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paradise

Welcome aboard

Usually the stories we have in Paradise are about Papua New Guinea or destination countries on our international network. In this issue, however, we feature somewhere we have never flown before – Truk Lagoon in the Caroline Islands of Micronesia.

Papua New Guinea is a top destination for divers from all over the world. And so is Truk Lagoon. Air Niugini diving enthusiast Tony Gardiner describes Truk as a 'large open grave – a memorial to the idiocy of war'.

In October Air Niugini plans a divers' charter to Truk. Space is getting tight but it might not be too late for you to squeeze aboard.

Joseph James Tauvasa
General Manager

No. 30 July 1981

Paradise is published by Air Niugini, PO Box 7186, Boroko, Papua New Guinea (telephone 27 3542; telex NE22225).

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Design – Tom Cooke
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Typesetting – Kath Williams
Advertising – Margaret Bates

Advertising
Papua New Guinea – Publications Department, Air Niugini, PO Box 7186, Boroko
Australia – The Globe Bridge Company, 11a Euroka Street, Waverton, NSW 2060 (telephone (02) 921249)
Hongkong – Progressive Advertising Agency, 11 Kam Ping Street, Kam Ming Yuen, Rm C, 2nd Fl., North Point (telephone 5-630145-6; telex HX65474PPAAE)
Japan – Universal Media Corporation, GPO Box 46, Tokyo (telephone 666-3036; cables 'Unimedia' Tokyo)
United Kingdom – Intergroup Communications Inc., 31 Lyncroft Avenue, Pinner, Middlesex (telephone 01-868 9289; cables Pacom Pinner)

Subscriptions
Annual subscription for six airmail copies of Paradise: Kina 15, \$Aust 21, \$US 24.
(Bank drafts for foreign currency)

Please address all correspondence to Paradise, PO Box 7186, Boroko, PNG.

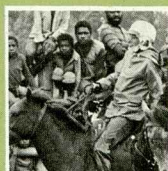


Quality in Air Transport



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Where the hell of 37 years ago has become a wondrous marine mix of the works of man and nature



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All the thrills and spills of a Western-style rodeo in a valley in the Southern Highlands



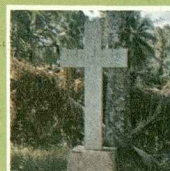
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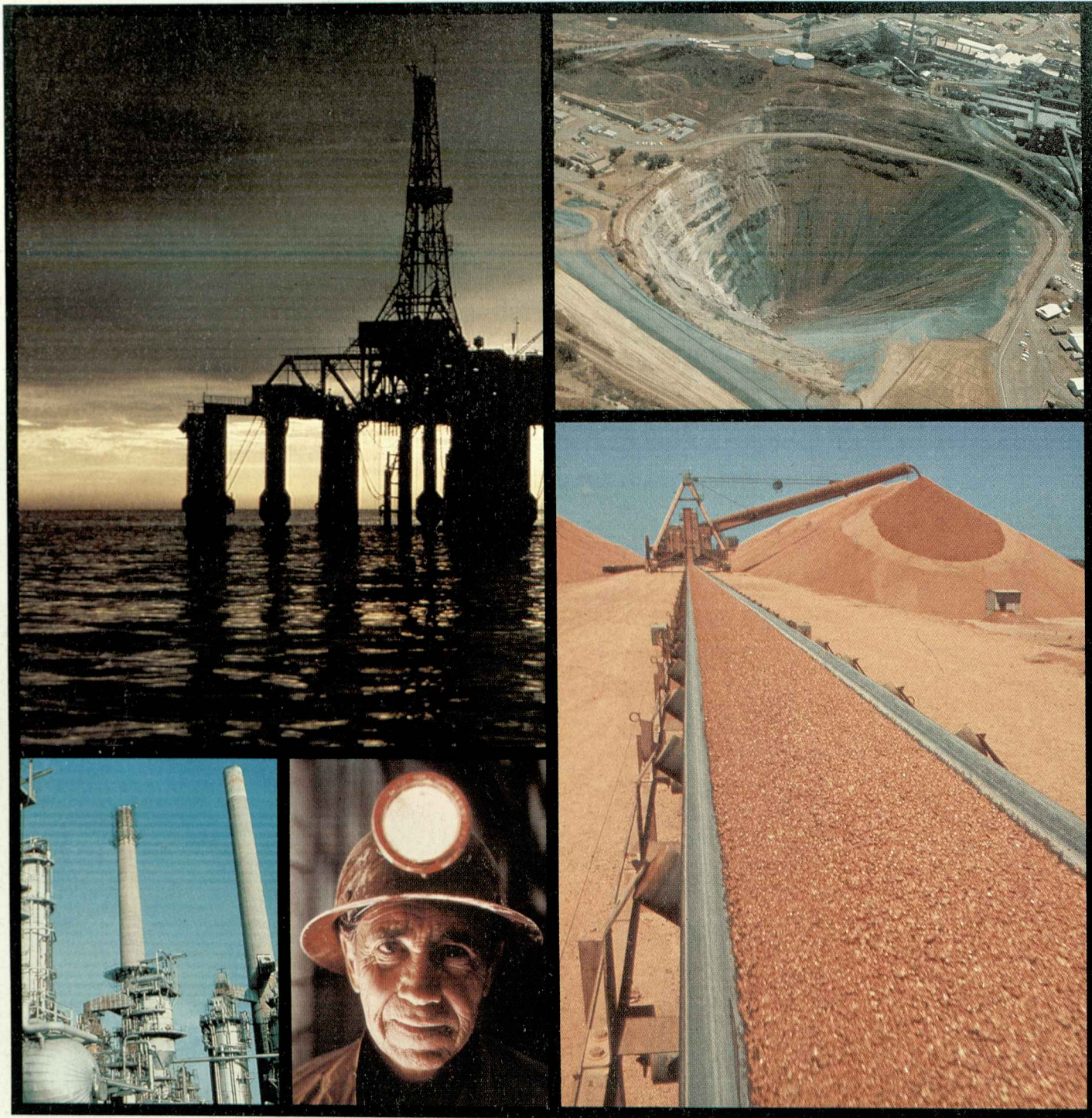
For nearly 30 years a family in Texas waited for news of Lt Billy Hollingshead



35 DRAGONS

There's no smoke or fire but still they're fearsome-looking creatures

Cover: Young black-mantled goshawk not long out of the nest. Steve Pruett-Jones took the picture



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Truk Lagoon

From 1941 to early 1944, Truk Lagoon in the Caroline Islands of Micronesia was a Japanese military stronghold. It was sometimes called the 'Gibraltar of the Pacific' and was regarded by Japanese and enemy alike as an unsinkable aircraft carrier. On February 17, 1944, and on the following two days, the might of United States war machine proved that if Truk could not be sunk it could be rendered useless. Thousands died and a great dent had been made in the pride of the might of Japan. Tony Gardiner took his cameras to Truk recently in search of evidence of that holocaust.

TRUK Lagoon is peaceful today, much as it probably was before the Japanese saw the value in it as a military stronghold. But the villagers are more Westernised now and there are still the scars of the horrors these innocent people had to bear.

I went to Truk last year with three American divers to photograph the remains of the Japanese Imperial Fleet, more commonly known now as the

'Ghost Fleet'. We found a lagoon which is a large open grave — a memorial to the idiocy of war.

The surrounding islands are heavily cloaked in jungle which hides much of the rusting remnants. But the huge cannons at the mouths of man-made tunnels are still watching the entrances to the lagoon. Shoreline pillboxes, bullet-riddled, are now the targets of graffiti writers.

On the old aerodrome site on



Inset: An American view of the 1944 destruction of Truk Lagoon; far left: Shinkoku Maru telegraph awaits a signal which will never come

Moen Island stands a modern hotel which caters mainly for divers and Japanese making sentimental journeys to the theatre of one of their greatest military defeats.

On a hill on Moen stands the highest monument – a desolate Japanese lighthouse, stripped of its lighting equipment. Its service to the local community now is as a tourist attraction.

On the shallow reefs near the Moen commercial area stands the hulk of a marooned freighter. In nearby bush are forgotten aircraft, damaged by US fragmentation bombs. They are largely left in peace but evidence of vandalism and souveniring tourists is apparent.

Now Trukese law prohibits wreckage from being taken from the area in an attempt to preserve the site as an historic monument. Unfortunately little is being done to preserve above-water wreckage and artifacts from the elements.

We dived for two weeks on 20 of the 49 known sunken vessels in the lagoon. There are also three aircraft wrecks – a Zero fighter, a 'Tony K1-61' which closely resembles the British Spitfire, and an overturned 'Emily H8K2' seaplane. All four propellers on the seaplane are undamaged suggesting it was not flying before it found its watery grave. Around the Emily we found the instrument dash panel and lengths of copper fuel lines. The tail cannon still protrudes from the fuselage.

Our first dive was on the *Sankisan Maru*, a 5000-ton merchant vessel destroyed by torpedoes. It is in about 30 metres off Ulman Island and the stern is badly damaged.

It is a relatively easy dive. The deck, only 15 metres down, is clearly visible from the surface. We could see coral-encrusted trucks strewn about at odd angles.

Our Trukese diver-guide suggested we should first investigate the forward hold – which was nearer the surface – to enable us to economise on bottom

time; a vital factor in guarding against the bends or decompression sickness. (The bends, in simple terms, are caused by an excess of nitrogen in the body. At the surface a person has about a litre of nitrogen dissolved in the body. At 20 metres the same diver might have up to three litres. The body absorbs nitrogen as it descends in water and expels it as it ascends. A too-rapid ascent or lack of decompression facilities can result in severe pain, nausea, even death. Truk has no decompression chamber.)

We found the forward hold of the *Sankisan Maru* contained uncountable quantities of live small calibre ammunition, grenades and gas canisters. To move any of it could have resulted in our immediate extinction and, probably, a chain reaction right through the vessel.

The second hold held aircraft engines and heavy duty trucks with headlights and radiator grills intact. We were careful not to raise the thick carpet of silt layering the hold and its contents. If stirred it could quickly block out available light and make it difficult for us to find our way out. On expiry of bottom time we ascended to locate the forward mast to which our surface tender was moored.

About 1.5 kilometres to the north, still off Ulman Island, in a similar situation to the *Sankisan Maru*, is the *Da Na Hino Maru*. This vessel, crippled, was run aground on shallow reef by her captain in an attempt to make salvage possible. He didn't quite make it and the hull now rests in about 20 metres. The *Da Na Hino Maru* is known as the 'gunboat' or the 'poster wreck' after the much-publicised bow gun which stands majestically upright three metres below the surface.

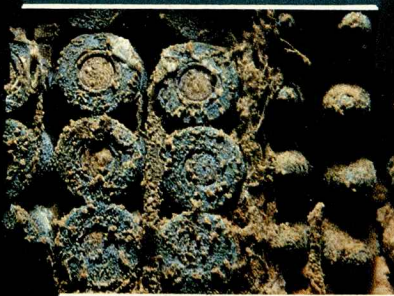
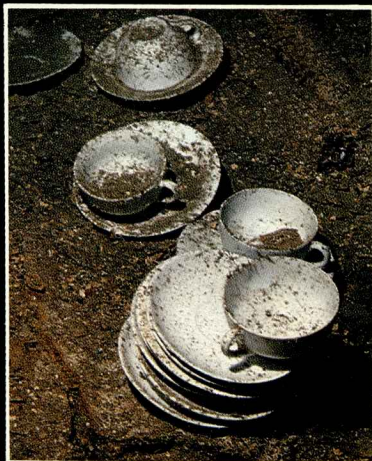
As each day of diving wore on it was necessary for us to take longer surface intervals to allow the body to expel excess nitrogen absorbed at depth. This enabled us to avoid long

decompression stops while ascending in later dives. We used the surface stops to motor from one wreck to another.

A 45-minute trip from the *Da Na Hino Maru* took us to the *Shinkoku Maru*, a 150-metre-plus oil tanker. In the middle of the lagoon, the *Shinkoku Maru*'s decks are heavily encrusted with thick layers of marine corals which will preserve the vessel for years to come.

Winches wound with thick wire ropes, capstans, air vents and funnels are all now decorated with displays of brilliantly-coloured soft corals, tubular sponges and clusters of tiny opaque sea squirts. Oil pipes, running the length of the decking, provide anchorage for large anemones attended by the usual clown fish.

On the bridge we came across the first signs of crew — a solitary shoe amongst a turmoil of dangling wires and communications equipment. The ship's telegraph, compass housing and helm pinnacle, stand there awaiting instructions which will never come. In the level below we found the medics' room complete with operating table, mortar and pestle, a single am-



Clockwise from above: Washing up waiting to be done; small calibre ammunition; biggest of all World War II shells at 18 inches; bones scattered across the flooring; rusted roadster

poule of morphine and a mass of crockery.

We entered the engine room through a hole in the stern of the ship. Our imaginations raced. On either side of the tunnel doorways led into the crew's quarters. Personal effects and decayed material poked up through the heavy layer of silt and long layers of bleached soft coral hung down, soggy with algae. An eerie feeling gripped us.

My torch penetrated the gloom, picking out the pathetic remains of three crewmen. Bone and skulls lay scattered on the flooring. To avoid stirring the silt I went into the room alone to photograph the remains. After three hurried frames I was overcome by a desperate urge to get-the-hell-out-of-there.

Ascent, the most important part of any dive, has its moments. As we decompressed for up to 30 minutes on lofty coral-encrusted king posts, we were able to watch mesmerizing swarms of baitfish. Red schnapper and

the occasional graceful batfish happily accepted our peaceful presence. On occasion, a whaler shark patrolled the steel memorial. Oddly, they didn't come any higher than the ship's gunwales.

South of Eten Island two masts break the lagoon surface. They mark the *Fujikawa Maru*. The hull has settled at about 40 metres on a barren, sandy bottom. Over the years the wreck has become an excellent example of how to establish an artificial reef complex. It teems with life. In the holds we found Zero fighters, engines, propeller blades, machine guns and ammunition and even an outboard motor.

Amidships, in the coral-coated corridors of the galley and mess, we found neatly-piled china and other kitchen utensils including a frypan and an egg-flip on a large coral stove.

Little has been salvaged from the holds of the *Fujikawa Maru*, making it a diver's dream come true.



Other vessels we came across were the *Hoyo Maru* with enormous propellers, the sub-chaser *Suzuki Maru* which had patrolled New Guinea waters, the *Yamagiri Maru* with 18-inch diameter shells (the largest made in World War II), and the submarine *Shinohara I-169*. — Tony Gardiner, a diving enthusiast, is an Air Niugini staff member.

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pacific

Christina Dodwell, having walked through rugged mountains from Oksapmin in the West Sepik to Lake Kapiago in the Western Highlands, and then trekked on horseback for weeks on the upper slopes of the mighty 4369-metre Mount Giluwe, takes on her next challenge — as an entrant in the Mendi Valley Charity Stampede.



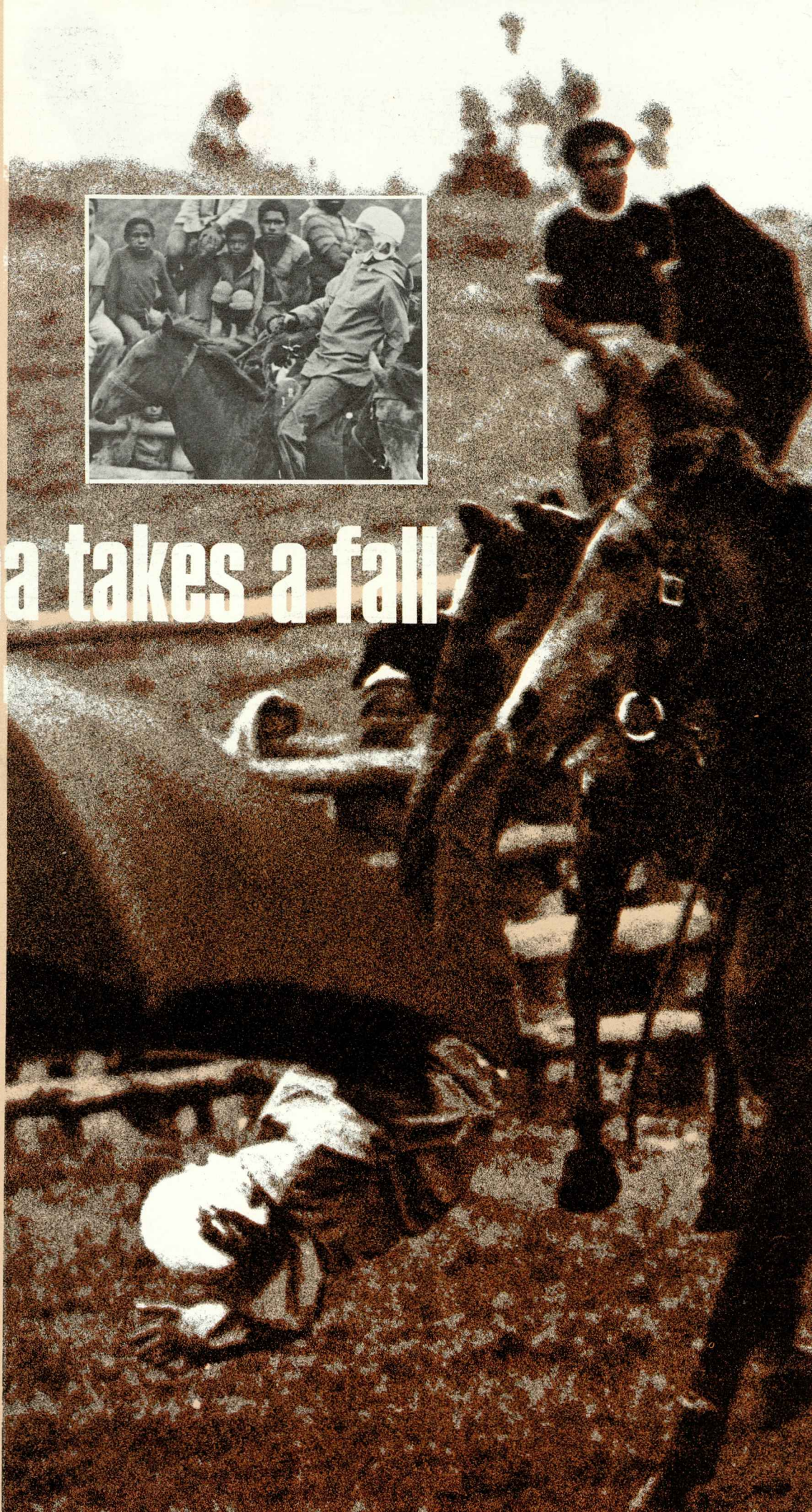
Christina takes a fall

RODEO was new to me. I wasn't really thinking of entering the Mendi events, but, knowing how fit and sure-footed my horse had become during our travels on Giluwe, I thought he might have a chance in the big event — the 'Great Cross-Country Race'. And then there was the bronco-busting event. This tempted me because I wanted to see how well I could ride.

These thoughts ran through me as we were heading north toward Laiagam and Wabag in the Enga Province. So we turned round and branched off on the soft dirt road to Mendi, capital of the Southern Highlands Province.

Late afternoon we stopped at a village beside some lakes and the headman offered me a hut to stay in. Next morning there was a market and my horse made me buy far more *kaukau* (sweet potato) than I had intended by leaping in, scattering them everywhere and taking great bites out of every root he could reach. But he needed the energy if he was going to take part in the cross-country race so I was happy to pay up. I'd been told the course was always dangerous and that the pace was a flat-out gallop.

I loved watching people's reaction along the way when they



first caught sight of the horse. Most had never seen one before and their first instinct was to run for their lives. Then they would come back for another look. Others were transfixed with astonishment, disbelief and delight — especially when the horse jumped ditches and gullies.

Our route to Mendi took us over 3000 metres and the horse panted in the rarefied air. From one lofty vantage point we were able to watch a clan fight in progress far below. The warriors, chanting and yelp-yodelling, dashed up to the skirmish line, called out insults and let loose a few arrows. The standard of marksmanship did not seem high and I don't think anyone got badly hurt.

The fight, I was told, had something to do with a recent traffic accident in which two men had been killed. The fighting had flared after compensation payments had proved inadequate. When the rains came the fighting stopped. It rained all the way into Mendi. The cross-country race was going to be a mudbath.

It was still raining on the day of the rodeo and I was in two minds whether to take part. But I saddled up and rode the eight kilometres from Mendi to Oiarip Agricultural Station where the rodeo was to be held.

The main corral was ringed by a crowd of people and on the top rail sat many more with coloured umbrellas. The steer riding had just started. Riders hit the sodden ground at regular intervals, usually within a couple of seconds of coming out of the gate on a wildly performing steer.

Competitors were a mixed bunch, ranging from Papua New Guinean cowboys, each with his own inimitable style, through

plantation bosses, seasoned rodeo riders, missionaries, volunteer workers, to me, the only female participant.

Despite the rain the atmosphere was noisy and alive. None of the steer-riders lasted long. A professional and lay-missionary gave the best performances but the latter's steer fell and broke a leg.

In the flag race which followed I was able to get an indication of the competition I would be up against in the big race. Horses raced back and forth (their riders retrieving flags), making quick turns and displaying a high level of agility and speed. The butterflies in my stomach became more active.

As I inspected the course I found tussocky grass, hidden sinkholes, ditches and patches of bog. But locals told me the course wasn't in bad shape. I suppose they knew best.

Then came the archery competition. Again the standard of accuracy was not high. But in the woodchop, sturdy Highlanders wielded their axes with devastating swiftness, some of them in traditional dress.

The loudspeakers called for competitors in the big event — the Great Cross-Country Race.



With 14 others I cantered to the start line.

Ready, set, go! We surged forward — a straggly bunch thundering over the boggy hills. We were well up but dropped back as we steadied to tackle a slippery angled bank. A leading horse hit the bank and fell. The horse directly behind fell over him, somersaulting awkwardly. I heard the crunch of its neck breaking as I approached. Another horse crashed into the pile-up.

In a fraction, I managed to swing my mount clear of the writhing mass of horses and hu-

man straight. We crossed the finish line in fourth or fifth place. I don't think more than a handful of horses finished the course.

There was no jubilation at the finish; just a worried crowd awaiting news of fallers. There

mans and eventually picked a way through.

We galloped up the next hill, overtaking one horse on the way, and then we went round a curve and down an appalling slope of tussocky grass and sink-holes. Crumbly ledges dropped into patches of bog.

Down another slope we came to four horses floundering shoulder-deep in a stream. A rider alongside me had no hesitation in using the backs of the mud-sunken animals to get across. I couldn't do the same so I skidded to a halt at the brink. I did what I could to help but it looked like a job for men with ropes. The quickest way to get help was to follow the course.

We took a run at the stream. My horse bounded forward and sprang out, landing saddle-deep in mud on the far side. For a moment he plunged up and down in the mire but then found his feet and hauled us both out.

He pressed on gallantly, ploughing through marsh, clearing a gully, before hitting the

was genuine sorrow when news of the dead horse came in.

The atmosphere lightened with events which followed including pig races followed by an hilarious dog race in which only three finished, the rest running in circles and fighting with each other.

Then came the bull ride. The butterflies became active again as I watched how the riders tried, usually in vain, to grip the beasts' backs with their knees to make a pivot while their legs swung free to help balance them. One extra large bull threw his rider and then charged the rails. Despite the barricade, the crowd shrank back. Then the bull trotted





around the corral, snorting and shaking his heavy horns.

Meanwhile, a small group of wild horses waited restively in a nearby smaller corral. I wondered which would be mine.

The horses were a mixture of brumby stallions and unbroken colts. Some didn't buck but the stopwatch measuring riders for the qualifying time of eight seconds were switched off while the steeds were not bucking.

I felt surprisingly composed as I climbed over the rails and held myself poised over the horse's back as someone tightened the cinch. I had time to note how every muscle in the

stallion's back was clenched tight. Was it hate or fear — or both?

Lowering myself gently into the saddle I settled deep and firm, my feet seeking the stirrups, careful not to touch the horse's sides lest he leap into action too soon.

The gate rattled open. For a second the stallion hesitated. Then he sprang into the arena. Now it was for real. He was bucking like crazy, the jerking jack-kniving of his movements jarring and wrenching my body, seemingly in every direction at once. A sharp twisting thrust nearly had me off. I doubled

the grip with my knees and tried to remember what I'd just learnt. In the whirling confusion I noticed I still hadn't fallen off. And I was feeling strangely relaxed.

Only a few seconds could have passed and mud was spraying up from the plunging hooves. Then I knew I was falling. I kicked my feet out of the stirrups and let go. I sensed I was flying and then I was in deep mud, quite unhurt. I was told I got to my feet laughing and then staggered out . . .

— *Christina Dodwell modestly describes herself as an 'English traveller'.* 🐾





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BROWN GOLD

FROM the jungles of the Amazon basin in South America the cocoa tree has been spread through much of the world which is subject to a wet tropical climate. The Germans brought the cocoa tree to Papua New Guinea at the turn of this century, marking the beginning of an industry which has brought a mixture of frustration, defeat and hard-earned success to those who have taken up the challenge.

Cocoa today is a major cash crop in Papua New Guinea — and it is likely to stay that way as long as there is a demand for chocolate. And when is that likely to ebb? It's rare to find a person who does not enjoy at least a nibble on a chocolate bar.

Prices for cocoa have been consistently high. Back in the middle of the seventeenth century, when it is thought cocoa was introduced to England, chocolate sold at up to 15 shillings a pound and was a luxury enjoyed only by the wealthy. But it is not only for its high price that cocoa justifies its name of 'brown gold'; the problems involved in producing a

bagful of cocoa can be compared with those of winning a bagful of the yellow variety.

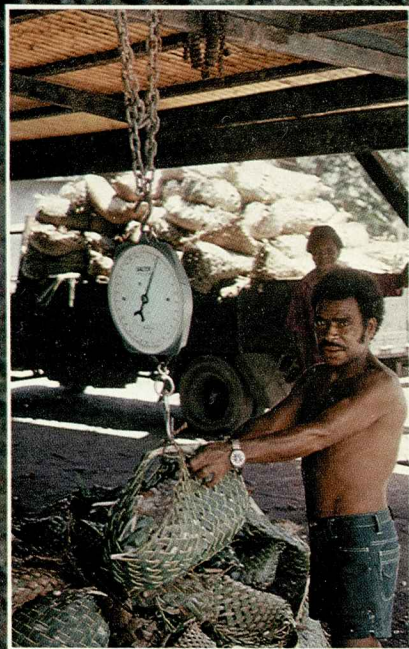
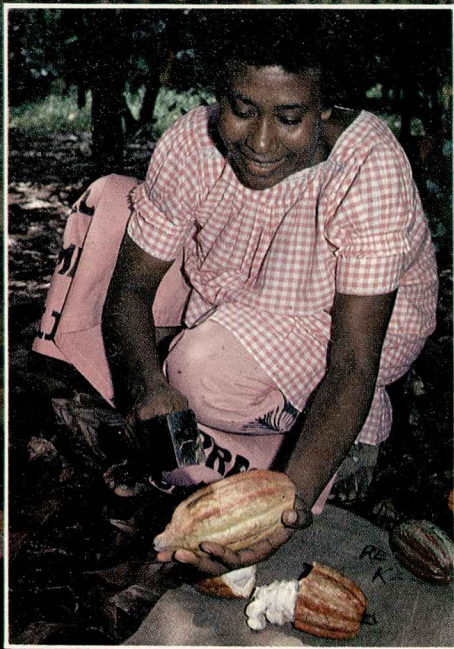
Bombing and neglect during World War II practically eliminated plantations established by early German settlers but after the war replanting began in earnest. Australian servicemen who had fought in Papua New Guinea during the war returned to participate in soldier-settler schemes. Large areas of Northern and East New Britain Provinces were planted by settlers, plantation companies and smallholders. Production rose steadily and prospects looked good. But then came 'dieback'. It was the early sixties and growers gloomily began predicting an end to their dreams and to the industry as a whole. Dieback was a mystery disease. Was it going to do to Papua New Guinea's cocoa planters what another mystery disease had done to Ceylon's nineteenth century coffee industry — totally eliminate it? Fortunately, after cutting a swathe through plantations, dieback declined to a tolerable if still irritating level. In 1969 researchers identified its cause

as a fungus which made itself at home in the branches of cocoa trees.

But there was something even worse than dieback. Out of the bush came a hitherto rare flightless weevil, *Pantorhytes*. Cocoa must have seemed like manna from heaven to *Pantorhytes* which proceeded to feed and breed in the trees with an intensity never displayed in its native bush.

Soldier-settlers were particularly hard hit and soon *Pantorhytes* was awarded the title 'The Worst Cocoa Pest in the World'. So devastated were plantations in Northern Province that most growers totally abandoned operations. Tales are still told of planters — drowning their sorrows in the pub — passing the time by staging races among the very insects which had eaten away at the foundation of their hopes. In Northern Province today oil palms have taken the place of cocoa trees.

I talked recently to one cocoa grower who refused to be pushed out by *Pantorhytes*. He has held his ground in one of the weevils' strongholds, even



Cocoa trees flower profusely but only one in a hundred blossoms becomes a fruit; right: fermented beans spread for sun-drying; above: fruit nearly ready for harvest; top left: extracting the beans; top right: fresh beans for sale

Inset left: advice for East New Britain cocoa farmers; inset right: farmer checks extent of dieback disease before pruning; below: *Pantorhytes* being driven out of its mind by crazy ants

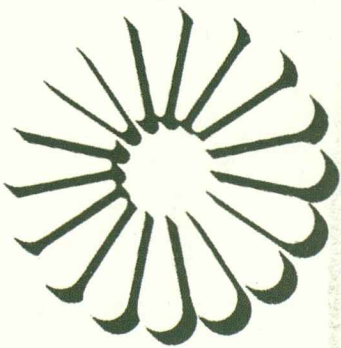
though the price has been high. He told me he had replanted three times in 20 years. When you consider a tree does not bear a full crop until it is 12–15 years old and can be still increasing its production after 40 years in countries not afflicted by *Pantorhytes*, you can gauge the extent of that planter's perseverance.

Nowadays improved cocoa varieties, which combine high yield with a resistance to dieback, are replacing old plantings as their useful life comes to an end.

And for *Pantorhytes* a bizarre fate is being devised. Scientists have discovered that these tough, inedible weevil pests have a natural enemy in the crazy ant, so-called because of its frenzied movements. It has been noted that when these ants take up residence in a cocoa tree *Pantorhytes* makes a quick exit, apparently driven mad by the unwelcome attention of its 'crazy' adversaries. Growers who have crazy ants don't have *Pantorhytes*; and, as a nice bonus, crazy ants don't even bite. The task now is to find a way to attract crazy ants to cocoa trees and keep them there.

Cocoa production in Papua New Guinea has dropped in recent years as trees – and growers – have become older and crops have been neglected. Now a redevelopment drive is under way. The Cocoa Industry Board and the Department of Primary Industry are determined that Papua New Guinea will profit from its brown gold resources. – *Chris Prior is a research fellow with the Biology Department of the University of Papua New Guinea based at the Lowlands Agricultural Experiment Station, Keravat, East New Britain Province.* ♀





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Defiant infant . . . a black-mantled goshawk; inset: whistling kite hunts over canyon





Papua New Guinea's birdlife is best known for birds of paradise and bower birds but it is home too to many other unique groups of birds. Stephen and Melinda Pruett-Jones of the Wau Ecology Institute take a close and artistic look at our birds of prey.

Hunters by day hunters by night

BIRDS of prey – or raptors – because they eat other birds and mammals, are themselves viciously persecuted in many parts of the world even though their activities are vital to a healthy balance in nature. Papua New Guinea's raptors are both fascinating and very rewarding to observe in the wild.

As hunters, they are powerfully built, have hooked beaks and very sharp claws or talons. They are categorised according to their general size, shape and way of life. Eagles are huge birds with large broad wings for soaring great distances. Hawks range from small to a fairly large size with either broad soaring wings or short rounded wings for quick flight through forests. Falcons are excellent flyers, with long pointed wings built for fast flight and diving from great heights.

One species in New Guinea, the peregrine falcon, is master of the skies and has been clocked diving at over 200 km per hour.

Owls are only distantly related to the other raptors but share with them a predatory life style, powerful beak and claws and keen eyesight. Owls are perfectly suited for night life. For better vision their eyes face forward rather than to the side and their feathers are designed for noiseless flight. Most species have large facial discs of feathers surrounding their eyes which reflect sound back to the bird's ears. Owls rely on sight when enough light is available but can locate prey accurately in complete darkness.

The islands of New Guinea support 49 species of raptors of which 17 are found nowhere

else in the world. Papua New Guinea is home to 47 species. Some species are widespread and occur over all of New Guinea whereas a few are restricted to very limited areas.

Of the widespread species most are shared with Australia and a few with Indonesia. Three species (the osprey, peregrine falcon and barn owl) include New Guinea as part of their worldwide range.

Each major habitat in New Guinea has certain raptors associated with it, making it convenient to group birds according to the areas in which they live.

Along the sea coast and on large lakes the white-bellied sea eagle and osprey patrol open waters for surface fish while one or more species of kite (a kind of hawk) scan the shoreline for insects, small mammals or refuse. The three large kites in New Guinea, the brahminy, whistling and black, sometimes kill live animals but more often scavenge as do vultures in other parts of the world.

The kites are among the most conspicuous of all New Guinea raptors and can be easily observed as they soar over roadsides and agricultural areas. Such birds do man a great service by keeping the roads and footpaths free of animal refuse. In extensive grasslands the kites share the countryside with another group of hawks, harriers, which float lazily with the wind low over the ground in search of mice and insects.

The forest raptors, including various eagles, hawks and owls, are suited for a life among dense trees and are seldom found outside timbered areas. Falcons





Left: *Brahminy kite* watches shoreline from cover; below: *New Guinea eagle* feathers add to the finery; bottom: *injured brown owl* on road to recovery; right: portrait of a *New Guinea eagle* by Steve Pruett-Jones from a photograph by Brian Coates



frequent all habitats but are more common in open woodlands. Owls are found regularly in grasslands as well as in forests.

Some raptors nest during the wet season in New Guinea while others prefer the dry season depending on when their prey are most active and abundant. Adults pair about a month before nesting begins and their courtship flights can consist of elaborate aerial acrobatics performed by one or both birds. Often the male and female will meet in mid-air, lock their claws together and tumble earthward, separating only a few metres above ground.

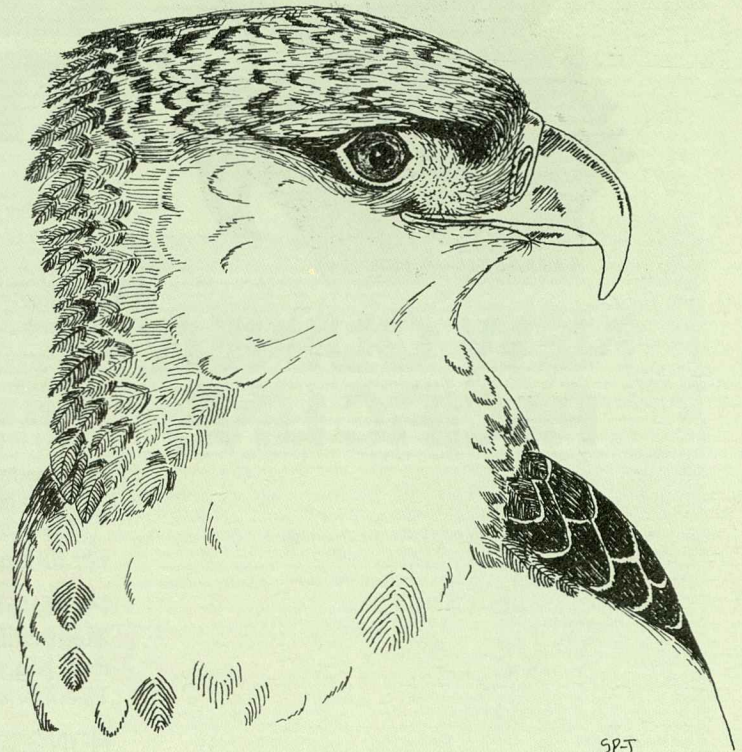
Falcons do not build their own nests but either take over an abandoned nest of a hawk or

scrape out a small depression on a cliff ledge. Owls never build their own nests. They use old hawk nests or a secure hollow in a tree. The nesting season may last only two-and-a-half months for the small forest hawks or as long as nine months for the large eagles. When the young hatch, both parents help in feeding and teaching them to hunt. But once the young are old enough, they are forced out of the adult's territory and must seek areas of their own.

While most raptors are loners and aggressive toward other individuals, one species, the black kite, is social and lives most of its life in colonies that may number hundreds, even thousands.

During the day kites hunt singly or in small groups but at night rejoin the colony at a traditional roosting site. They also nest in colonies. Black kites are to be found in valleys where the forest has been cleared and the land cultivated.

For its size, New Guinea supports more forest bird hawks (genus *Accipiter*) than any other country. These birds are very aggressive predators and eat only live animals. Some species prey on other birds while others live on lizards, snakes and small opossums. Most species are re-



SPJ

stricted to certain types, or even sections, of the forest, and few venture into open woodlands or cultivated areas. Several species are so rare that fewer than a dozen sightings have been recorded.

The New Guinea eagle is one of the most interesting and puzzling of all resident species. It is found only on the island of New Guinea and is the largest of all forest raptors there. It is unique worldwide in that it hunts below the forest canopy in much the way smaller hawks do. It has long bare legs and is a capable runner.

New Guinea eagles have been seen landing on the forest floor and running down animals. If they capture more than they can eat they will cache meat under a rock along a stream or on a ridge and then retrieve it early next morning.

As most forest mammals are active at dusk and at night, the New Guinea eagle hunts both night and day. The male and female keep in contact with each other by loud calls that carry great distances in the forest. The call was described by one naturalist as 'the sound of a taut bow string being released followed by the clucking of a chicken'.

Birds of prey are important to the people of New Guinea.

They are a cherished symbol in cultural activities and their feathers are used in headdresses. The two most highly prized species for their feathers are the New Guinea eagle and the long-tailed buzzard. In most areas, the nests of raptors are well known and closely watched.

Knowledge of New Guinea's raptors is lacking in many respects but slowly the secrets are being revealed. Birds of prey are an important part of the wildlife heritage of New Guinea and their conservation is essential. The Wildlife Department in Papua New Guinea has won legal protection for two species: the osprey because of its scarcity and the New Guinea eagle because of its importance as a national symbol. This is a valuable step as it ensures the survival of these species. For those with time to closely observe birds of prey, they are an inspiring sight and a vivid reminder of the strength and beauty of nature. 🌿



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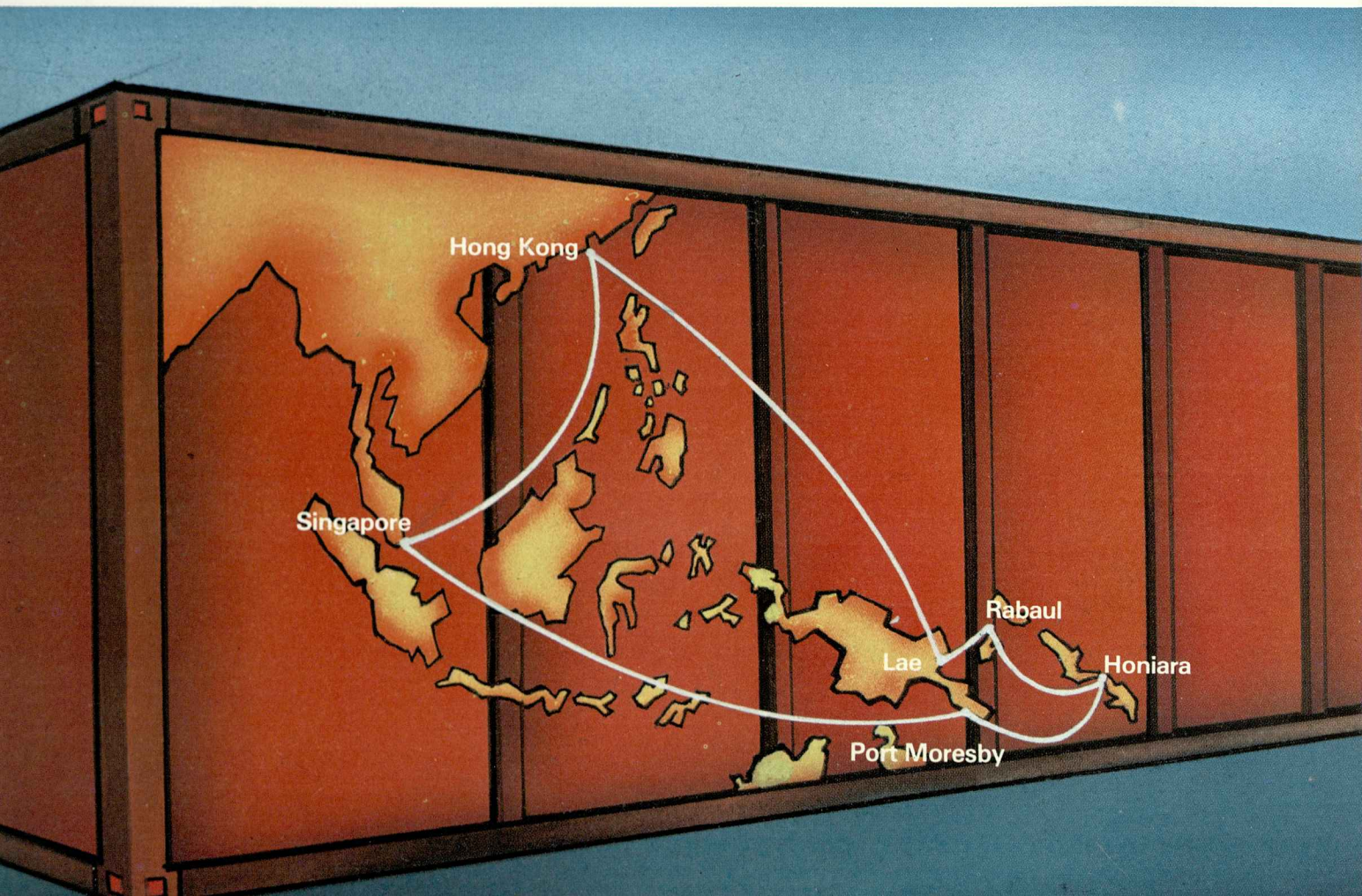
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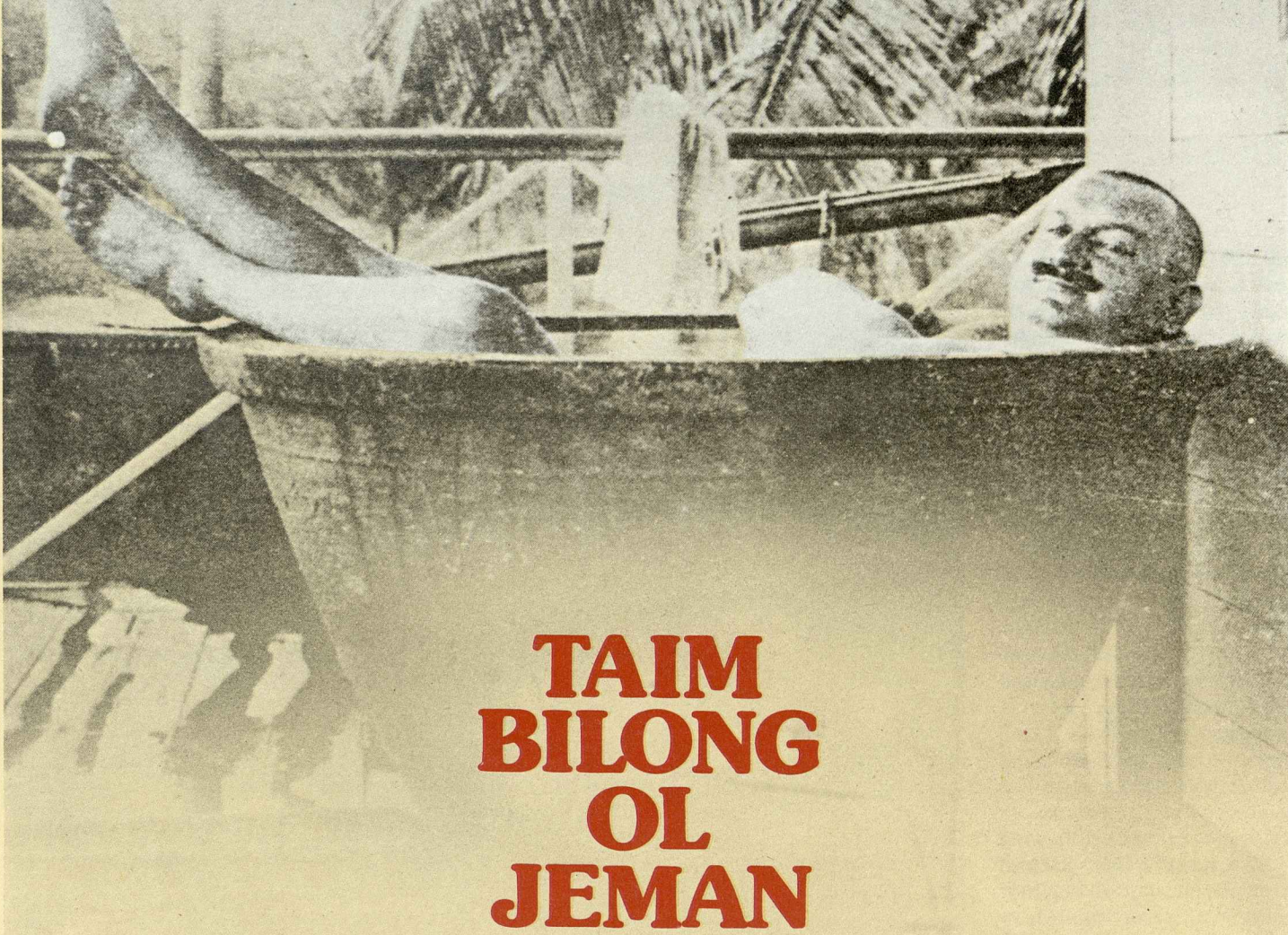
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TAIM BILONG OL JEMAN

Nineteen-eighty-four is a date with ominous implications for Westerners who place their faith in the speculation of George Orwell. Eighteen-eighty-four had dire consequences for the peoples of the eastern half of the island of New Guinea. It was in that year that Germany and Britain decided to carve up their land for use as colonies. Two years before, Holland had claimed all the western part of the island as part of the Dutch East Indies colonies. Janetta Douglas takes a selective look at the German years.

WITH all the arrogance of empire, the German Government issued an imperial charter in 1884 giving authority to the newly-established Neu Guinea Compagnie to establish plantations and trading posts on the northeast coast of New Guinea Island and on islands throughout the Bismarck Archipelago.

Under the charter, the company was told to both administer and exploit the islands as they saw fit. The plans were greeted with great enthusiasm by the people of the only recently-united German nation. Needless to say, no one told the people to whom New Guinea was home about the decision. Or asked them what they thought of it.

Company shares were snapped up by investors who anticipated a few lean years

while plantations were being established and then handsome returns from bountiful crops.

Dr Otto Finsch, explorer, and the first Imperial Commissioner Baron von Oertzen were duly dispatched to New Guinea waters. With them went six warships loaded with hundreds of flags and signs which were to be handed out and planted on every beach-head where bewildered New Guineans would let them land.

Meanwhile, on the southeast coast of New Guinea an Australian crew was doggedly doing the same on behalf of Queen Victoria who, history says, was only reluctantly acquiring a New Guinea possession. It seems the British colonial coffers were a bit strained at the time but, with the German move in the north, Britain decided it could not afford to miss

out on a foothold in New Guinea.

As repugnant as it may seem today, the colonisers circa 1884 actually thought they were doing the colonised a good turn. Or so we are assured.

The tribesmen of New Guinea however were quite unsympathetic to their 'colonial benefactors' and reacted in much the same way as would New Yorkers today if space invaders chose to colonise Manhattan. However, after realising the futility of their spears and arrows against the superior weapons of the invaders, New Guineans settled to a process whereby they knocked off the odd incautious foreign traveller and a policy of passive resistance which accepted steel axes and pieces of material but rejected almost everything else.

The Neu Guinea Com-

pagnie's first general manager arrived in New Guinea on November 5, 1855, and set up headquarters on an island in the harbour at Finschhafen. The following year an 'outstation' from which plantations could be established was built near present-day Finschhafen on the Bubui River. Two more were built later at Constantinhafen and Stephansort in Astrolabe Bay, south of modern day Madang. Then came an outstation in the Duke of York Islands in the St George Channel between New Britain and New Ireland (later transferred to Herbertshone near modern Rabaul), and another at Hatzfeldthafen, north of modern Madang.

The Germans' initial concern was how to purchase the land they required. They had no common language with New Guineans. Repercussions of those early 'purchases' are still being experienced in the courts of Papua New Guinea today.

Many villagers came forward to accept gifts and put a mark on paper. While the recipients of the 'gifts' walked away smiling happily the Germans thought they had purchased hundreds of hectares of land. All too often the 'sellers' were bogus.

When the Germans tried to recruit labourers to clear the jungle, villagers simply 'went bush' so the developers turned to Asia for labour.

Meanwhile the colonists were finding it hard to stay alive. Until the turn of the century, malaria, beri-beri, influenza and dysentery were regarded as deadly tropical diseases of unknown origin. In 1981 the New Guinea Compagnie general manager Eduard Wissman died of malaria. His death caused the company to abandon the Finschhafen headquarters and relocate the seat of government at Friedrich-Wilhelmshafen, today known as Madang.

Those who didn't succumb to disease battled on with commendable vigour. Surrounded by tribesmen who spoke many different languages and literally

hundreds of dialects, isolated by lack of telegraphic communication and poor shipping services, and badgered by impossibly impatient money-hungry board members in Berlin, it is surprising the company made any progress at all.

By 1891, 106,500 pounds of tobacco had been produced and shipped to European ports where it was acclaimed to be of quality comparable to Havana tobacco. Cotton was also looking good in 1891 and a selection of timbers taken to Germany by the manager from Constantinhafen was greeted with enthusiasm. A quantity of phosphate mined on Bat and Mole Islands, northwest of Madang, found a market in Europe.

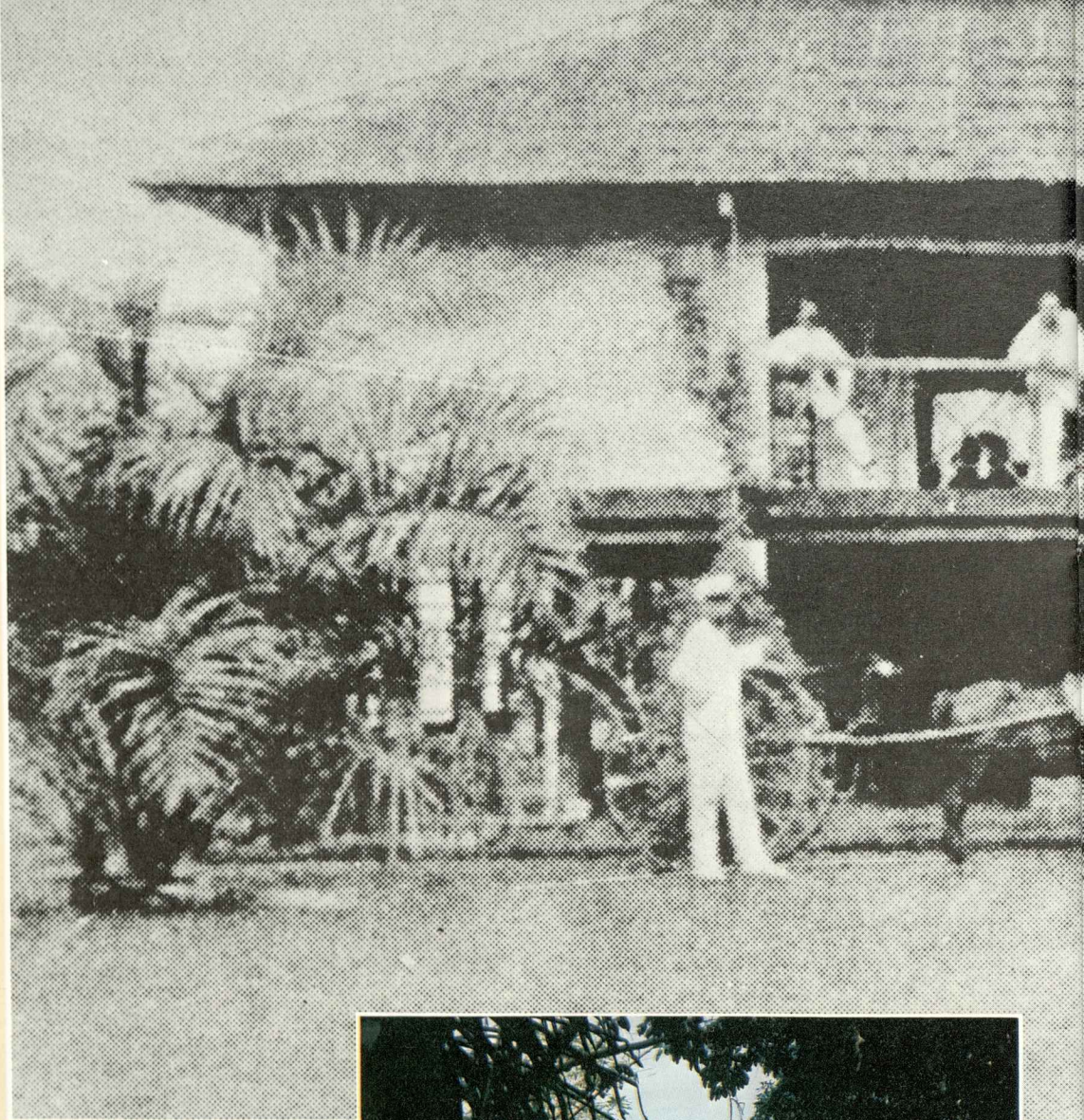
Experimental crops were coconuts, coffee, rubber, hemp and cocoa – and all were doing well. Fresh vegetables were being grown on most outstations and many pigs, sheep, cattle, poultry and horses had been introduced.

But the company's course was uneven. Death, disgrace and disillusionment resulted in high staff turnover. Aggressive New Guineans forced the closure of several outstations. There was severe disagreement between company officials and private plantation owners and the board in Germany continued to complain.

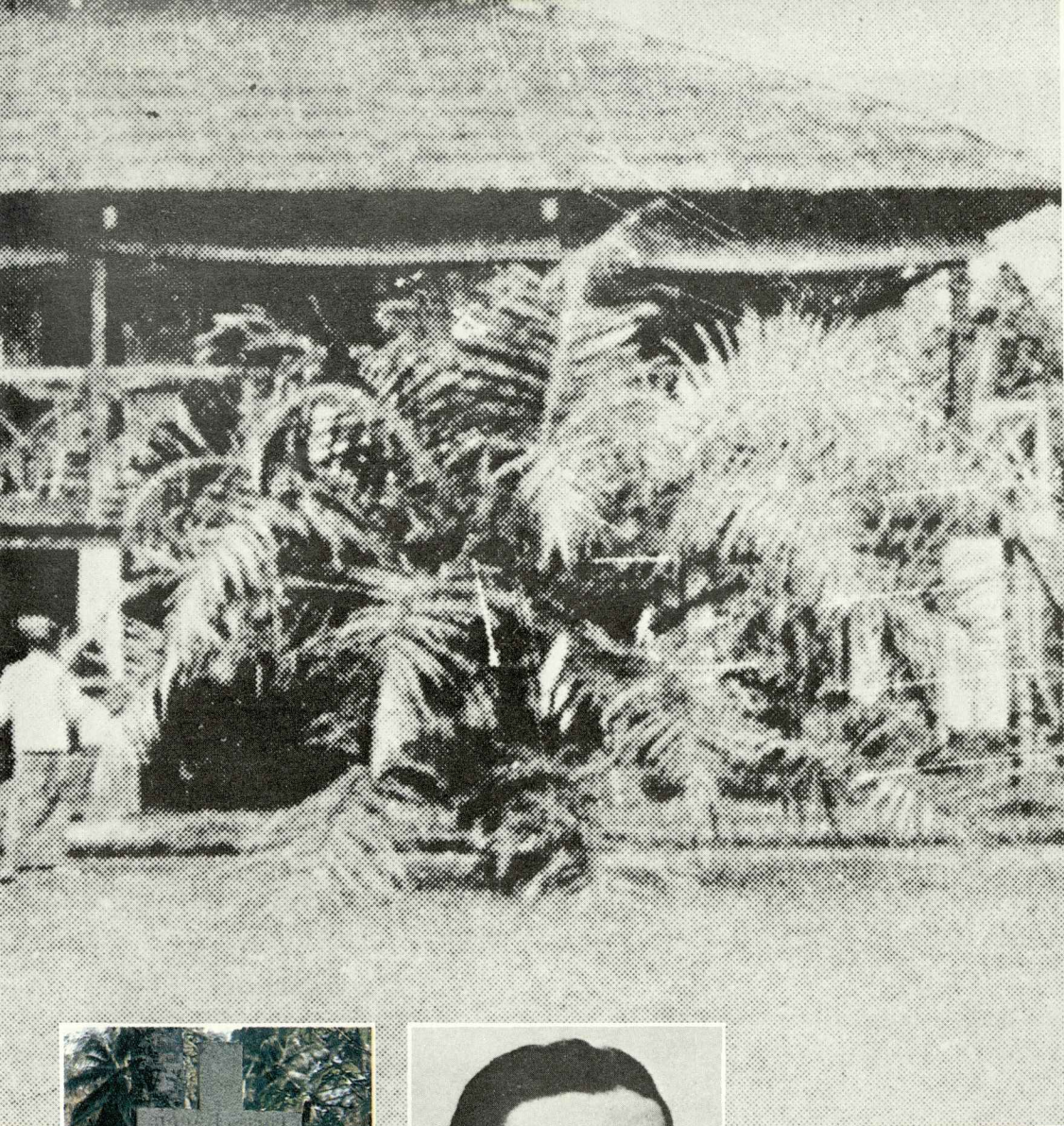
Briefly the headquarters

were moved to Stephansort. Finally, in 1899, the German Government felt obliged to take over the burden of civil administration from the company. The Imperial Government headquarters were established at Herbertshone.

In 1900 Germany purchased the islands of Micronesia from Spain while simultaneously relinquishing its claim to that part



Brian Mennis



Brian Mennis

Hallstrom Pacific Library

of the Solomons chain which was to form the British Solomon Islands Protectorate.

Direct government intervention by Germany marked an upsurge in the fortunes of the colonisers if not of the New Guineans. Much exploration was undertaken and many new plantations were established — always at a great cost to the life-style of the indigenous people.

The Germans made a great show of creating 'peaceful conditions' and providing 'the highest degree of medical care

and education'. These services, they believed, would 'coax the natives into becoming part of this expanding economic empire'.

Meanwhile, back in Madang, resentment was mounting in some areas against foreign barbarians who didn't seem to understand even the simple courtesies of village life. They watched their hunting grounds being destroyed and saw their best garden land swallowed up by enormous plantations.

Not only were the foreigners

Clockwise from left: Curt von Hagen; his headstone at Stephansort; remains of the bridge for the narrow gauge track from Erima to Stephansort; Neu Guinea Compagnie house at Stephansort, 1912. Historical prints from Noel Gash and June Whittaker's *A Pictorial History of New Guinea*, Jacaranda Press

confiscating their land; they were ridiculing everything New Guineans held dear — their religion, culture, dress . . . They felt themselves being changed from a people who depended and survived upon the land into beings whose only way to survive was to pay head tax and earn money to buy their needs from a company store.

Eventually the dam of resentment broke. At a traditional cult festival in July 1904 on Bilbil Island near Madang the people decided to kill off the whites and put an end to the interference in their lives. Unfortunately for the villagers a man from Biliau village told the

German medical officer. The plotters were captured as they stormed the arms depot on July 26.

One man was shot dead, nine others were later executed, three were sentenced to life imprisonment and many more were sent into exile on outstations. The whole exercise was designed to impress upon villagers the futility of opposing the might of the Imperial Government of German New Guinea.

In 1909 the headquarters were transferred to Rabaul. In Madang in 1912 the Germans got scared again, fearing another revolt. To this day Madang villagers insist that nothing of the sort was intended. Nevertheless, the Germans acted with brutal efficiency, moving whole villages of people to near where Saidor stands today, 100 kilometres to the southeast of Madang. Two years later the Germans found themselves on the receiving end, imprisoned by Australian troops on the outbreak of World War I.

In the early 1960s there were many New Guineans still alive who remembered German times. Many spoke of the kindness with which they had been treated by individual Germans. Most of these old people are now dead but their children still point with pride to relics of the German colony.

At Stephansort there are signs of the old town, now covered with secondary growth. There are the remains of a monument to the tyrannical administrator Curt von Hagen who met his end at the hands of a prisoner from Buka Island on August 14, 1897. It is hidden by grass but is all still there. Bits of a rusting railway line that once linked Stephansort and Erima can be picked out. There are ruins of once-elaborate stables, many disused roads, the sawmill boiler and the headstones at the cemetery of the men, women and children who became the victims of a rush of patriotic fervour. — *Janetta Douglas lives in Port Moresby.*

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Lieutenant Billy comes home

SWIRLING cloud and driving rain enveloped the Havoc as it groped its way westward up the Markham Valley in Papua New Guinea's Morobe Province. It was June 29, 1944 and the squadron, flying in loose formation, had run into the squall only minutes after taking off from base at Nadzab, the site today of a modern commercial aviation terminal.

The crew's big fear was mid-air collision. Only the glow of

the instruments and the powerful hum of twin radial engines gave the pilot and gunner of the Havoc any sense of reality and of an outside world.

No one will know their reaction in those final seconds when their aircraft bounced through treetops, its wreckage coming to rest in a deep ravine. There was no fire. Soon, dripping vegetation concealed the scattered wreckage.

In early May 1973 Assistant District Officer David H. Pen-

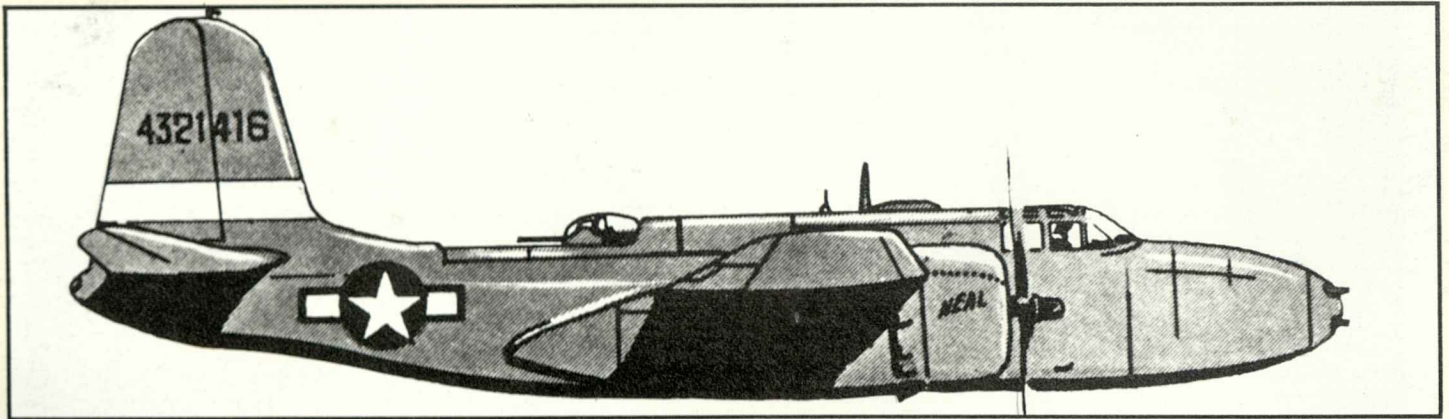
nefather, stationed at Kaiapit, began to hear reports of wreckage in nearby mountains. A villager, Lainisan, said he had found it while pig-hunting. Pennefather asked two villagers to bring in evidence of the wreck. They returned with an American aircraft instrument and some .50 bullets.

Pennefather and seven Papua New Guineans walked into the wreck site on May 22, 1973. To reach it they had to climb a very steep 900 metres, scramble 200

metres down a steep gully and then climb a further 100 very steep metres.

The main part of the wreckage was on the side of the gully at an angle of 50 degrees. The .50 calibre machine guns in the solid nose cone and the sophisticated Martin rear turret with similar weaponry identified the aircraft as a late model A20G Havoc (more commonly known as a Boston).

The high point of the wreckage comprised the cockpit and



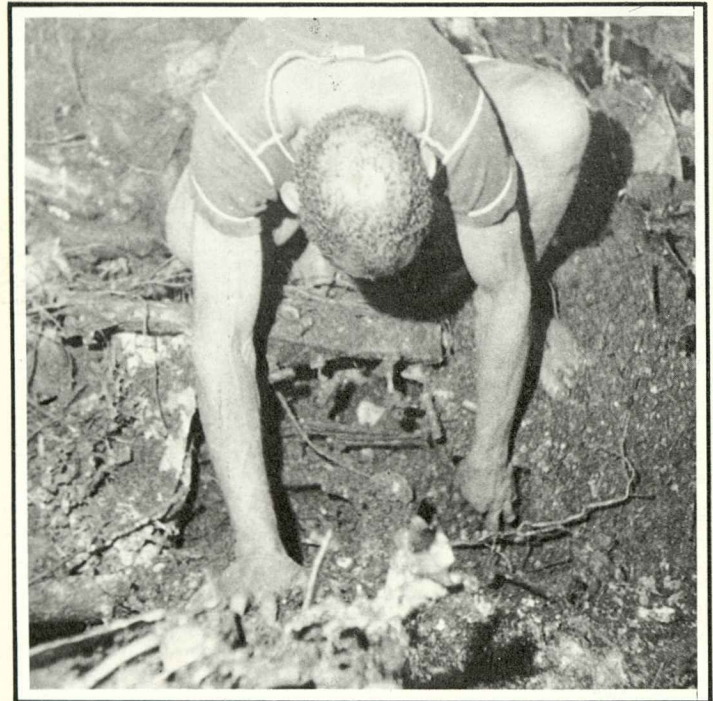
Above: Artist Peter Connor's recreation of Billy's Havoc A20; right: Kaiapit villager Lainisan helps sift the wreckage on the side of the gully; opposite: tailplane markings identify the aircraft

one engine. Between those and the rear cockpit turret and tailplane down below was an assortment of twisted metal. Among the debris were three live 500-pound bombs and the remains of two bodies.

Details of the aircraft, pilot's name and the town from which he came were obtained by Pennefather from the Albert F. Simpson Historical Research Center (USAF) in the United States. Records listed the pilot as Lieutenant Billy B. Hollingshead of Baird, Texas. The gunner was identified as Staff Sergeant Leonard H. Tilder but there was nothing in the records to say where he came from.

Pennefather followed up this enquiry with a letter to the 'Officer-in-charge, Department of Police' or 'Sheriff's Office', Baird, Texas. He asked if anyone knew of relatives of Lt Hollingshead.

In the meantime the crew's remains were shipped to the US



Air Base at Tachikawa, Japan, where they were kept until March 1974, awaiting the arrival of identification specialists. The US Army did not contact the Hollingshead family until identity had been positively established at the end of that month.

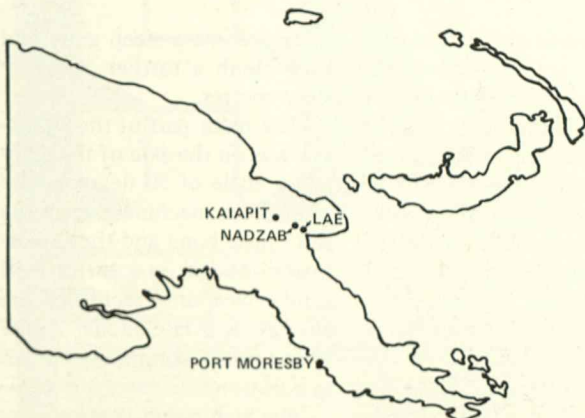
It turned out that the wife of Baird's sheriff had been a schoolmate of the Hollingshead brothers. She forwarded Pennefather's letter to Billy's elder brother, Fayne, in Abilene. He found the stunning message in his mailbox one evening in August 1973.

With his eldest brother, Olaf, he tried to get some positive news with the help of a neigh-

bour and friend, a retired lieutenant-colonel. But they could get nothing and for seven months they waited, wondered and hoped.

Their parents had died many years earlier (mother in 1950, father in 1965), both hoping to their last days that Billy would be found or at least his remains returned.

Billy Hollingshead was born at Potosi on April 15, 1921, the youngest of the family. The Hollingsheads moved to Baird when he was a year old. Billy was remembered as a sweet little guy who used to skip class and then be found playing an old piano in the school auditorium. He graduated from Baird High





School in 1939 and went immediately to North Texas State Teachers College to study music. A promising pianist, he played concerts in his area and planned a career in classical music. As a youth he had a programme of popular music on the local radio station, KRBC. His theme song was 'Dipsy Doodle'. He was in his third year at North Texas when Pearl Harbour brought the United States into the war.

Although Billy already held a pilot's licence and could have joined the Border Patrol between Texas and Mexico, he chose to volunteer immediately and began training as an Army Air Corps cadet in January

1942. He was commissioned and won his wings at Brooks Field on September 6 the same year. After advanced training, Lt Hollingshead was transferred to the South Pacific in November 1943, flying his first combat mission on December 1.

He flew B-24s (four-engined bombers), P40 fighters and A20 Havocs. He won the Air Medal for a series of missions in the New Guinea area and the Silver Star in January 1944 when he deliberately placed himself in a dangerous position to help prevent Japanese interceptors from attacking an American force. He was wounded in this action and received the Purple Award.

Lt Hollingshead joined the

388th Squadron when it was formed at Hunters Field, Savannah, Georgia in October 1942. As a member of 312th Bomb Group, he was a popular entertainer with his expert piano playing.

Billy, a bachelor, was very fond of his two nephews, Neale and Kyle. On receiving his first new twin-propellor aircraft, he marked the occasion by painting their names on each of the engine cowls. He had a cigarette lighter on which he marked off the number of missions he had completed. He did not take it with him on his last flight and it was returned to his family with other personal belongings. They still have it today.

The 388th Squadron at that time was in three parts. Hollingshead was with the flight echelon at Nadzab, a previously vacated area on a flat kunai plain at the lower end of the Markham Valley, not far from Lae.

Hollingshead was on his 37th combat mission when he was killed. The flight was to be a raid over Yakumul near Wewak. At the time of the Havoc's loss, one or more of the squadron must have witnessed the crash because official records list the site in approximately the correct area — 'two miles east of Kaiapit'. A search in 1948 by the American Graves Registration Service was unsuccessful. The military informed the fam-



ilies that the plane and crew had been utterly destroyed by the bombs and fuel load. Subsequently this proved to be pure conjecture.

The military funeral for Lt Billy in 1974 was a simple one because complete services had been held at the memorial stone when he had originally been listed as lost. The six young soldiers who bore the coffin had not even been born when Billy had disappeared 35 years before.

Those who had known him — two brothers, their wives, a nephew and about 30 friends from Baird and Abilene — stood in the shade of an oak tree in Potosi cemetery, each lost in personal thought about the boy and man they knew so long ago.

The wind rustled through the branches of a small flowering peach tree at the foot of the grave as the honour guard plac-

ed the flag-draped coffin on the pedestal. To one side was the marker that had been in the family plot since 1944. The inscription was a quotation from Franklin D. Roosevelt:

He stands in the unbroken line of patriots who have dared to die that freedom might live. Freedom lives and through it he lives.

Beside the plot were the graves of Billy's parents. Nearby were those of his great-great-grandmother and many other relatives from both sides of the family.

After a brief service by Colonel Wayne Burke, former Dyess Air Force Base chaplain, a detail of seven soldiers fired three volleys. Then a lone bugler, standing under another old oak a few yards away, played taps. There were few tears. A member of the family explained: 'Our grief was 30

years ago. Now we're happy to have him home.'

David Pennefather has since left government service and now works with a private company at Lae. It was through his initiative that this mystery was solved. David explains that he has friends in Australia whose relative went missing in New Guinea during the Pacific War and is yet to be found. He says: 'I know what it would mean to them if he was found.'

This was not the first time Pennefather had helped American, Australian, New Zealand and Japanese authorities with aircraft wreckages, investigations and reports. Almost certainly it will not be his last. — Robert Kendal Piper is Historical Officer for Air with the Australian Department of Defence. ✿

David Pennefather at the grave of the pilot he found in the mountains.



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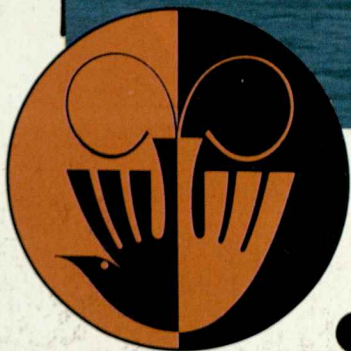
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DRAGONS

EVERYONE has heard of dragons. They figure prominently in Chinese legend and almost everyone in the English-speaking world recalls the exploits of Saint George and his quest to slay the mighty fire-breathing dragon.

There aren't any real fire-

Story and pictures
by Roy D. Mackay

breathing dragons today. Probably there never have been. But there are dragons by name – and several are to be found in Papua New Guinea.

Indonesia has the largest dragon in the world – the giant

lizard known as the Komodo dragon (*Varanus komodoensis*) which grows to about three metres in length. It is named after the islands on which it is found.

In Papua New Guinea we have a much longer dragon, the Salvadori dragon (*Varanus sal-*



Puff, the forest dragon distends its throat to warn off predators – but it's all show





vadori) which grows to four metres. However it is a slim animal and its tail takes up two-thirds of its length.

The Komodo dragon is a very heavily-built animal and is quite capable of attacking, killing and devouring a pig, whereas the Salvadori dragon – sometimes called the tree-climbing crocodile – eats birds, rats, small wallabies (*sikau*), bandicoots (*mumut*) and other small animals. It does hunt on the ground but more often lies in wait along a branch overhanging a game path, dropping onto any small passing animal.

'Dragon' conjures visions of highly aggressive fire-breathing monsters with smoke shooting from nostrils and wickedly-long claws. In fact, our dragons are timid animals which either keep perfectly still in the hope that they will not be noticed or they race away with surprising speed into vegetation where it is impossible to follow.

Other dragons in Papua New Guinea include several smaller versions of the Salvadori. The spotted monitor or goanna (*Varanus indicus*) grows to a little over two metres and is the animal whose skin is used on *kundu* drums. It is widely dis-

tributed in lowland areas of Papua New Guinea and on the coastal fringe of Cape York Peninsula and the Northern Territory of Australia.

There are four other species of these dragon lizards in Papua New Guinea – the sand monitor (*Varanus gouldi*), the spotted tree monitor (*Varanus timorensis*) the rare Karl Schmidt's monitor (*Varanus karlschmidtii*), and the beautifully-marked emerald monitor (*Varanus prasinus*) which is a slim tree-climber growing to nearly two metres and occurring in lowland rain-forest, palm forests and swamps of the Papua New Guinea mainland and the Torres Strait islands.

Lizards from another group also are called dragons. These are of the genus *Gonocephalus*, sometimes called angleheads but more often referred to as forest dragons.

The largest of these, the black-throated forest dragon (*Gonocephalus nigrigularis*) grows to almost a metre long. The smallest, the Papuan forest dragon (*Gonocephalus modestus*), is only about 30 centimetres long. A lovely mid-green colour with brown markings, the Papuan forest dragon can change its



Salvadori's dragon rests in the forest; inset from left: the rare Karl Schmidt's monitor; the delicate emerald monitor; Gould's monitor lives on the ground; right: Papua New Guinea's smallest, the Papua forest dragon





Mating monitors ride the Bensbach River; inset left: black-throated forest dragon; inset right: Boyd's forest dragon, a fearsomely inoffensive fellow



colour to the extent that the green will turn to brown, especially if it is lying on a brown tree branch where its green might easily be noticed.

A characteristic of forest dragons is a crest of enlarged scales of varying size in a line from the back of the head down toward the tail. In some species the crest runs right to the tail.

This ornamentation reaches its most bizarre development in Australia's Boyd's forest dragon (*Gonocephalus boydii*). Not only is the crest along the back more elaborate but there is also a crest which drops down from the throat.

Papua New Guinea's dragons are not as terrifying as those of legend. For instance, they are not poisonous as are many mythical dragons. The only poisonous dragons alive today are two very closely-related lizards – the gila (pronounced *haila*) monster (*Heloderma suspectum*), and the Mexican bearded lizard (*Heloderma horridum*) – which are found in southern and western United States and in Mexico.

Our dragons are not aggressive unless deliberately molested. Then they may use their sharp claws and strong jaws. The Salvadori dragon also uses its long tail as a whip to keep attackers at bay.

Dragons, in fact, can become quite tame. I had a two metre Salvadori in my backyard zoo in Port Moresby. My wife and I let it loose around the lawn while we were at home and we fed it dead chickens from the hand.

If you ever read the story of Sigurd slaying the horrible dragon Fafnir, just try to conjure up an image of a larger-than-life example of one of the dragons on these pages. – Roy D. Mackay is superintendent of Baiyer River Wildlife Sanctuary in Western Highlands Province. ♣



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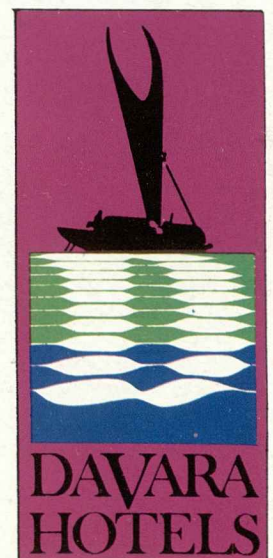
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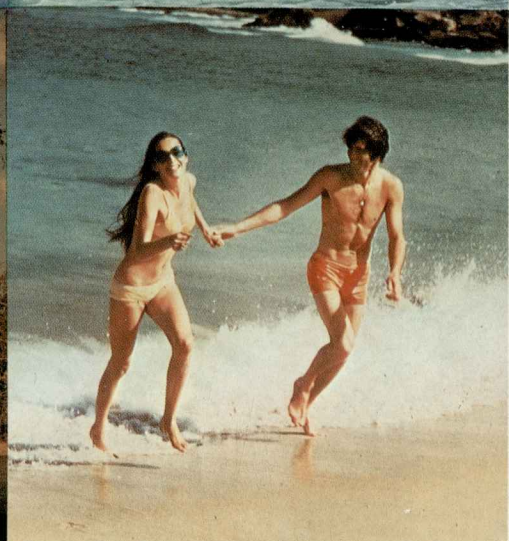
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