











ELA MOTORS IS WELL PLACED TO ASSIST YOU AS A RELIABLE EQUIPMENT SUPPLIER PROVIDING NATIONWIDE SUPPORT FOR

HITACHI, HINO AND TOYOTA REQUIREMENTS.







Ela Motors

ENQUIRIES: STAN FREEMAN - MANAGER - TRUCK & EQUIPMENT DIVISION PH 229446 FAX (675) 217268 TLX NE22125 PO BOX 74 PORT MORESBY NCD PAPUA NEW GUINEA



paradise

No 105 July-August 1994

Paradise is published bi-monthly by Air Niugini, PO Box 7186, Boroko, Papua New Guinea (telephone 273415; fax 273380).

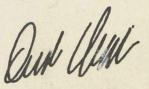
Welcome aboard!

Discover with us an array of beautiful islands. The Melanesian Discoverer will take us to the world's last paradise: the Trobriand Islands of the Milne Bay Province.

The volcanic soil of New Britain appears perfect for the cultivation of vanilla orchids. Danielle Amyot describes the farming of this species of orchid which makes one of the world's most popular flavorings.

In this issue we also mix history, rainforest spiders, traditional body decoration and sea-going outriggers with an article on Hong Kong's wonderful tramcar system.

Enjoy the service of Air Niugini.



Dieter Seefeld Chief Executive & General Manager Air Niugini

IN THIS ISSUE:

- 5 THE RELUCTANT SPICE
 Vanilla flourishes in PNG only with human help.
- 11 STREETCARS OF HONG KONG
 Crown colony's original mass transit is still going strong.
- 19 LITTLE RAINFOREST PREDATORS
 Spiders, mostly harmless to humans, are deadly on their prey.
- 29 THE MAGIC OF THE ISLANDS Cruising through the islands of Milne Bay Province.
- 33 **FEATHERS, FUR & FLOWERS**Nature's raw materials become colorful, ceremonial body decoration.
- **41 KIUNGA, THEN AND NOW** Fly River's inland port has grown up.
- 47 MANUS OUTRIGGERS

 Islander canoes built for oceanic voyages.

Cover: Bush spirit recreated by Highlands Show dancer (see page 33). Photograph by Liz Thompson.



Dieter Seefeld Chief Executive & General Manager Air Niugini

Editor – Geoff McLaughlin MBE Consultant – Bob Talbot Editorial – Ross Waby Art Director – Robin Goodall Subscriptions – Maggi 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: PGK30, US\$30, A\$45
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:(852)563 0145 Fax:(852)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.



Investment Corporation of Papua New Guinea

The Investment Corporation was established in 1971 by the National Government.

Papua New Guinea is known worldwide for its mineral wealth, but enormous potential exists for the further development of both primary and secondary industries, particularly for value added products. In keeping with the Government's policy of encouraging investment in Papua New Guinea, the Corporation is keen to identify and implement viable new business projects in conjunction with overseas partners.

Given our unique position and wide experience, the Investment corporation is well qualified to provide a wide range of services for diverning investors.

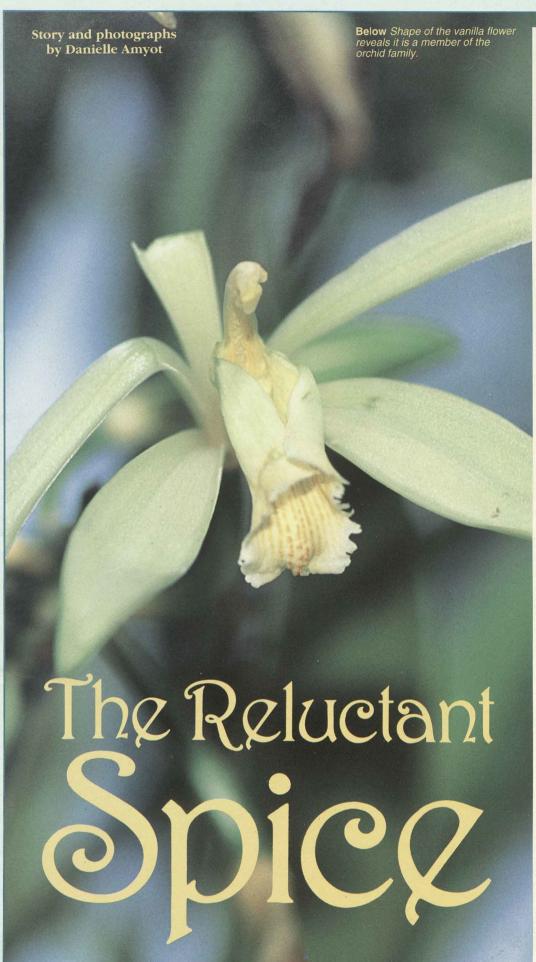
Below: Niugini Insurance House located in downtown Port Moresby is owned by the Investment Corporation Fund.

> Investors who would like to take advantage of the excellent business opportunities available in Papua New Guinea are invited to contact:-

The Managing Director Investment Corporation of Papua New Guinea PO Box 155 Port Moresby PAPUA NEW GUINEA

Telephone: 675 - 212855 **Facsimile:** 675 - 211240

Arteam 1 - 94



ome of us keep a bottle of vanilla extract for baking. The black liquid's essence adds flavor to cakes, puddings and desserts. It is also in ice cream, chocolate, carbonated drinks, pharmaceuticals, cosmetics and tobacco.

Vanilla drinks have been around for a long time. The Aztecs had been drinking xocoatl, chocolate a beverage flavored with vanilla, for centuries before Montezuma offered the Spanish conqueror Hernando Cortez a taste from a golden goblet. The Spaniards thought highly of the new spice, and brought the beans back to Spain in 1510. The Franciscan monk Bernardino de Sahagun published a recipe for the cocoa-vanilla beverage in his scripts of 1560.

Vanilla was introduced elsewhere in Europe at the beginning of the 17th Century. It was appreciated as a rare and precious commodity in the courts of Louis XIV of France. The apothecary at the Court of Queen Elizabeth I, Hugh Morgan, was the first to suggest the use of vanilla as a flavor in its own right.

Vanilla is now being grown in New Britain, at Numundo Plantation near Kimbe, and in Rabaul.

Vanilla plants are orchids and of the 110 species of vanilla growing wild throughout the world, only three have any economic value. Vanilla tahitensis is native to Oceania, and is less vigorous than V. fragrans, the native Mexican species which is cultivated more widely.

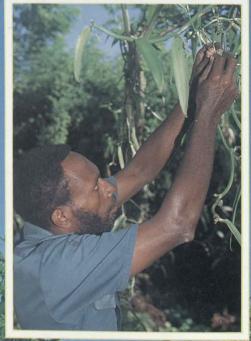
Vanilla plants thrive only in subtropical climates where temperatures average 25 to 28 degrees, and with a period of high rainfall followed by a dry season to reduce the vegetative growth and induce flowering. The soil must contain humus and allow water to percolate through, as the roots cannot endure permanent moisture. For this reason, the volcanic soil of the New Britain lowlands appears perfect for cultivation of vanilla. But growing vanilla is far trickier than meets the eye.

Orchids are climbers that reach a height of 10 to 15 metres on a support plant. The support plant will also protect the crop from excessive wind and will provide shade.

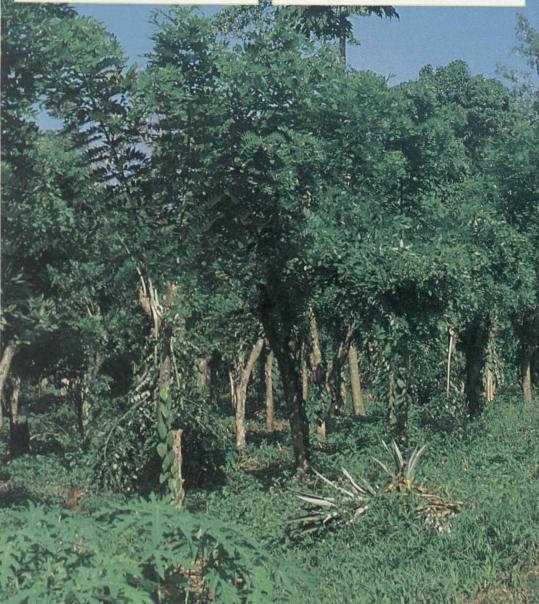
Propagation of the vanilla crop is by cuttings. The stems are fleshy and have knots every 15 centimetres. A young shoot with about three knots is planted in the soil, with the air-roots attached to its future supporting tree. The best time to plant is at the end of the dry season, as the rain helps the plant take root.

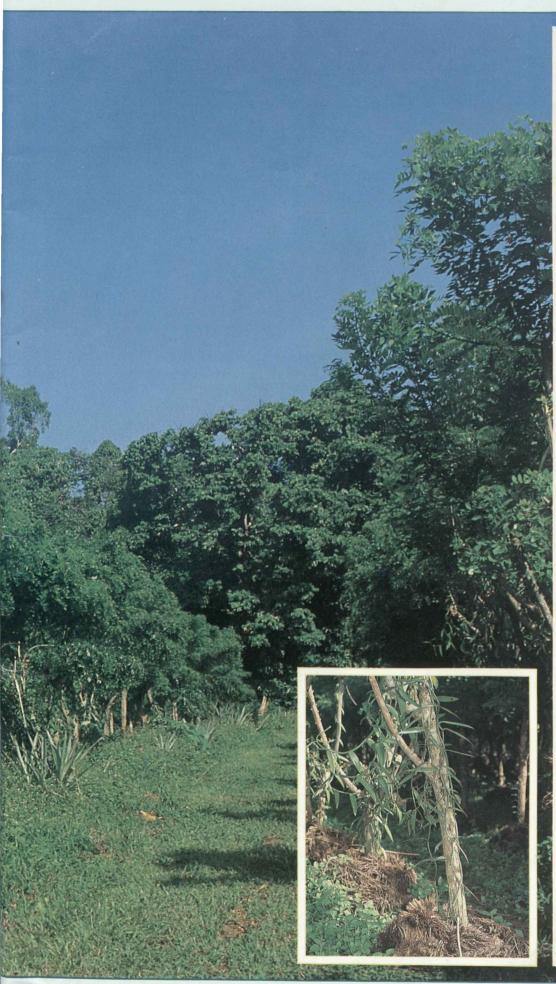
Bob Wilson, group Manager at Numundo Plantation, took pride as he showed me the fruits of the workers' labors. Like other Numundo pioneers, Plantation is experimenting to find the best cultivation methods to produce a crop new to the area. Four hectares are dedicated to vanilla production. The plants were spindly in the beginning, until plantation began mulching them with coconut husks. Now the plants grow large and strong, and experiments in some plots are being done to determine the effect of mulching with oil palm bunches.

After 18 to 24 months, the young vanilla tree puts forth its first flowers. They are large and sweet smelling, with waxy greenish yellow petals. They cannot self-pollinate because the pistil and stamen are separated by a membrane, and external









pollinators are required. Nature has taken care of this. In Central America, a tiny bee performs the task. In Madagascar, it is the hummingbirds. In Papua New Guinea, where the plant is not native, there are no natural pollinators and manual fertilisation is required.

To complicate the process, every vanilla flower blooms only for one day. It opens before dawn and fades in the early afternoon. During the blooming season, plantation workers must check every plant daily to fertilise the short-lived blossoms, for flowers on the same tree never blossom on the same day.

Pollinating is most effective between 6 and 8am. The membrane is slit and the pollen of the stamen is deposited on the pistil with a small stick. Only six to 15 flowers on each plant are fertilised, though a healthy shrub will produce many more. Individual selection of flowers ensures the plant does not weaken or become susceptible to parasites, and that the harvest produces the largest and strongest fruit possible.

In four to six weeks, the bean will reach its final size, about 15 to 20 centimetres. It is deep green at this stage, but will turn yellow at the lower end as it matures. After eight or nine months, the bean is harvested. Timing is important for this event, too. If the beans are picked too early, they will yield a lower vanillin

Inset, top left Kapinias Kateu pollinates a vanilla orchid. inset, top right Ripe vanilla beans. inset, left Mulch of oil palm and coconut husks protects vanilla vine. main picture Numundo plantation, West New Britain.

content (the chemical responsible for the characteristic aroma) and the beans will be susceptible to mould. If they are picked too late, the beans will burst. In this case, the vanillin content is high, but the beans are unattractive and can only be sold for extracts and essences. After harvesting, the vine is cut back.

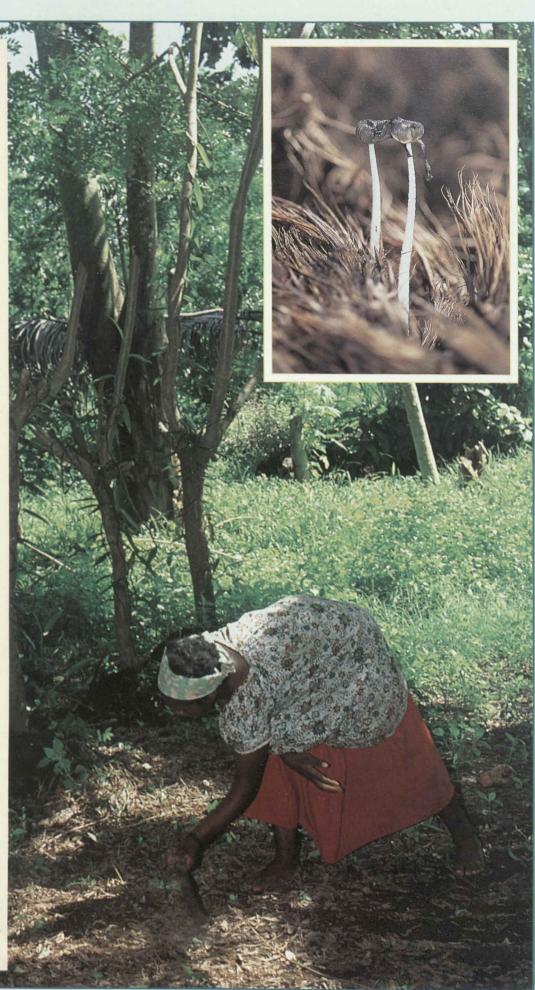
The vanilla beans have no aroma until they are cured. The fermentation process begins by scalding the beans in hot water, then allowing them to perspire while wrapped in woollen blankets on trays. As they ferment and become dark brown, vanillin crystals secreted in the lining of the pod ooze through the oil which surrounds the seeds.

The beans are then dried in the sun for five hours at the hottest point of the day. While still hot, they are again wrapped in blankets and brought indoors to the ideal maintain the temperature for fermentation enzymes. This is repeated every day for 10 to 15 days until the beans appear oily, then the exposure is reduced. They are then aired indoors to dry slowly.

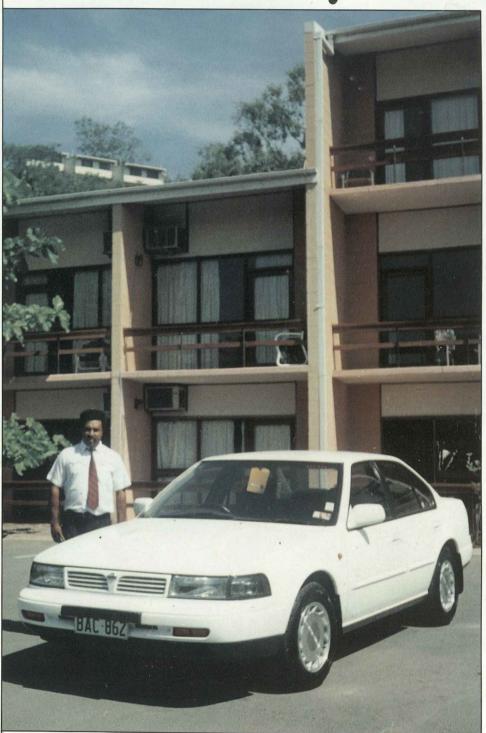
Then finally, the vanilla beans are ready to be sold in stores and markets.

Right Plantation workers keep weed growth to a minimum between rows of the crop. inset Fungi sometimes take advantage of the mulch.





On business or pleasure, Hertz has your wheels.



Understanding the car rental needs of business and leisure travellers is what Hertz does best! That's why Hertz offers discount opportunities all year long on daily, weekly, or monthly rentals.

Plus you'll benefit from the many special services that have helped make Hertz # 1!

Hertz Credit Card is without doubt, quickest and smoothest way to rent a car. No queues, paperwork and hassles.

Hertz Chauffeur Drive is available in Port Moresby. No hassle. No waiting. Drop off & pick up any time in one of our air-conditioned limousines secure in the hands of a reliable, experienced chauffeur.

FOR RESERVATIONS CALL HERTZ ON: 25 4999

Fax: 25 6985

BRANCHES THROUGHOUT PNG

DRANCHI	29 IHKUU	GHUUI PNG
Lae	Goroka	Mt Hagen
42 5982	72 1710	55 1522
Madang	Wewak	Namatanai
82 3103	86 2023	94 3033
Kavieng	Kimbe	Rabaul

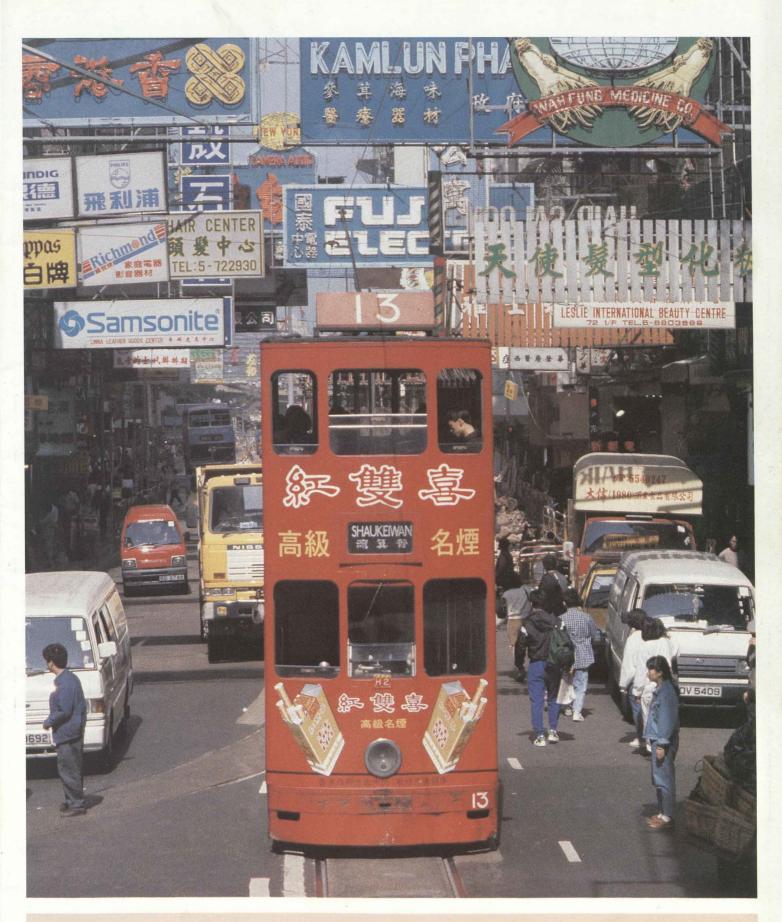


Papua New Guinea's first choice in car renta



Aviation Papua New Guinea.

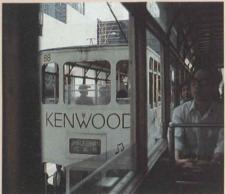




Streetcars of Hong Kong

Story and photographs by Roger Hunter





Top Advertising is eyecatching on Hong Kong streetcars. above Upper deck passengers on passing cars.

Facing page, top The Kennedy Town streetcar has right of way at the turn. bottom At the Shau Kei Wan terminus. small boy struggled to the top of the cramped spiral stairway, a school bag over his shoulder and a bottle of water clutched in one hand. The tram lurched forward as it left a stop on Kings Road, the sudden motion causing the boy to tumble back down the stairs to the lower deck.

He soon reappeared at the top of the narrow staircase, apparently unharmed from his ordeal, and joined other schoolboys at the front of the top deck.

A ride on one of Hong Kong's vintage trams, whether getting

from the one place to another, or as a novel way of viewing life along the island's northern coast, is an experience not easily forgotten.

From Shau Kei Wan in the east to Kennedy Town in the west, these old electric streetcars have been serving the travelling public in one form or another, since 1904. Today the 163-strong fleet carries around 334,000 passengers a day along 30 kilometres for a mere one Hong Kong dollar a ride.

Their distinctive advertising themes and clanging bells make them conspicuous along the island's crowded streets. All types of consumables — oyster sauce, cameras, motor oil, coffee and holiday destinations — are emblazoned across the panels of these mobile billboards.

On November 20, 1902, the Electric Traction Company of Hong Kong Ltd was incorporated in England and seven months later construction of the tramway started. The first service began on July 30, 1904, using a single deck 'toast rack' type car seating 40 passengers.

This new form of transport was enthusiastically embraced by the residents of the colony. However difficulties were experienced with some of the population who did not appreciate that the trams had a fixed path, resulting in accidents with those who failed to get out of the way in time! Records also tell of a typhoon on September 18, 1906 (no early warning systems in those days) that struck the island "wrecking three trams with one being blown into a house".

The first double-decked tram operated in 1912 sporting an open top. Complaints soon erupted from first-class passengers that the





top deck was unusable in bad weather. Canvas roofs and rolldown side curtains were added, giving increased protection from the elements.

Basic comfort has not improved significantly since the early days. When travelling today it makes sense to avoid rush hours and carry as little as possible.

The less adventurous may do it in style and choose one of the organised tours available through the Star Ferry offices. These tours use specially decorated vintage tram cars sporting polished brass fittings and part of the top deck open offering unrestricted views and a running commentary. A calligrapher may be on board to produce a framed copy of a traveller's name in Chinese characters, completed before disembarkation. One tour also





Coral Sea Hotels



Port Moresby



Mount Hagen



Port Moresby



Madang



Lae



Popondetta



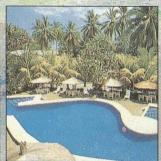
ae

Papua New Guinea's Largest Hotel Chain

together with the Premier Car Rental Company

Check into one of our superb Hotels in any of 7 unique locations throughout Papua New Guinea and enjoy friendly Melanesian Hospitality as well as access to top quality Hire Cars.









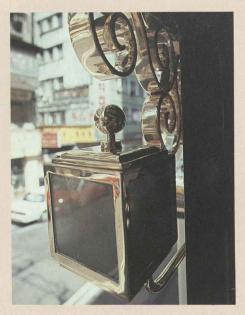
Coral Sea Hotels

P.O.BOX 1215 BOROKO, PAPUA NEW GUINEA CENTRAL RESERVATIONS PHONE: (675) 25 2612, FAX: (675) 257853



includes a dim sum lunch and drinks. But one has to ride these rails as the locals do to savor the real experiences of tramming the Hong Kong way.

A good place to start is Des Vouex Road, Central District. With a handful of one dollar coins, catch one heading west with a destination label of Western Market or Kennedy Town. Jump off at Western Markets, the old colonial building with a large granite arch over the main entrance, on the corner of Connaught Road and Morrison Street. Constructed in 1906, the building was used as a fish market until 1989. Following restoration, it reopened with many specialty shops and cloth merchants (formerly of the now demolished Cloth Alley) and a fine restaurant where dim sum can be had as



Above Brasswork on a vintage tourist streetcar. above right The controls. below Western Market.



well as Chinese provincial home cooking.

From Western Markets continue west on a tram labelled Kennedy Town. After the modern high rise buildings of the business and financial area of Central District, approaching Kennedy Town is like entering a time warp. One could imagine this is what most of







urban Hong Kong looked like 40 to 50 years ago with the older apartment blocks and open shop fronts. Early morning you will find, on the waterfront, a busy market with live seafood.

Heading east, the line follows Queensway through Central and Wan Chai Districts to Hennessy Road and the upmarket Japanese department stores such as Sogo and Daimaru in Causeway Bay. Continue on to North Point via Kings Road where the car bears left at North Point Road and then right into Chun Yeung Street where morning market vendors crowd the tracks. Vigorous bell ringing by the tram driver has sellers scattering from the line only to return after the car passes.

During the summer of 1967, civil disturbances affected services to some areas temporarily but had little effect on the trams'



Top Early morning at Kennedy Town waterfront. **above** passenger view of the Kennedy Town waterfront.

popularity. The system has survived 90 years and there are no signs of the world's last remaining double decked trams lurching to a final halt in the near future.







NEW GUINEA MOTORS

We're not just about selling vehicles. We are about service, customer satisfaction and quality in everything we do and we strive continually to raise industry standards. We are not the biggest but we want to be the best. That is our goal. We operate in nine centres in PNG offering new vehicles from the smallest runabout to the heaviest specialist truck. Our used vehicles are prepared in our workshops and backed by our reputation as PNG's number one used car dealer. We offer service and panel shop facilities second to none, that are supported by a countrywide distribution network for spare parts.

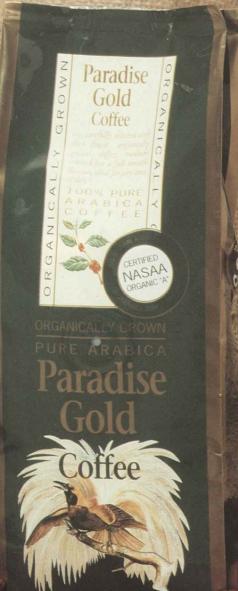
Above all this we have our people.
"They are our true assets."





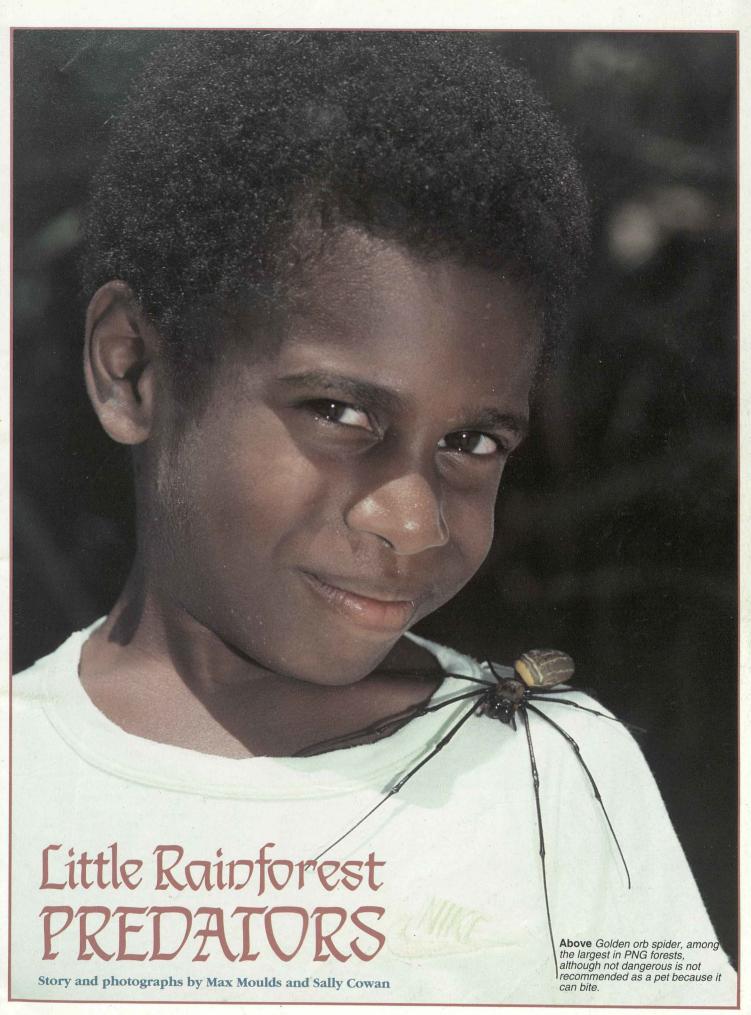
ISUZU





Goroka Coffee Roasters Pty Ltd

PO Box 555 Goroka, Eastern Highlands Province, Papua New Guinea. Tele:(675) 72 1245 Fax:(675) 72 2835







Above Branded orb weaver wraps insect prey caught in its web, having paralysed it with venomous bite. top right Spectacular horned spiny jewel spider is widespread in South-east Asia.



hen most of us think of spiders we imagine black hairy creatures lurking in dark corners. The thought of one creeping along an arm sends shivers up the spine. Such an image of spiders is not justified. Many are beautiful and most are harmless. Their notorious reputation stems from just a few 'nasty' species known to have killed people.

Tropical rainforests abound with spiders. Of the 30,000 species known worldwide, over half are found in tropical regions. Some of these spend their lives on foliage, others spin aerial webs, others inhabit holes in tree trunks and logs or live in holes in the ground and many minute species live among leaf litter.

Perhaps the most beautiful are the foliage dwelling jumping spiders, often colorful little creatures quite harmless to us but formidable predators in the insect world. They are particularly abundant in the tropics and occur in a seemingly endless variety of colors and shapes. Like most spiders they have eight eyes, but two are greatly enlarged.

Some species of jumping spiders masterfully mimic ants. To add to the deception they often raise their fore legs in the air like a pair of antennae. The reason for this mimicry is not fully understood but most likely it provides a better opportunity to creep up on prey as well as protection against other predators such as spider-hunting wasps.

In the Tabubil region, one species of jumping spider was found that has amazingly modified jaws that act as raptorial legs (probably associated with mating behaviour). Praying mantids are well known for their raptorial fore legs but such structures are rare in spiders. These spiders do not stab their prey with piercing fangs but grasp them in a vice-like grip.

the largest Among rainforest spiders are the golden orb spiders that build aerial snares across open flight ways to trap insects. These magnificent spiders can grow very large with leg-spans reaching more than 20cm. Despite their huge size they are not dangerous to humans. Their large webs are designed to catch flying insects such as butterflies and beetles. Occasionally small birds become entangled but usually they escape before being attacked by the spider.

Other fascinating orb-web spiders are the small and often colorful spiny spiders. These have hard flat bodies armed with three pairs of spines. Usually they are strikingly colored and are

Top Jumping spider guards her egg sac. centre Massive jaws are feature of male, ant-like jumping spider. Ant mimicry may protect against predators. bottom Spiny jewel spider gets some protection from birds from its body armor.







easily seen clinging to their webs, but some species are camouflaged and resemble bird droppings.

On the rainforest floor, hidden among the leaf litter, live many very small, rarely seen spiders. Some are so small they are barely visible to the naked eye. They often occur in very large numbers and feed by hunting the numerous small creatures that co-inhabit the litter.

Papua New Guinea spiders are not well known scientifically and there is little doubt many remain undiscovered.

In the Star Mountains, north of Tabubil, several spiders were discovered that may be new to science. These included mostly jumping spiders but also some ground and leaf litter species. Naming these species will be a long and time-consuming task that will take several years to complete. Such work will lead to a far better understanding of how PNG spiders relate to their environment, especially to elevation and climate change, important factors for assessing the serious problem of global warming.

Top Large eyes on this tiny jumping spider are supplemented by three smaller pairs, giving complete field of vision. centre Distinctive patterns and colors mark spiny jewel spider species. This is Gasteracantha vittata. bottom Lynx spider is agile hunter which jumps and runs across foliage after prey.

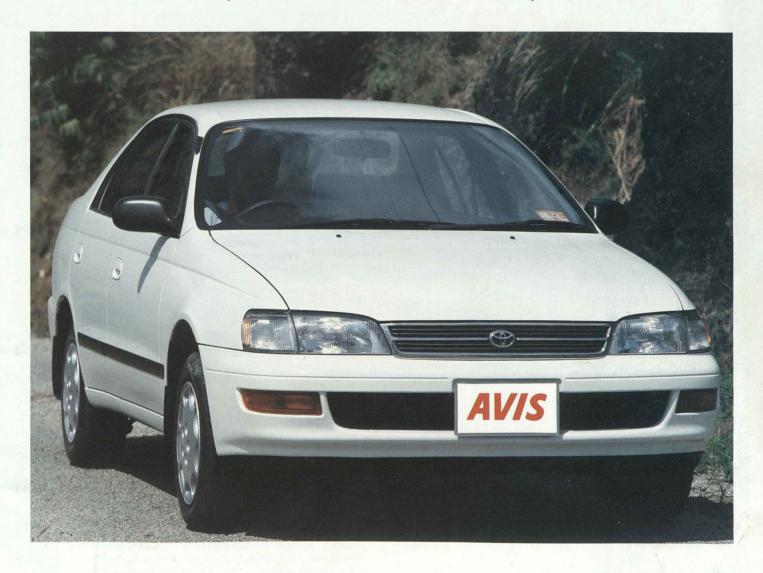








AVIS - PAPUA NEW GUINEA (1974 - 1994)



AVIS have been renting cars in Papua New Guinea for twenty years - a long time in our business and in some quite interesting places....

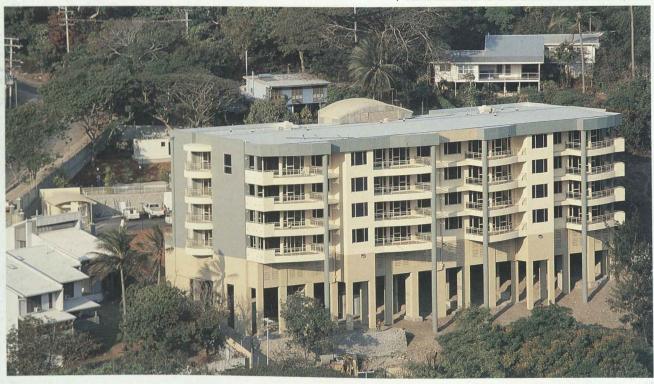
To do that, has meant striving harder to ensure we deliver the most reliable, trusted service available.

Fleeting current model quality vehicles is just one of the ways AVIS does that.

The other is trained and committed staff who make sure the vehicle is clean and then welcome you with a smile. Happy renting in 1994....

We try harder.

Imagine you where you can use can osite



Makana Apartments Port Moresby.

Granosite Coatings have a thousand uses. You only have to think of where!

Architects, builders, engineers and developers are continually faced with the problem of choosing a finish which is right for the job. Whether it's an aggregate coating, a bold or smooth texture, or a matt, satin or gloss finish, the decision's made easy with Granosite coating systems. No-nonsense finishes which look good, and allow Granosite's thirty years of architectural experience to provide the long life.

Makana Apartments, Port Moresby is another stunning example of architecture using Granosite surface

coatings. The external surfaces have been coated with GranoPearl a high profile aggregate material applied by L & A Bricklayers Pty Ltd which gives the apartments a top-quality finish as well as protection from the harsh environment. Whilst internally GranoImpact Rolana was used to create a stylish and modern interior. Granosite products are marketed in Papua New Guinea and the Pacific region by Rebma Pty Ltd. Contact Rebma Pty Ltd to discuss your next project or to request literature and sample kit. Project Architects: ETS Group of Consultants. Port Moresby.



REBMA PTY. LTD

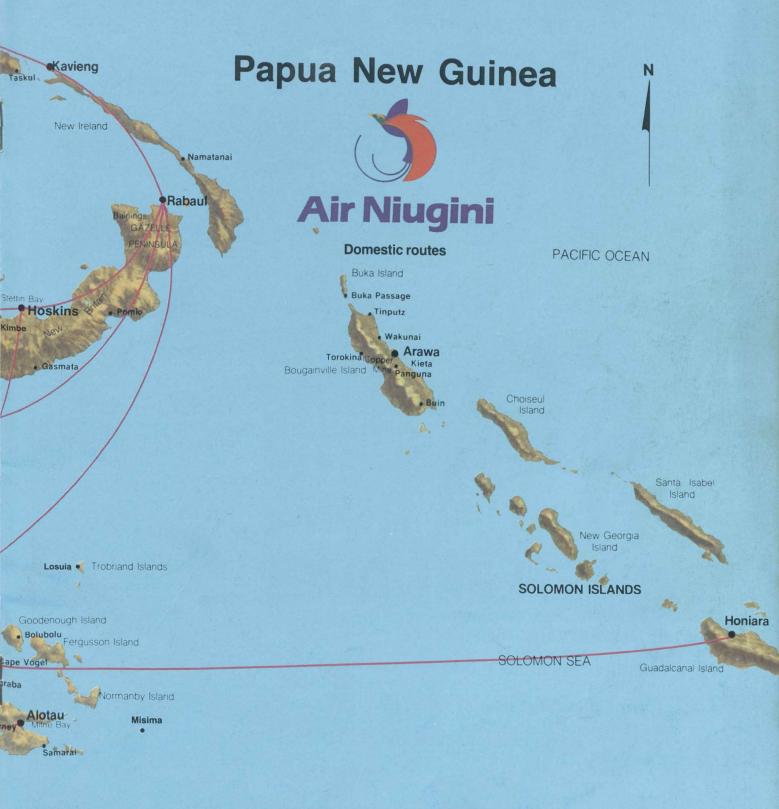
P.O. Box 912, Parramatta, N.S.W. 2124, Australia.

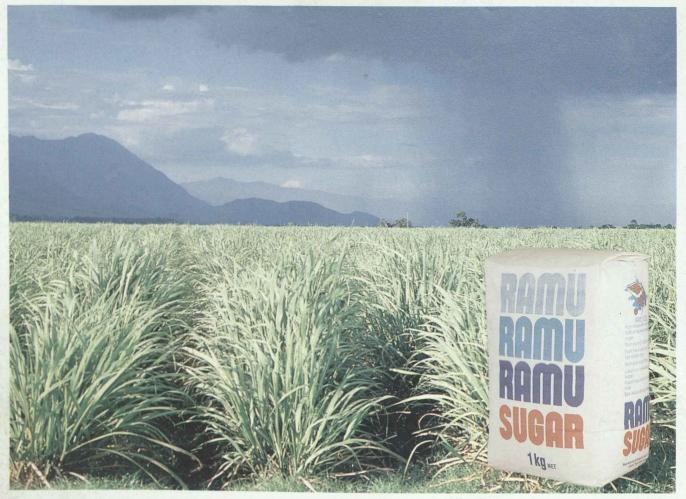
Telephone: (02) 876 5111 Fax: (02) 876 3764

CONSULTANTS AND EXPORTERS OF INDUSTRIAL COATINGS, CHEMICALS AND CONSTRUCTION PRODUCTS









RAMU SUGAR A HOME GROWN PRODUCT

More than any other manufactured product, Ramu Sugar is completely home produced. Grown in PNG, from a plant that originated in PNG, processed in PNG, packed and sold in PNG.

~ and abroad.



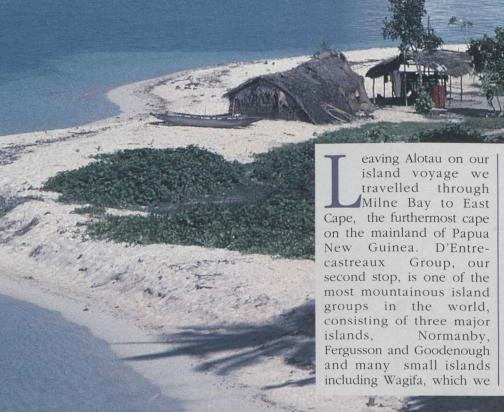
Ramu Sugar - over a decade of downstream processing



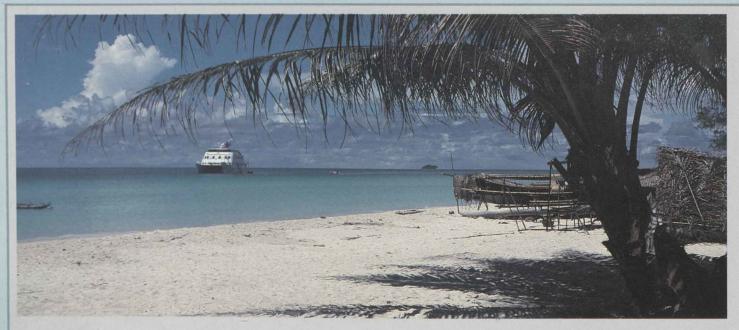
Above Young Milne Bay island woman. right Cruise boat at anchor in idyllic setting.

the magic of the 15CANDS

Story and photographs by Catherine Brewer.



visited. At Dobu Island, anthropologist Reo Fortune (a one time husband of Margaret Mead) wrote the classic book, Sorcerers of Dobu. We visited Deidei Village to see the thermal springs, then Goodenough Island and Wagifa where the older people entertained us with a singsing. The ship stocked up with fresh fruit and vegetables from the 100 or so canoes that came to meet our vessel, the Melanesian Discoverer.



During that evening the ship sailed overnight to a Egum Atoll and a village called Yaneba mid-way between the Trobriand Islands and the Woodlark Islands.

Nothing could have prepared us for the surprise of witnessing a sunrise at Egum Atoll. A small school of pilot whales were off our starboard, a large school of dolphins, ahead and when we passed over the shallow entrance we saw literally thousands of barracuda below in crystal clear waters. At Yaneba, we swam, strolled through the village, inspected the large kula canoes (traditional sailing vessels) so called because of the kula trading circle which links the Trobriand, Woodlark, Amphlette, Marshall Bennett and D'Entrecasteaux groups together.

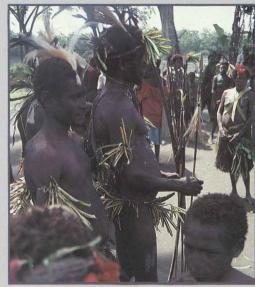
As was the case in many other places we visited, the people were provided medical attention by the ship's nurse. Few vessels call at Egum and other remote areas in the PNG islands.

We departed Yaneba for a rock described as Quark Island, home for literally millions of sea birds. It projects vertically out of the water 45 metres. Beneath was a dive that can only be described as breathtaking, it was here that the Cousteau Expedition filmed underwater life in a documentary on PNG. During lunch we sailed to Iwa, another spectacular island formed by the pressure forcing limestone upwards.

We climbed the cliff to several villages and walked hand in hand with young islanders eager to practice their English. Bargains were offered including canoe prows, model kula canoes, carved bowls and figures, and an assortment of shells. Before returning to the ship, we were entertained with dances by students of the community school. It became evident on this day that while the diving was superb, the divers were becoming discontent when they heard stories from the land lubbers. In some places the divers restricted diving to meal hours so they could do both dives and shore programs.

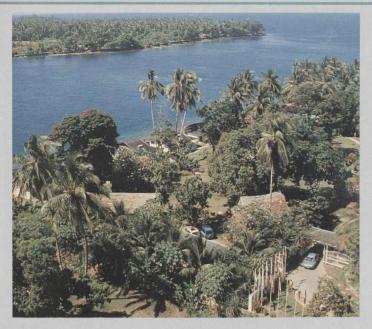
Our next stop was Kitava, another idyllic island in the Trobriand Group.

The next two days were spent visiting Kiriwina, the main island in the Trobriand Group where passengers bought intricate ebony carvings which were not



Top Typical Milne Bay port of call. right Welcoming party. below Typical Milne Bay village.









Top Visitors can get close-up views of settlements by helicopter. above left Meal break aboard the cruise boat. left Islander women and children. bottom On the Itne

River, New Britain.



cheap but excellent. We toured some inland villages on Kiriwina, then Kailuena Island where we visited Kuduago Village, then Kyuwa Island where we enjoyed a feast of freshly caught crayfish. At all stops, excellent diving was reported, swimming was superb and people vibrant, friendly and courteous.

Sadly we left the Trobriand Group and sailed across the Solomon Sea to the island of New Britain. At dawn we entered the Itne River, a small river with barely sufficient water for the vessel to navigate. We sailed 16km through a rain forest where the birders amongst us were in ecstasy. Hornbills, parrots, cockatoos, humming birds and herons were just a few of the birds sighted. We left

the ship by speedboat and visited a cave to see bats and on the way back came across two mating cassowaries. Every stop was a total contrast!

The ship sailed to Siassi. a small group of atolls around the volcanic island of Umboi, formerly shown as Rooke Island on some maps. We visited Aromat, a small island with a population so large, they are reclaiming land. Doublestorey houses are built cheek to jowl, and the people cross to the mainland of Umboi for gardening and water where land is plentiful, yet prefer to live on Aromat.

The final stop was at Saidor where a helicopter met the ship in the early hours of the morning for optional excursions into the Finisterre Mountains towering up to 4,000 metres. We flew to Teptep, one of the most spectacular places I have ever seen. Nestled in a valley at elevation of 2,000 metres, it had cool air, awesome valleys, raging rivers and yet another unique culture. The flight took just 10 minutes from the ship and it is 10 minutes I will never forget!

For more information on the cruises, contact Air Niugini.



LAE INTERNATIONAL HOTEL







Lae's Most Prestigious
International Hotel
SOME FIRST
IMPRESSIONS

LAST FOREVER

AT LAE INTERNATIONAL HOTEL

we know we make a good first impresion but to make it last forever takes a lot more!

It takes:

More than — almost nine acres of tropical gardens.

More than — first class standards and service.

More than — three superb restaurants.

More than — convention facilities for 500.

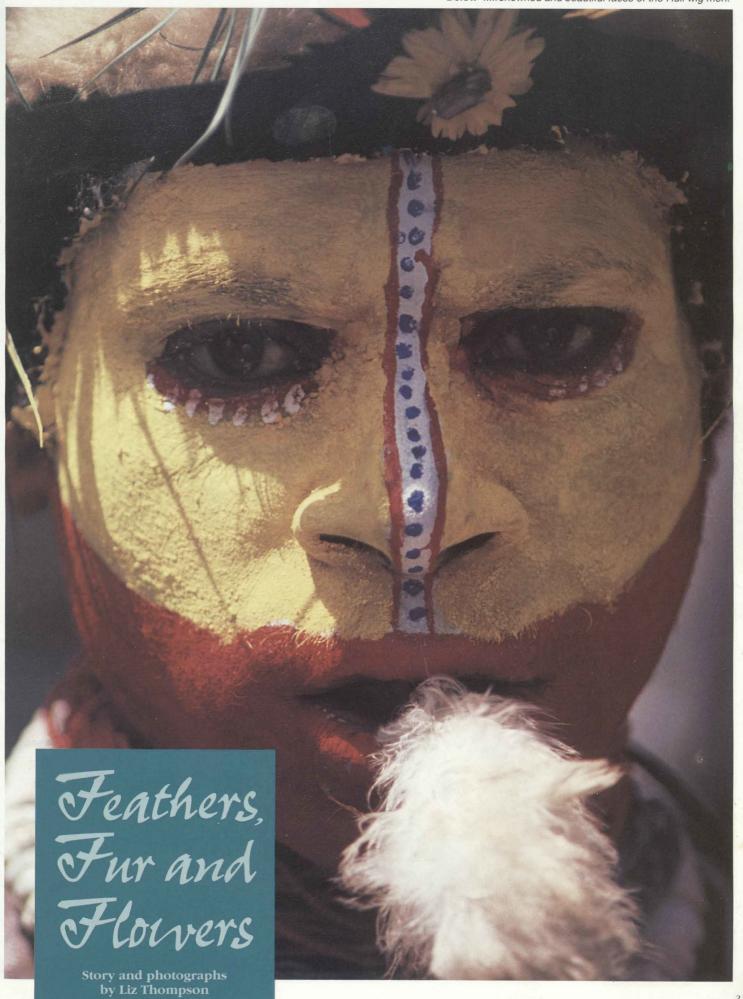
More than — a pool, tennis court, ærobics, gymnasium and sauna.

It Takes Style!

AND THAT'S WHY YOUR FIRST IMPRESSION WILL LAST FOREVER

For reservations and further information, please contact:
Lae International Hotel
P.O. Box 2774, Lae,
Papua New Guinea

Telephone: (675) 42 2000 Facsimile: (675) 42 2534



ust rises from the dry soil with the rhythmic stamping of feet. Lines of men, bodies shining with animal fat, hair decorated with tiny dried daisies, beat snake skin drums. The smell of sweat and pig fat fills the air, bodies sway in time to the drum, the atmosphere is one of building intensity as dancers from many of Papua New Guinea's 700 tribal groups begin a dance that is to continue for nearly three days. An annual event, the dancers are gathered together for the Highlands Show.

Held in either Goroka or Mount Hagen, the show draws tribal representatives from across the country to perform in what must be one of the South Pacific's most spectacular cultural events. It is an experience which provides images to last a lifetime.

The show is in September when the skies are consistently blue and temperatures frequently in the high 30s. As darkness descends on the Friday night of the three-day show, lanterns are lit and preparations begin. Treasured feathers are drawn from their long



Below For body decoration ochres, red clay, charcoals and white lime are mixed with oils or pia fat'.

bamboo containers, oil stored in coconut shells is prepared, mixed with charcoals and clays to smear on the skin. Necklaces, bones and shell armbands are laid out on fresh leaves. Paint is applied with brushes or with hibiscus twigs which have been splayed at the ends.

Men and women prepare in separate areas, helping apply paint to each other's face. Ochres, red clay, charcoals and white lime are mixed with oils or pig fat. Red clay mixed with oil produces a beautifully rich sheen on the skin. Charcoal, too, is often mixed with oil





Above A mask of cuscus fur, kina shells and acrylic paint. below Yellow flowers stand out against charcoal-smeared skin. bottom Cowrie and kina shells in abundance, with a magnificent bird of paradise headdress.

and gives the body a deep blue color.

Many of the dances and performances are derivative of the movements of spirits or animals and birds. At last year's show, men painted half black and half white explained that decoration represented the half-man bush spirit. This man lives in the bush but he, his children and his wife each have only half a body. They suggest that you can see where the spirit has been walking in the bush because he leaves a trail of only a single foot print.

Some of the most renowned and beautiful faces are those of the Huli wig men, with iridescent blue dots against an almost luminous yellow background. They are called wig men because of their headdresses made from hair cut from the heads of









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



children and men. The wigs are a vine framework onto which the hair is stuck. Decorated with powdered ochres and everlasting yellow daisies, these hats of hair are believed to provide a place for the spirits to reside.

As the groups dance to the sound of drums, flutes and hypnotic chanting, high headdresses made of wood and tapa cloth sway above the sea of heads. Others wear crowns of turquoise bird of paradise feathers, a highly prized possession. Bordered with cuscus fur and mottled blue snake skin they are nearly a metre high. Rings of fine bamboo hold hundreds of beautiful green beetles to the rim of the headdress. Cassowary feathers and sprays of frothy yellow and white tail feathers frame the whole ensemble.

Mud men, feigning the dead, wear huge masks of clay all with different



wear crowns of leaves coated in oil or bright red frangipani tucked into their hair.

Necklaces are made from thick, shiny black pieces of cassowary spine, slices of swordfish spine, wild expressions. Other dancers | banana seeds, red beans,

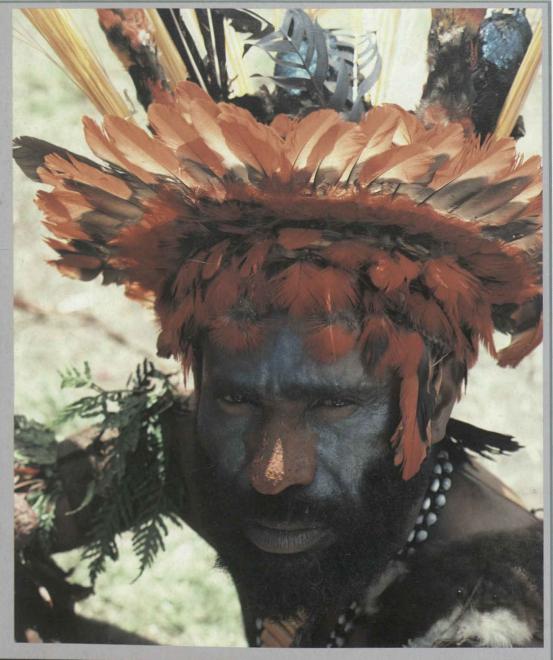
Top Dancers painted with charcoal and lime. above Huli

store beads and plastics. Pig tusks and pieces of bone are threaded through noses, tortoiseshell and bone through the ears. Occasionally modern implements are used to replace traditional objects; empty film canisters in the ears, beverage can pull rings, pens, even nail clippers are threaded through pierced nose septums.

Whatever is used, for whatever purpose, there remains an incredible variety of beauty in the art of body decoration in PNG. It continues to be used on occasions when people come together to celebrate, to exchange, to mourn. Ceremony and body decoration continue in the villages, in private as well as in the exotic splendor of the Highlands Show. Traditional dyes, feathers and costumes are still treasured and worn alongside new, introduced elements.

Continuation of tradition in varying forms is a continuation of links with cultural heritage, an important, vital and living part of any developing nation. The intoxicating atmosphere of the Highlands Show and the beauty of the smaller ceremonies which take place on a village level are a tribute to the survival, richness and diversity of PNG's extraordinary culture.

Right '... others wear crowns of bird of paradise feathers.' below left Imitating bird spirits of the bush. below right Hornbill necklace ornament.









FUTURE AIRLINE PILOT

Layton Roroi

"9 year old Layton is determined to one day be a Captain with our Nations Airline."

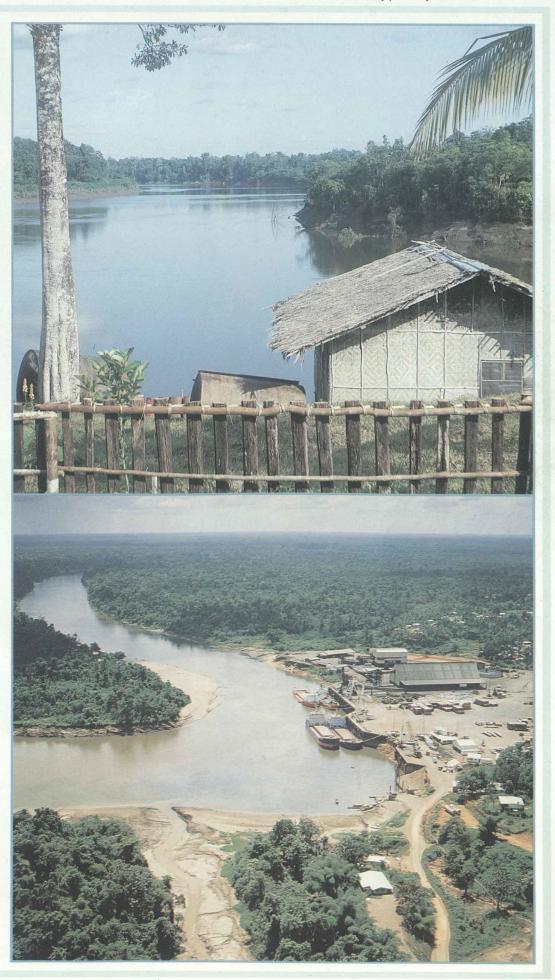




"At the PNGBC, we are interested in Layton's future and the future of all young Papua New Guineans."



Then and now tory Story and photographs



ooking at Kiunga now it is hard to believe 30 years ago its most outstanding feature was a reputation for an annual rainfall measured in metres. One of Papua New Guinea's remote outposts, the settlement, 800 kilometres up the Fly River, had a total population of about 50.

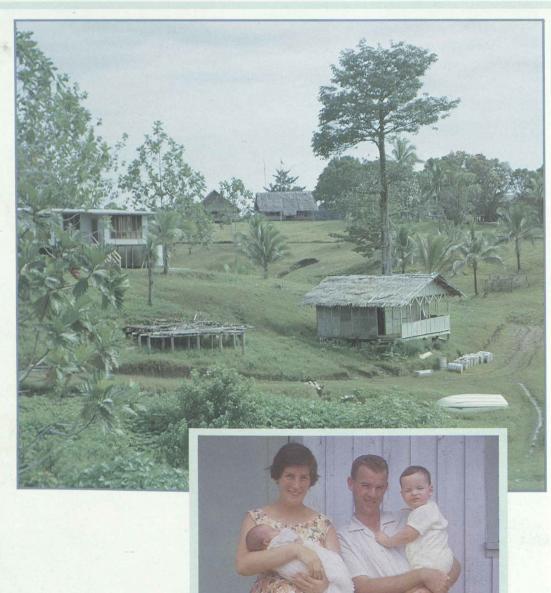
Kiunga had no electricity, no government schools and had a hospital which was-little more than an aid post. Communications with the outside world were basic and unreliable — a battery operated radio, an elderly World War II Catalina flying boat service once every two weeks and a three-monthly boat from Daru.

Two missions, the Catholic Montfort priests and nuns from Canada, and the Australian Unevangelised Field Mission provided some basic medical and educational services.

At about that time, Assistant District Officer Des Fitzer, now Central Province Department Secretary, took a patrol into the remote and rugged Star Mountains, in the process discovering Mount Fubilan, the new Eldorado of copper ore capped with gold.

Not too far to the west, the Indonesian government was preparing to take control of Irian Jaya from the Dutch, courtesy of a United Nations temporary administration.

In an attempt to show the flag and develop the border area more, the Australian administration had shipped heavy earth moving equipment to Kiunga to carve out a new airstrip. Arriving at the beginning of the wet season, the bulldozers, scrapers and other big yellow machines spent most of their limited time there pulling each other out of the mud. The job had to be finished with



Above The author's house (left) in 1963. right Author and family in 1963. below Catalina flying boat served Kiunga in the past.



old-fashioned pick and shovel but the strip was soft and susceptible to closure even after light rain.

Later, Kiunga's first Land Rover, sent up from Daru on top of the boat's hatch cover, had to be driven up the steep Fly River bank because there was no cargo lifting gear.

Progress in those days was slow. Villagers lived off the land and had virtually no cash income except for the sale to the government of some food and building materials. At the end of 1964, the first trial plantings of rubber seedlings went in. These were so successful that rubber has become a substantial source of income for the Kiunga region.

Warren Dutton, who came to Kiunga at that time, subsequently left government service and worked hard at fostering the rubber industry. This commitment helped him

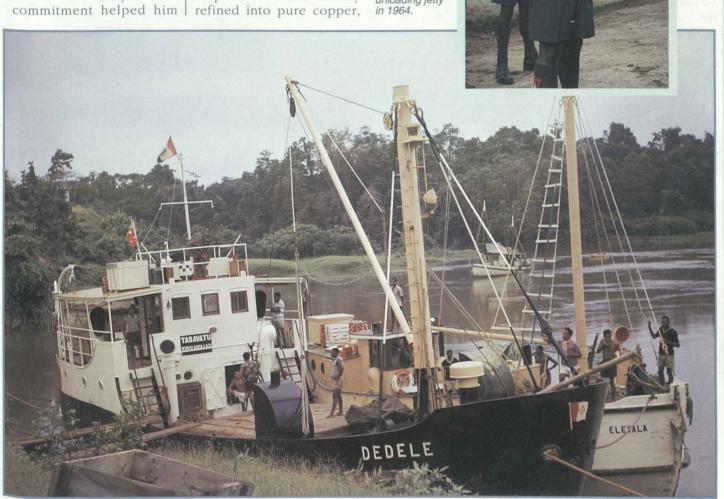
into a very successful political career as secretarygeneral of the new Peoples' Progress Party, a member of Parliament and a Minister.

Thirty years ago, Kiunga witnessed the first elections for the pre-independence House of Assembly. The people had to vote for one of a group of candidates they did not know and never saw. It was democracy by guesswork but it laid the foundations for the future parliament and a very stable democratic system.

Now, Kiunga is a boom town, thanks to the Ok Tedi Mining Company. Established as the river port for the copper mine at Mount Fubilan, Ok Tedi's plant each day processes ore slurry piped some 150 kilometres from the north into around 2,000 tonnes of black, powdery copper sulphides. When finally refined into pure copper



Above Kiunga sub district office and bank. right Kiunga police sergeant, 1963. below Two planks serve as unloading jetty





this daily throughput of ore is worth around K1 million.

Kiunga's population has jumped to around 6,000 and the once tiny outpost of bush timber buildings and muddy tracks now features a wide range of commercial, industrial and government buildings, sealed roads and a gravelled airstrip handling five or six scheduled air services each day.

The town now has a modern hospital and seven schools. The Montfort Mission has built a Boys Town which teaches wood and metal trades to young men as well as contracting to make furniture and other useful items.

The mine and its supporting infrastructure have generated hundreds of jobs for locals, other Papua New Guineans and expatriates. But the mine has a limited life of perhaps another 15 years.

Rubber will be Kiunga's future. Unlike many of PNG's other crops, the world demand for rubber will almost certainly grow. Rubber does not pay as well as jobs in the mining

industry but it is a renewable resource. Already there are plans to replace old trees and to develop factories to add value to the crop before it leaves Kiunga.

From a remote, lonely and primitive outpost less than a generation ago, Kiunga is now a dramatic manifestation of PNG's future.

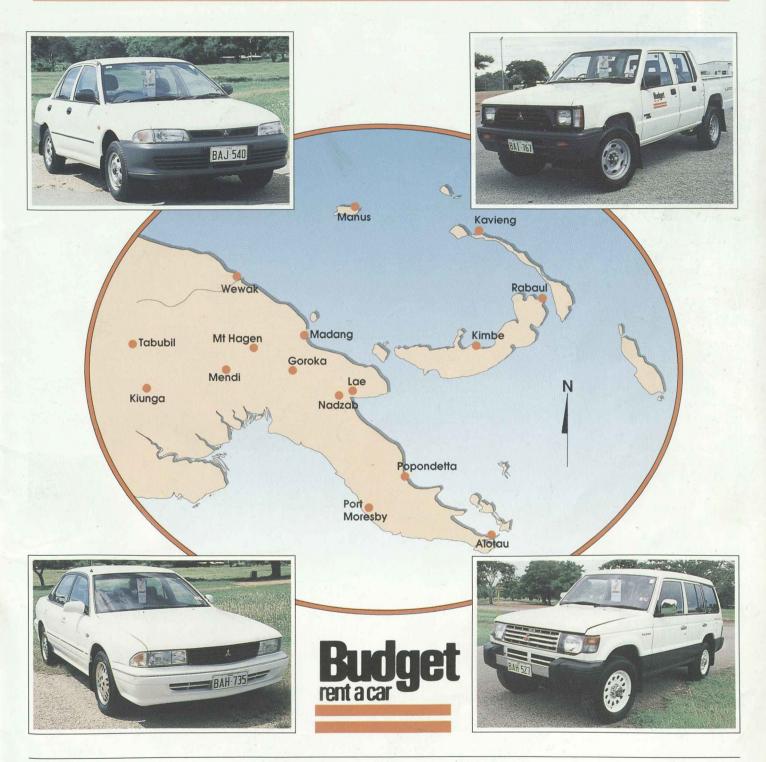
Top left Modern times at Kiunga's gravel airstrip. top right Kiunga's Bishop Gerard Deschamps. inset Well equipped policed keep law and order. right Ambulance serves Kiunga's modern hospital. bottom right Boys Town run by Montfort Mission teaches trades.







Budget has Papua New Guinea fully covered From corner to corner And all locations in between



Central Reservation - Port Moresby
Phone: (675) 25 4111 Fax: (675) 25 7853

PUA NEW GUINEA



PORT MORESBY





Below Manus outrigger offers comfort and stability at sea inset right Young Manus canoe 'captain'.

FO25 YAMAHA



Story and photographs by John Brooksbank

e were becalmed in the middle of the ocean, which stretched blue and glistening to the horizon. No land to be seen in any direction, just lots of Pacific Ocean everywhere, no sound except the slapping of the waves against the hull. The harsh midday sun beat down on us, the vessel was leaking from a number of vine bound joints, there was no compass and not a breath of wind.

Quite normally for a Manus seagoing canoe, we have stopped to change over petrol tanks.

I look around the canoe, over 10 metres long and superficially very basic in construction. Closer inspection reveals it to be an eminently practical vessel. The Manus single outrigger canoe is undoubtedly the peak of many generations of Southeast Asian canoe making

Manusians learned that open sea than more basic single outriggers sail better dugout or double outrigger

with the outrigger on the side nearest the wind, where its weight counterbalances the wind pressure on the sail. Essentially a dugout log, this particular type is extensively modified with other locally available materials, which adapt it as an ocean going vessel capable of carrying many people and their goods.

The Manus single outrigger is more stable in open sea than more basic dugout or double outrigger

canoes which are limited to inland rivers, lakes or close to the shore. To counteract the asymmetric stress of the waves hitting the single float, the mounting is strengthened by raising the sides of the hull with rough hewn planks. These are attached with pegs or vine and sealed with 'casta', a strong gum from the crushed nuts of the parinarium tree.

The deeper hull also makes the canoe more seaworthy. On top of the







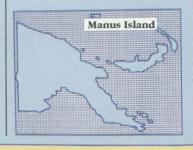


hull and the stiff outrigger float frame is a large deck. This is high-framed enough to allow dry storage under decking planks for water, food, firewood and, I was happy to see, another full container of petrol! We were soon underway again and it was my turn to jump down into the rear of the canoe to bale water for a while, probably a correct assessment by the villagers of the level of my maritime skills. Standing there I could

just see over the edge of the built up hull, the sea disconcertingly close to my face. There was a rhythmic creaking and groaning as various parts of the canoe flexed and bent as we slid through the waves.

Manus canoes today are modified from traditional designs to incorporate light, powerful outboard motors, taking the place of woven matting sails and large wooden oars that were held in rowlocks either side of the rear of the hull. All canoes still carry a sail, although now of durable plasticised cloth, sometimes used in its traditional role but usually erected as a sunshading tent fly over the decking.

Top Stilt house over water at M'Bunai village, Manus. centre left Canoe stored on long ramps above high water at Mouklen village. centre right Food source is close at hand on Manus. below left Black palm slats bound with cane secure the outrigger.



Within Manus there are three broad groups of people: the inland Usiai, the coastal dwelling Matankor and the seafaring Manus. Traditionally the Manus, usually meaning speakers of the Titan language, had little land and lived most of the year on board their canoes, surviving on the trade of harvested marine products for sago, vegetables and other essentials.

As a result, speaking villages are today found dispersed over a large part of the south of the main island and numerous offshore islands of Manus. Until just a few decades ago, village houses were built over the sea so that at high tide they were completely surrounded by the ocean. The famous American anthropologist Margaret Mead lived with and studied Titan speakers in villages such as Pere during the 1930s.

Studying the canoe I could see the pitched racks on either side of the main decking holding fishing spears, turtle hunting equipment, masts, steering poles, oars, binding cane and other assorted timber for on-board repairs. In the





corner of the deck Josepha Manuai, the aging matriarch of the family, sat hunched up next to a flattened metal box that serve as a hearth where water was boiling for a cup of tea - the marine equivalent of meals on wheels! With drums of fresh water, firewood, dried flour, sago and fish stored under the decking, the canoe was a very self sufficient mobile unit.

While on the move there was invariably a trolling line trailing the canoe wake; when anchored for the



Top Arah Sui, an outrigger from Mouklen village, comfortably accommodates a family. top inset On-board galley. lower inset Wartime Manus Island was the major Allied base in the Pacific Ocean. left Manus Airport now at Momote on Los Negros Island.

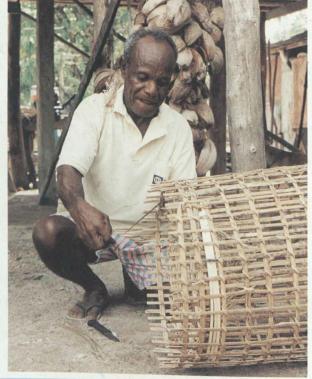


night, bottom fishing lines dropped from all sides. So there was never any shortage of fish; in deeper water special lures were used to attract more elusive species such as tuna.

If it cannot be consumed or bartered immediately, fish is filleted and dried to hardness over the fire. Such smoke-dried fish, clam shell and squid, keep for a long time for trade, later reconstitution with boiling water, or eaten as is — a delicious sort of smoky marine jerky!

For the Titans of Manus, the canoe is an essential part of life. Their self sufficiency and mastery of ocean navigation meant that relatively long journeys could be undertaken. As such they may have been among the first indigenous Asians to venture into the open Pacific to settle their islands and travel even further afield.

These journeys may have been important components in early wide ranging Melanesian trading networks that saw obsidian blades and lapita pottery from Papua New Guinea found

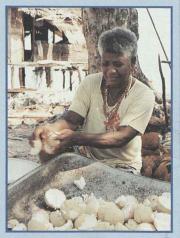


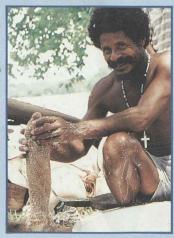
as far away as Vanuatu and Fiji.

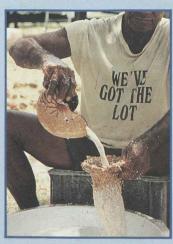
In terms of population, Manus Province, with about 35,000 inhabitants, is the smallest in the country. Due to limited employment opportunities in their home province there are many educated Manusians to be found elsewhere in the country in the Government and the private sector.

Top left Manus Provincial Government vessel, MV Tawi, serves farflung islands of the province. above Fish trap gets finishing touches. right from top Processing coconuts into cooking oil, Mouklen village.











ravelodge We have it all.

From the centre of Port Moresby to the tropical paradise of Rabaul, Travelodge Papua New Guinea has a hotel to suit your stay.





Port Moresby

Situated in the Port Moresby business district, the Port Moresby Travelodge offers first class accomodation with stunning ocean views and well appointed rooms. With relaxing restaurants and bars, the Port Moresby Travelodge is a popular meeting place for business and social activities. The hotels conference and function facilities cater for meetings, seminars and banquets from 5 to 500 people.





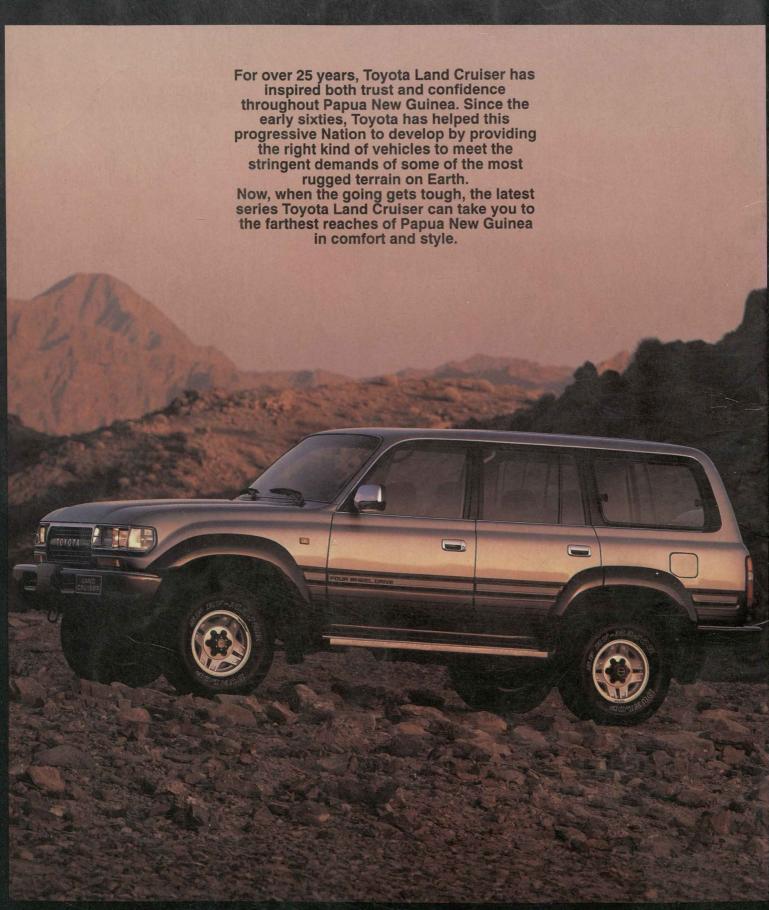
Just 10 minutes from the Port Moresby city centre the Islander Travelodge is an ideal business/resort destination. With 12 acres of tropical gardens, the whole family can enjoy our many recreational activities, swimming, tennis, walking, squash, gymnasium, restaurants, not to mention our full conference and function facilities for the business or social event. Come and be pampered by our friendly staff in our tropical oasis.





Get away and discover The Rabaul Travelodge, offering international accommodation on this island paradise. You can indulge yourself with fishing and diving or explore the nearby volcanoe, markets, war relics and caves, or simply relax and enjoy the stunning view of Simpson Harbour. The hotel has business facilities and first class dining, so why not mix business with pleasure and enjoy this remarkable paradise.

WHEN THE GOING GETS TOUGH THE TOUGH GO TOYOTA LAND CRUISER





Ela Motors