Lake above the Hindenberg Wall in Bulmer's fruit bat territory. **below left** Unstriped tube-nosed fruit bat with unusual greenish wings. **below right** Back from brink of extinction, rare female Bulmer's fruit bat with young.



a great advantage

Very little is as yet known about this most mysterious bat, but over the coming years we hope to learn a lot. Ok Tedi Mining is funding a research and conservation program for the species, to be carried out by staff of the PNG Department of Environment and Conservation. Local landowners are now eager to protect this extraordinary bat, and with their help and the funding from Ok Tedi, I feel that it has a bright future.

P A P U A N E W G U I N E A

COFFEE



Goroka Coffee Roasters Pty Ltd Po Box 555 Goroka EHP



*THE BEER OF PARADISE...
SOUTH PACIFIC EXPORT LAGER*

One Horse Town

Story and photographs
by Janetta Douglas



Left Sister Martha Kettle (left) in 1991 and on a pack pony (left) 50 years earlier as a newly arrived nun in Papua New Guinea.



A 30-minute flight north west of Port Moresby lands intrepid travellers in the tiny township of Woitape nestled at 1,800m among the peaks of the Owen Stanley Range. Alighting from the aircraft they are likely to see in the rich green pastures beside Woitape's airstrip, a most unexpected sight. Here stands Bella the 14-hand high relic of a time when the only way to travel through the mountains was on foot or on the back of a sure-footed pony.

Bella is the sole survivor of a team of pack ponies abandoned when airstrips were built throughout the province in the 1960s and 1970s. Her last mate died a few years ago and Bella must be at least 30 years old. However, walk up to this glossy brown beast and the ears prick with pleasure as she bustles towards an offered bunch of grass as if to say, "I'm so glad you came. Where are we off to today? Fane? Ononge? A short stroll up to Kosepe maybe?"



Above One of the hardy breed of ponies which thrive in PNG, with its young rider.



Above Bella, sole survivor of the Woitape pack ponies. **below** French missionaries relied on hardy steeds in taking the gospel to the Highlands.

Those days are gone forever. Today, aircraft soar out of Woitape taking mere minutes to hurdle the mountains and valleys that Bella once took days to traverse. Her ancestors were imported from Australia and New Zealand at the turn of the century and included Welsh ponies, thoroughbreds and cart horses.

Few of them survived their first year of service. Trekking through the mountains was no easy task. Over 1,000km of tracks once linked the mountain patrol posts and mission stations with the coast at Yule Island. Each track has

been hand hewn around the mountains after being pegged to a gradient of between five and eight degrees. Many animals were to die of disease on the coast. Many died after losing their footing on the mountain tracks. Some died of exhaustion on these 10-day treks where there was little grass growing on the rocky outcrops or beneath the rain soaked forests.

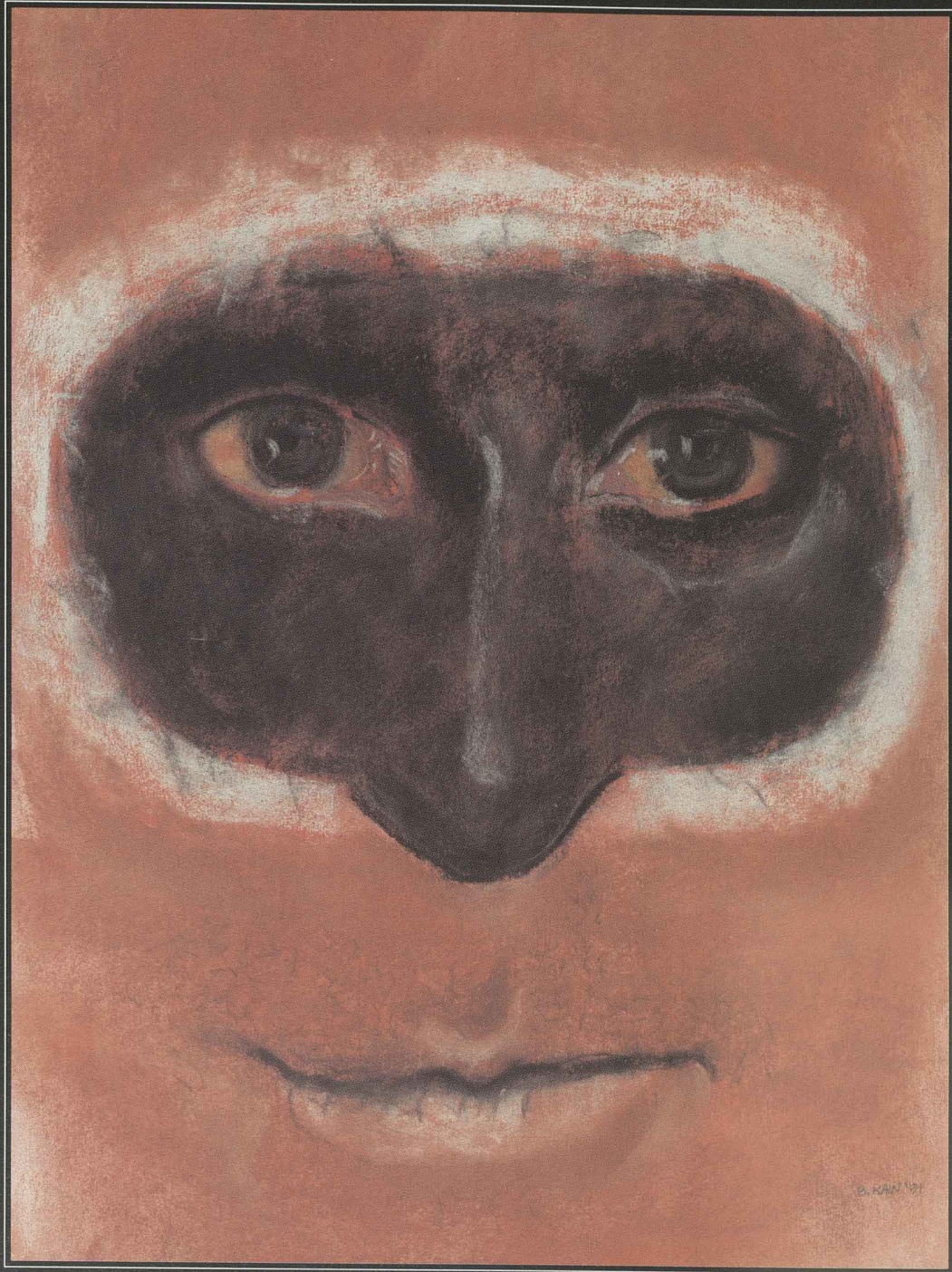
Only the finest of these imported animals survived and only the most noble of them were to breed, but what an incredible breed evolved. Honest, intelligent, sure footed and fearless, with a sixth sense

for danger that mission folk still talk about with awe.

Bella is the last of her kind in Woitape but there is still a herd at Kamalai behind Tapini where their ability to cope with any feed conditions has allowed them to flourish. Others have survived around the turf club at Port Moresby. Mr Merlin is one of the best, outleaping fancy imports at gymkhanas.



THE FACE



An extract from the 1992 Shell Collector Series Calender. Artist: Bob Kain.

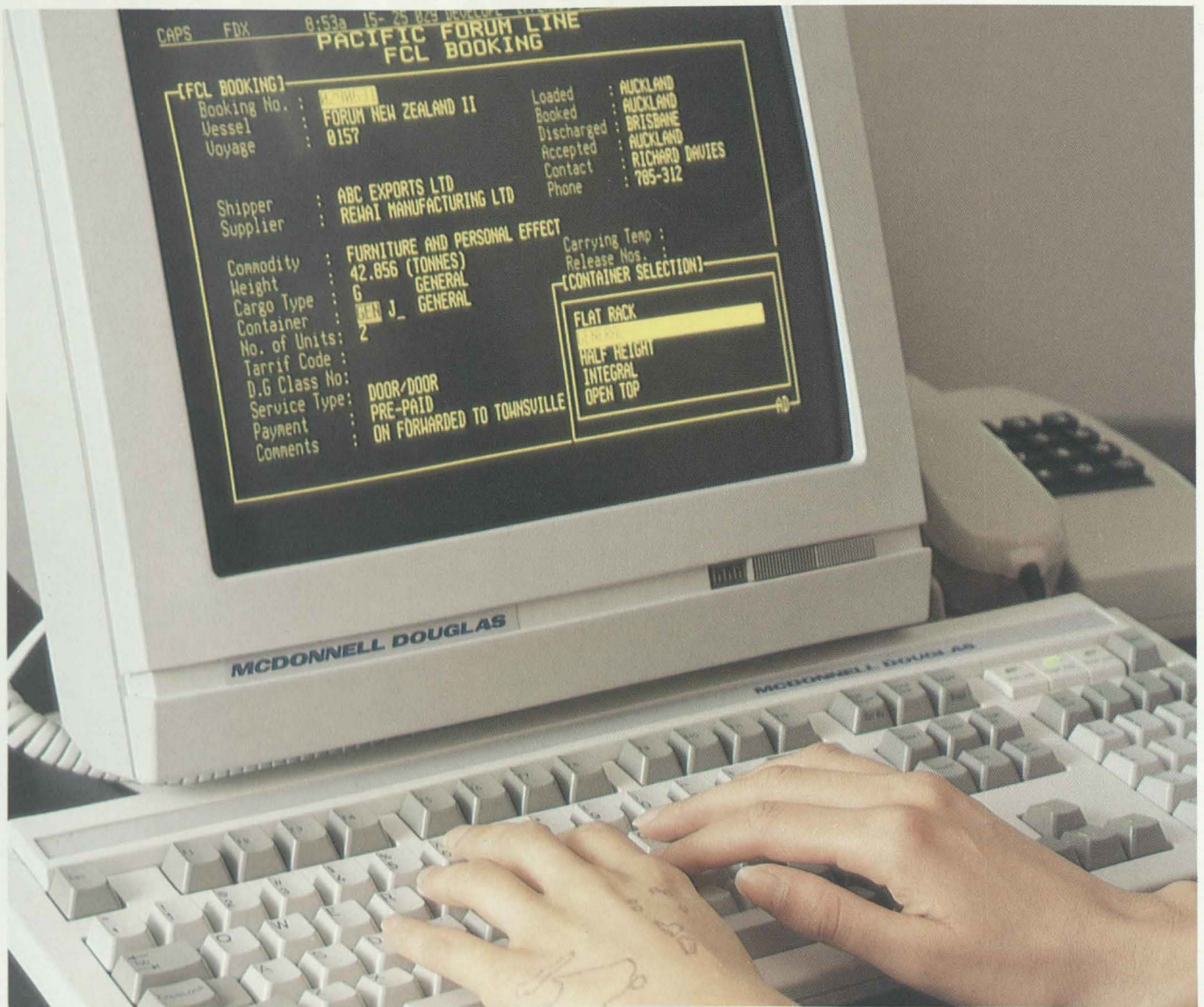
Of Papua New Guinea.

Throughout Papua New Guinea Shell is committed to serve and deliver to our many and varied customers.

Shell is PNG's Leading Oil Company.

Shell... We Deliver.





Wendy Hern has never been to sea but she knows the Pacific like the back of her hand.

Wendy Hern knows how to get your products from A to B, or to be more precise, around the Pacific, in the most economical way.

Like the rest of the team at Pacific Forum Line, Wendy operates the Pacific services efficiently.

Wendy's role is integral to the success of your business.

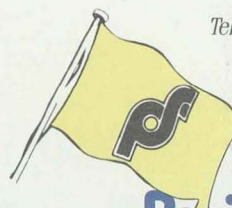
She works closely with you and the computer, through stormy problems and plain sailing to make sure your goods reach their destinations in good condition and on time.

This experience is constantly at your service.

We're proud of Wendy and the rest of the team at Pacific Forum Line, where your business comes first, and gets there first, around the Pacific.

Pacific Forum Line Shipping Services

- Australia
- New Zealand
- Fiji
- New Caledonia
- Tonga
- Western Samoa
- American Samoa
- Tuvalu
- Kiribati
- Papua New Guinea
- Solomon Islands
- Cook Islands



Telephone: Auckland NZ (09) 307-9100
 Fax: (09) 309-2683
 Telex: 60460

Pacific Forum Line
We run the Pacific, regularly.

Bella is well past such antics. Her pack saddle now hangs on the gleaming rafters of the nearby Owen Stanley Lodge, its patches and stitching testifying to the care of the bushmen who once held her lead rope as she went about her duty.

Each pony was required to carry a load of 60kg in packages wrapped in hessian and tar paper and slung on either side of the saddle. Careful packing was essential so that no parcel was so wide, so high or so long as to bump a cliff face and force the pony to walk too close to a precipice. Flour, sugar, salt and rice were carried in square benzine drums much to the disgust of the recipients who still grimace at the memory of its taste. However the drums had many uses once arriving at their destination including the making of roofs and furniture.

The finest ponies also carried the priests, nuns and government officers who lived and worked among the people. Many of these dedicated missionaries are still around, including Sister

Martha at Fane, a five-minute hop in an aircraft or a two-day walk from Woitape. Sister Martha was raised in a country town and had no problems galloping a horse in full habit and veil in these impossible conditions. Others did not have her faith in their ponies. Many completed the journey in hammocks slung on poles between two carriers. Sister Melanie was so distressed by the journey to Fane she never went back. She now lies buried below the Fane Church beside the folk who gave their lives in the service of the people they came to love.

Aircraft may have replaced the pack pony as the most convenient method of travel through the mountains, but most of these old pony tracks are in frequent use by villagers and local and international backpackers.

Woitape is the centre for such adventures with reliable guides available to lead the fit and healthy through mountains filled with friendly people, birds of paradise, parrots, orchids and an endless variety of butterflies. The



Above Guests at Owen Stanley Lodge examine Bella's pack saddle. **below** Papuan ponies setting out for the Highlands in the 1930s.

Owen Stanley Lodge has a hut near the top of Mt Albert Edward from whose summit both the north and south coast of Papua New Guinea can be seen.

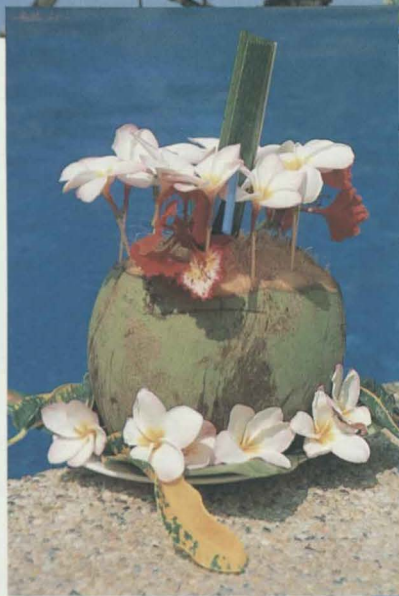
Meanwhile, Bella munches on contentedly as guests relax in the shadow of her saddle at the Owen Stanley Lodge, lounging around the log fire and sipping their drinks. The more perceptive of the guests will be up next morning to pay their respects to Woitape's proud old lady. She is not just

any old horse. She is Bella, the last of the Woitape line who helped bring law and order, education and medical care to the delightful Fuyuge villagers.



Papua New Guinea's Largest Hotel Group

together with the Premier Car Rental Company



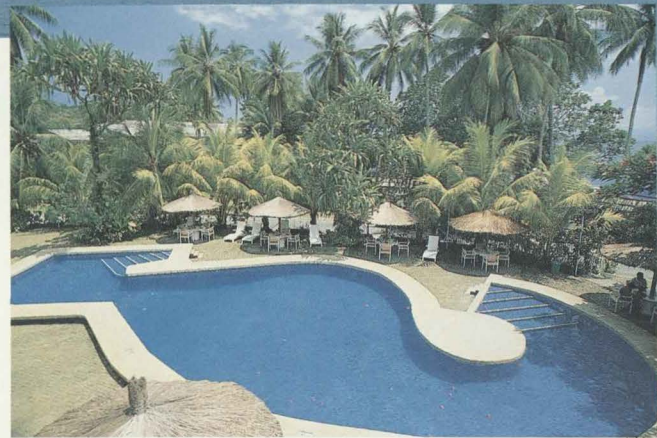
*Check into One of Our Superb Hotels
in any of 7 Unique Locations
Throughout P.N.G and enjoy Friendly
Melanesian Hospitality as well as
access to Top Quality Hire Cars.*

**One number gets
them all:**

CENTRAL RESERVATIONS

Ph: **25 2612**

Fax: 26 7853



Budget
rent a car

and



Coral Sea Hotels

Media Brokerage International

THE

Magnificent Sevens

Story and photographs by Georgie and Ron McKie



Above
Arabian
Gulf team
supporter.
right
March
past of
teams
before the
tournament.

Above
Spanish
players
autograph
programs

For one weekend of each spring, Hong Kong is the host to one of the greatest international rugby gatherings on Earth, the Hong Kong Sevens. Over 35,000 fans gather to see the spectacle of 24 invited teams doing battle for the prestigious cup, plate and bowl trophies. Tickets for the event are sold out within minutes of going on sale in Hong Kong. Airlines fly in at least 5,000 fans from around the world, many from Papua New Guinea.

It becomes a massive party for all, particularly for the 30,000 Hong Kong expatriates who claim that it is the biggest meeting of non-Chinese Hong Kongers of the year. It is also interesting to note how many Asian corporate conferences are held in Hong Kong during the week before or the week following the tournament. What better way to ensure a 100 per cent attendance of executives?

The Sevens recently extended invitations to teams from Fiji (the cup holders), Spain, Singapore, Western Samoa, Tonga, Korea, Germany, Barbarians (UK), Australia, United States, Scotland, Russia, Argentina, Canada, Thailand, France, Hong Kong, Arabian Gulf, New Zealand, Japan, Taiwan, Sri Lanka and PNG. In the past, PNG has played well, beating Sri Lanka in 1986 to take out the bowl final.

Three teams play a round robin in each of eight pools on Saturday, which is the qualifying day. PNG unfortunately drew one of the hardest pools in 1991, coming up against highly fancied Australia and the American Eagles. Teams with two wins qualify to play for the cup; one win puts the team into the competition for the plate and the remaining sides play for the bowl.

While the giants in 15-side rugby are highly fancied

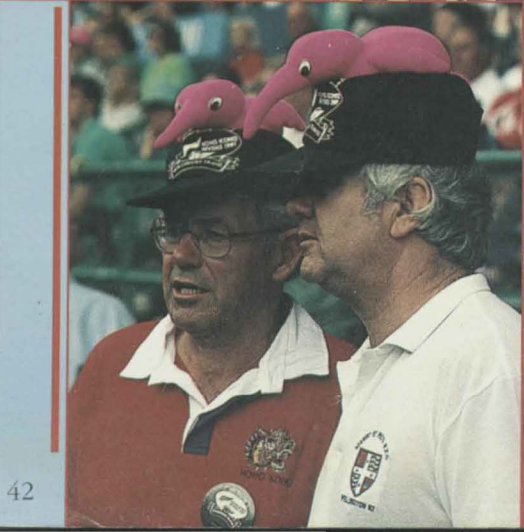
as winners, seven-a-side rugby teams play a short, very fast, running type of game equally suited to the tiny Thais and Japanese, as to the hefty New Zealanders or burly Fijians. It is a wonderful chance for emerging rugby playing nations to mix it with the best at international level. Less-well-known teams are avidly supported by the spectators

who automatically barrack for the underdog. Tournament favorites are heckled and jeered as a matter of course.

The atmosphere among spectators is electric. People pour into the stadium as it opens at 7am. By 8am many of the souvenir booths have long queues and have sold out of some of the more popular t-shirts, hats, books,



This page Supporters let themselves go in displaying team colors in spectacular and bizarre fashion.

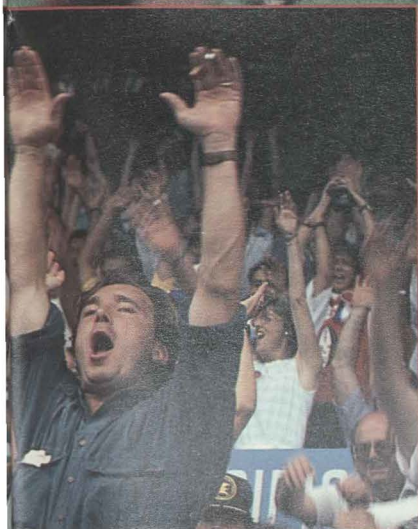


rugby balls, cushions and umbrellas. Food and drink to sustain the body through the two days of barracking are readily available. Waiters ply the rows of seats selling beer, wine, fruit juices and soft drinks.

Each team seems to come complete with an official supporters squad. In the case of PNG, the 1991 'A Team' flew to Hong Kong with the players, having assisted with their fundraising. There is a waiting list to join them! They were easy to recognise with their yellow shirts and hats with pukpuks (crocodiles) on top. Each group of supporters had a distinctive outfit or body paint. Barbarian supporters were among the zaniest, with broad black and white stripes and bizarre clothing. It was impossible not to see the large



Left The Pukpuks of Papua New Guinea limber up before a match. **below** PNG Pukpuk player makes a burst against Korea.



New Zealand contingent in their bright pink clothes and pink kiwis on black hats.

Each day was packed with activity. Saturday kicked off with two games of mini rugby played at the same time on the ground. This involved children under the age of 13, playing in five age groups. From 11am the 'big boys' played in 15 minute matches (two seven-minute halves with a one-minute break). While a game was in progress, the next two teams would be at each end of the ground going through their warm-up preparations. This could be as entertaining as the matches! Play continued until almost 7pm.

On Sunday, their teams now in their final groups played quarter-finals. To provide a break, and a little rest, there was a midday display followed by the march past of teams. The highlight of this was the appearance of the referees. These men came from Australia, Fiji, France, Scotland, Sri Lanka and Hong Kong. They all had one thing in common - they marched in dark glasses and carried white canes!



Left Referees, 'blind' to bias, march with white canes. below Western Samoa on attack against Malaysia.



Left, from top In distinctive garb, supporters of the Barbarians; Papua New Guinea; and New Zealand.



The first bank you see in PNG



is the bank that knows PNG best

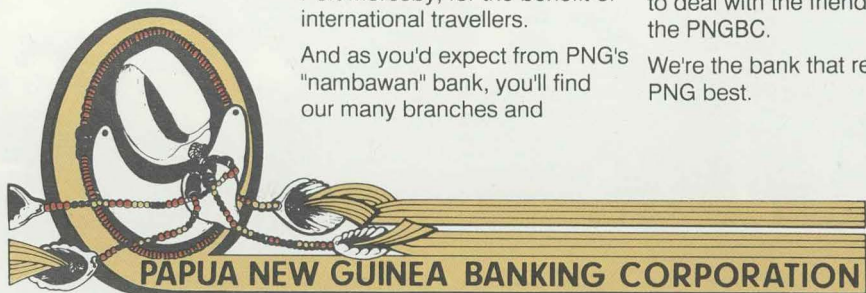
The Papua New Guinea Banking Corporation is the only bank to provide banking services at Jackson's Airport in Port Moresby, for the benefit of international travellers.

And as you'd expect from PNG's "nambawan" bank, you'll find our many branches and

agencies right around the country, no matter where you go.

So whatever your personal or business banking needs, it pays to deal with the friendly staff at the PNGBC.

We're the bank that really knows PNG best.

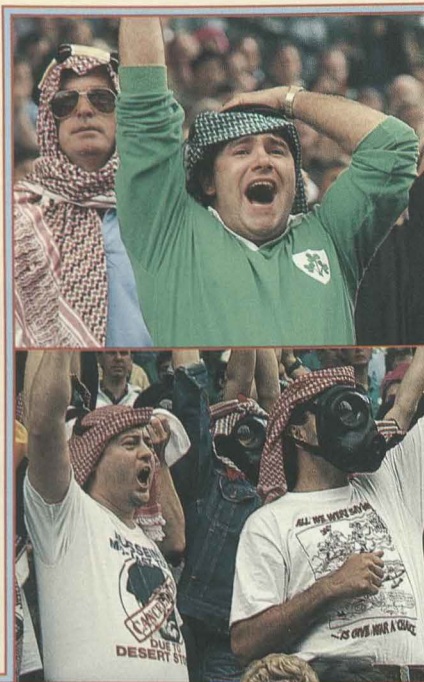


P.O.Box 78, Port Moresby. Telephone 21 1999. Fax 229867 / 211954.

Sunday afternoon brought a new urgency. Semi-finals were played and the question on everyone's lips was whether Fiji could go through and win the cup for a record seventh time, the third in succession. The bowl final was between Korea and Thailand, Korea came out an easy winner. The plate championship was between Argentina and a vastly improved and impressive American Eagles side. However Argentina won.

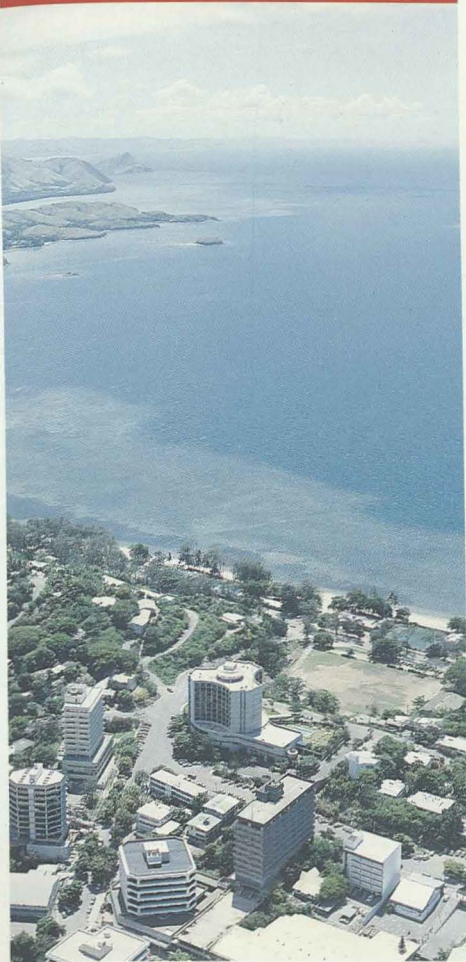
That left only the cup to be fought for between the two giants of the game. New Zealand and Fiji. This was a riveting and closely fought match. With a close final score, the Fijians again proved themselves to be world masters of the game. No one could be disappointed in the face of such splendid matches and excellent sportsmanship. This was truly a sporting event of world importance.

Above right Irish and Arab supporters mingle. right Arabian Gulf fans. far right American Eagles stretch before taking the field. below Russian fans cheer their team. bottom PNG Pukpuks go in for a try against Korea.



Travelodge
PAPUA NEW GUINEA

Port Moresby
Travelodge



business

With panoramic views of the Pacific Ocean overlooking Port Moresby City Centre, the Port Moresby Travelodge is the hub of business and social activity.

A truly first class hotel with friendly and attentive staff that offers everything for the business and tourist traveller.

FOR AIRPORT TRANSFER AT PORT MORESBY CONTACT AVIS RENTAL DESK

Port Moresby Travelodge Ph: (675) 21 2266
Cnr. Hunter & Douglas Streets. Fax: (675) 21 7534
P.O. Box 1661, Port Moresby. Telex: NE22248

Papua New Guinea has three superb Travelodge Hotels.



Rabaul
Travelodge

pleasure

Rabaul is a tropical island paradise with spectacular volcanic ranges, sandy palm lined beaches and deep turquoise lagoons.

Nestled on Rabaul's waterfront with sweeping views of Simpson Harbour is the Rabaul Travelodge.

Spectacular diving or tours of wartime relics make your stay a most memorable experience.

Rabaul Travelodge Ph: (675) 92 2111
Mango Avenue, Rabaul. Fax: (675) 92 2104
P.O. Box 449, Rabaul, ENB. Telex: NE92975

The Islander
Travelodge



recreation

The luxurious alternative for the business traveller or visitor is The Islander Travelodge Port Moresby, situated at Waigani on 12 acres, surrounded by tropical gardens, The Islander Travelodge boasts two full size tennis courts, four squash courts, garden pool and gymnasium.

The Islander Travelodge Ph: (675) 25 5955
Waigani Drive, Hohola Fax: (675) 21 3835
P.O. Box 1981, Boroko. Telex: NE22288

NEW TOYOTA
CROWN
PURE ELEGANCE



 **TOYOTA**

Ela Motors