

paradise

in-flight with Air Niugini



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10th Anniversary
SPECIAL
ISSUE

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Quality in Air Transport

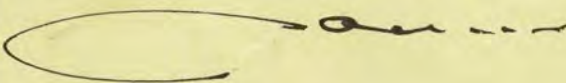
paradise

Welcome aboard

And welcome to this special issue of Paradise for a special occasion — Air Niugini's 10th birthday.

In terms of development, the airline has come a long way in that first decade. It has carried nearly five million passengers and has brought reliable air transport to the people of the Highlands, the Islands and the coastal Lowlands. More than half the 20 points to which Air Niugini flies within this country of challenging climate and terrain now have jet services; and the remainder are served by pressurised turbo-prop aircraft. The airline shifts not only the people but also their produce . . . full planeloads of vegetables, fruit, meat, general cargo . . . When drought lowered the Fly River and prevented the supply barges from feeding the giant Ok Tedi gold and copper project, Air Niugini provided a vital cargo lifeline.

Passing from quaint, but functional, DC-3 "Sidesaddles" to a jet domestic and international airline service has not been without bumps and turbulence. After an initial boom period, the airline dipped briefly into the red before recovering, only to experience two unprofitable and unsettling years, in 1979-80. In the extremely difficult conditions that afflicted the aviation industry worldwide, Air Niugini nonetheless regained profitability in 1981 and 1982. The economic environment is still tough, but I am confident that Air Niugini will achieve the goals of growth and a successful second decade.



J.J. Tauvasa

General Manager, Air Niugini



Above: Participant in the 1983 Highlands Show provides a striking study for the camera of Grant Nickels at Mount Hagen. Story and more pictures, page 45.

Cover: Aloft, a modern jet aircraft; below, a timeless village. An Air Niugini F28 photographed by John Devereux over a ridgetop settlement near Kwikila, south-east of Port Moresby, symbolises both advancement in Papua New Guinea and retention of traditional life.

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MELANESIA EXPLORED

Story and photos by John Devereux

PARADISE? The usual travel brochure stereotype is deserted white beaches, beckoning blue sea and swaying palms.

Yet how disappointing the difference between the glossy brochure and the reality can be. Often enough the beach is crowded, the sea filthy and the backdrop lined, not with swaying palms, but with high-rise hotels!

In despair you wonder if somewhere, just somewhere on earth there is a place where you can go to escape the crowds and the concrete. Well, there is!

In the Milne Bay Province of Papua New Guinea, just off the eastern tip of the mainland, there are myriad idyllic tropical islands. The amazing thing is that they have been known for centuries, discovered and charted over the years by exploring sea captains, and visited in turn by labour recruiters, traders and missionaries.

Yet nowadays these islands seem almost forgotten — it's as if the twentieth century has passed them by. Their inhabitants still live their traditional lifestyle, building their houses from natural materials and relying on their gardening and fishing skills for food.

Most of the islands are small and widely scattered. A few of the larger ones do have airstrips. However, for the tourist the only way to get to most of them is by sea. The *Melanesian Explorer* is a small purpose built cruise ship offering the only regular tours of these enchanting islands. Tours begin at either Alotau, capital of Milne Bay Province, or Madang on the north coast.

It's a splendid way to travel. The ship has all the amenities

of a modern hotel, with two bars, restaurant, lounge and sun-deck, comfortable cabins, plus a well-stocked library and video TV. Every trip is coordinated by an on-board cruise director, who also gives talks and shows films about the wildlife, culture and history of the various places along the route.

A swim before breakfast is *de rigeur*. Haul yourself dutifully out of bed and come on deck, bleary eyed . . . and there it is: paradise! Like a snapshot.

The ship is moored in a passage between two islands, sunlight slanting through the coconut palms out of an impossibly blue sky. A few dugout canoes, paddled by small boys, glide quietly along leaving scarcely a ripple on the water.

This really is paradise on earth.

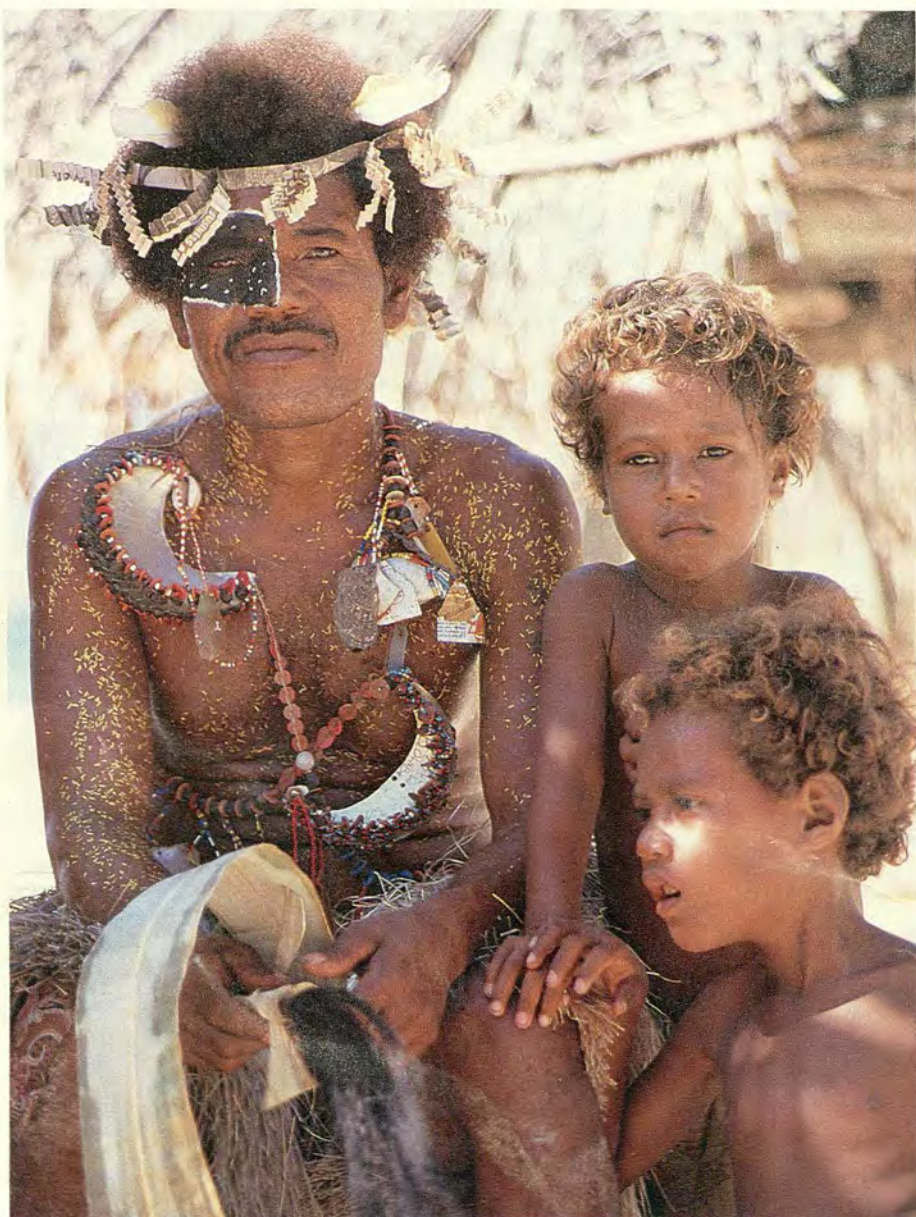
Breakfast never tasted so good as after that early morning swim. A speed boat provides the way to that gleaming white beach. A Robinson Crusoe path leads up through bush, thick forest, neatly-fenced food gardens of yam and banana, then . . . the village. Beautifully crafted thatched houses cluster in the shade of the Frangipani and Poinciana trees.

Villagers have as much curiosity as visitors. They love to gather around and have a chat. And they are more than willing to trade their carvings and possessions for cigarettes or chocolates or anything you can offer. (If you have an instant print camera, you will win friends for life!)

Sunbathing, snorkelling, enjoying a superb lunch while cruising . . .

No two islands are the same. Some are low-lying coral atolls, whose inhabitants specialise in





Top right: a bigman of Yanaba Village proudly shows off his Bagi shell jewellery. The style of the face painting — with only part of the face covered — is typical of the Milne Bay islands, though each island has its own variations on the theme; **top left:** carrying the groceries was never this graceful — but then this is Paradise; **below right:** Yanaba village in its idyllic shoreline setting; **below left:** villagers perform an impromptu singsing for the benefit of the visitors from the ship.

THE AMPHLETT ISLANDS



Left and top: a traditional Kula trading canoe sets sail on a voyage to the next island group; **centre:** a village nestling on the shoreline beneath the steep, thickly wooded slopes. Originally volcanic, the Amphletts contrast with the low lying coral atolls that form the landscape of neighbouring islands.

growing food crops. Others are steep-sided volcanic islands, where gardening space is limited and the local people make clay pots to trade with other islands for food.

All the islands in the area are bonded together through an elaborate trading ritual known as the *kula* ring. In this trade, near-sacred objects — mostly ornamental shell necklaces, or *bagi* — change hands among trading partners of the various islands according to set patterns. The islanders have a great voyaging tradition and fortunately it is still kept alive.

Members of the ship's crew come from various coastal and island places along the route. Each is an expert in his own way and can provide a fascinating first-hand insight into the life and traditions of the people encountered.

The voyage itinerary is flexible. Although there is a basic plan, this is inevitably subject to slight changes according to sea conditions or local events. If there happens to be a *singsing* planned to take place on an island not normally on the itinerary, the cruise can be adapted to include this particular event.

Major *singsings* on the Trobriand Islands, in particular, are



spectacular — definitely not to be missed.

Unscheduled events can occur. On one cruise, the ship was delayed and there was no alternative but to drop anchor and wait while things were sorted out. This didn't spoil things for the passengers in any way, however. In fact, it made their day!

On the horizon was a small island, and it was decided to set out in the speedboat to explore it. It was completely deserted! In no time a fire was lit and the passengers were cracking coconuts and having the time of their lives. The sea was warm and the water unbelievably clear, providing memorable viewing of multi-coloured corals, spectacular canyons and drop-offs.

As evening approached, a shout of "ship ahoy" signalled the return of the *Melanesian Explorer*, now ready to move on.

The day spent as castaways on a desert island was the highlight of the trip. 🍹



Far left: the *Melanesian Explorer* in glistening waters at anchor off Kaibola beach, Kiriwina Island. The name 'Trobriand' refers to the group of islands, Kiriwina being the largest and best known; **left:** The Trobrianders are sometimes called the islands of love: these lovelies, and the gently swaying movements of their dance, are guaranteed to have visitors entranced.

Above: the snake dance — the most spectacular singing along the entire voyage. Many hours of careful work go into the preparation of the 'make up' and headgear; **left:** a flotilla of small canoes returning to Kaibola after a day's fishing.

GAWA ISLAND

Right: at sunset a group of boys paddle their canoe up to the *Melanesian Explorer* for a closer look; **below:** a tiny hillside village in lush tropical setting; **bottom left:** passengers take time off with the local children to enjoy a swim in this delightful spot; **bottom right:** islands like Gawa get few visitors, so you're assured of a warm welcome.



KITAVA ISLAND

Below: giggling pupils gaze out from the local community school; **bottom:** a Kitavan model canoe perched atop its beaming owner. Artifacts can either be purchased for cash, or traded for goods. It's well worthwhile taking a small stock of things along with you for this purpose.



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By Loujaya Kouza

LIFE IN TAPESTRY

WHEN Graeme Ross first came to Papua New Guinea in early 1961, as a primary school teacher at a boarding school on the north coast of Manus, he was a man with nothing to do in his spare time. It did not stay that way.

"I had a large piece of hessian — the wrapping from my kitchen table — and managed to buy some 'boi wool', as it was referred to in those days.... small hunks of brightly coloured wools used to make fringes on home-made pandanus mats. With an ordinary sewing needle I made a mask for the wall. This was followed by a similar piece that was stretched over a piece of plywood as a coffee table."

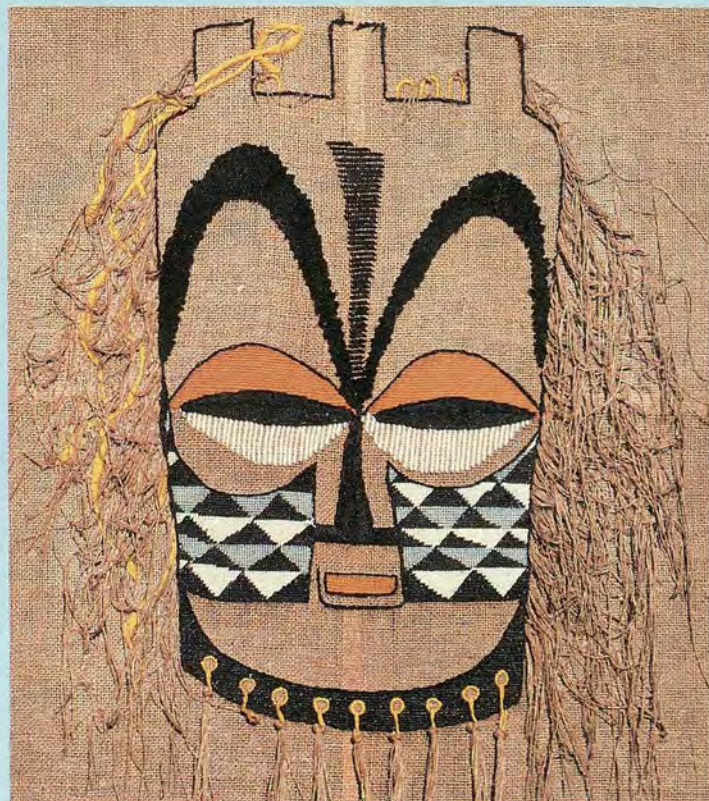
Graeme Ross' leisure time hobby, born of boredom, was revived when he moved to Port Moresby in 1967. Various threads or yarns were available in Port Moresby trade stores, but the range was still very limited.

"If I wanted red it was possible to perhaps buy one shade of red; if not, an orange or purple would have to do."

The materials he used were still makeshift. The only suitable backing he could find to work on was fly screen, and it was with an oddment of threads and insect screen that he worked until visiting Melbourne in January last year.

"That is when I came across the genuine canvas and Australian wool from Semco, a company based in Melbourne, which I now use as they are now going into more exacting shades," he said.

"Tapestry, with its choice of colours and subject matter, is more or less a matter of experi-



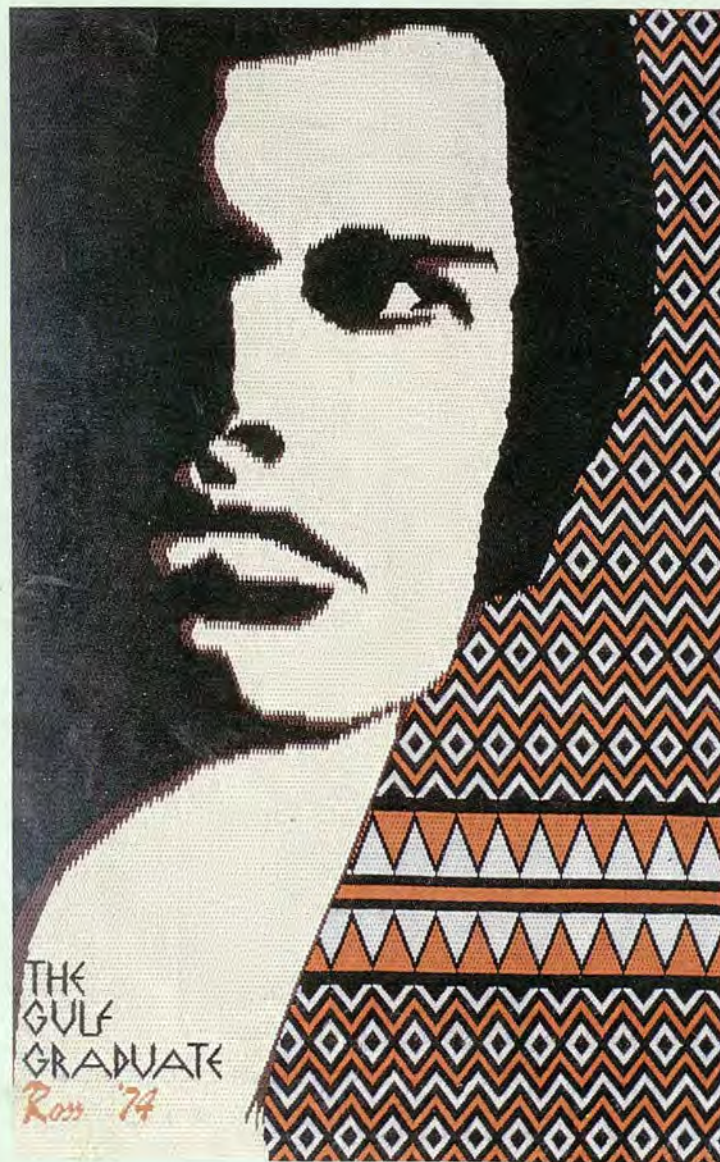
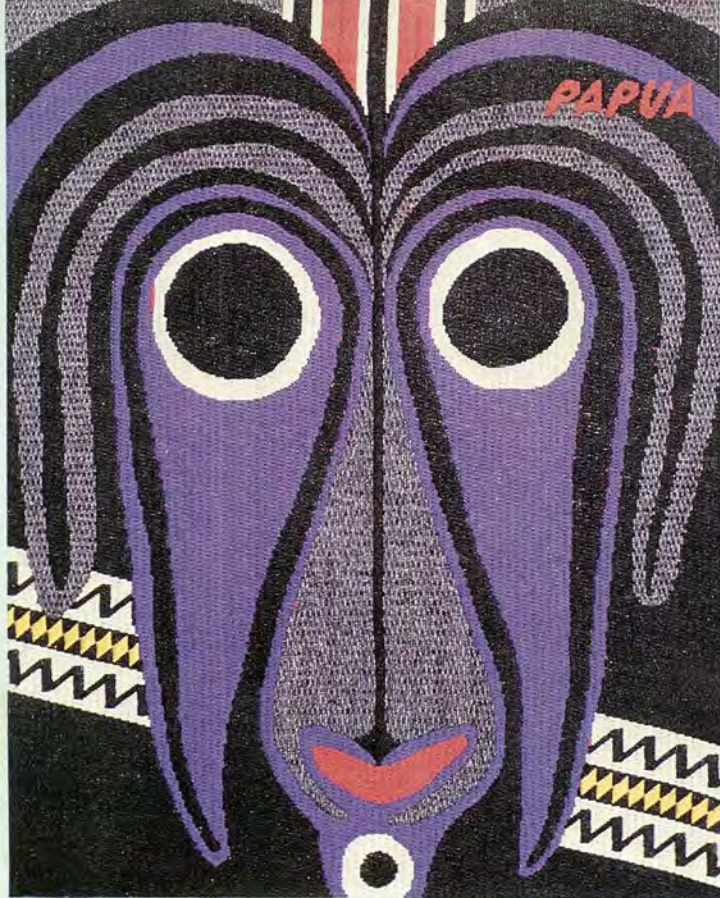
menting as you go along. All my tapestries are original. I draw my own pictures, my ideas coming from the things I've seen or just out of my head."

Most of his tapestries are made on a smaller mesh, about 144 stitches to the square inch. In addition to Papua New Guinea designs, he has one based on a frieze from the tomb of King Darius the Mede, another from a poster of the last century and the head of a bird of paradise, taken from an earlier edition of *Paradise*.

"I've done more than a million stitches since the beginning of 1982. I put up to 18 hours a day at weekends into my work and I don't get time for anything else except tapestry. One of my tapestries took five months to complete. Another, featuring a Chinese dragon, consisted of only 207 stitches."

"There are a few folk who have shown interest. We usually spend our lunch time working on plain white canvas with me being the 'bunny' who has had to draw all designs with felt tip marking pens (in black). This is okay for me as I know what should go where, but not at all easy for the beginners. He adds: "One thing I find about Papua New Guineans is that they lack the patience required. Many have started off but few have continued."

Graeme Ross had a serious car accident in 1978 and was hospitalised at the Port Moresby General Hospital. There he was able to complete a lot of traditional art with wood tools, and paint and hold a one-man exhibition, which was opened by Lady Rachael Cleland. The exhibition proved successful.



The show was a sell-out.

He brightens at the prospect of his November exhibition. "I've been thinking seriously about exhibiting my work in Honolulu. A lecturer friend of mine who lives there stated after seeing one of my tapestries that she had not seen anything like them and was sure people in Hawaii would be equally delighted to see them. The idea, however, is tentative."

Each and every one of his works to date has been original or close to it . . . things that he particularly likes and would like to live with . . . a frieze from an ancient tomb, a poster from the last century, an animal study . . . and as they were, they were rolled up and stored in a camphor-wood chest, only to be brought out when people came to see them.

Graeme reflects on his 22 years in Papua New Guinea. After completing his term with the Education Department in 1977 — following his one-man show at what is now known as Studio Y — he lived on commercial art until opening up the art department for a Port Moresby printing company. From there he moved to Elcom (Electricity Commission) to take up the position of public relations officer, a job he retains today. The future is anybody's guess, but for certain there are many thousands of stitches to be put on canvas as the ideas keep rolling in. ☺

Graeme Ross will be exhibiting 25 of his tapestries at the National Art Gallery in Port Moresby in late November

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WINNING WOMEN

Story and photos by
Paul Malarski

JEAN Kekedo is Papua New Guinea's first ombudsman and is a classic example of a woman who started her way at the bottom and, through sheer hard work and ability, worked her way to the top.

After gaining a Bachelor of Arts degree in social work at Adelaide University from 1970-72, she returned to Papua New Guinea to start work in the public service as a class 1 clerk.

She was then appointed deputy head of the Prime Minister's Department and worked with both Michael Somare and Sir Julius Chan.

"I realised that was the highest I could get in the Prime Minister's Department. No matter how good I was, I would never become head because they expected a man to be head," she avers.

Last year she was appointed for a three-year term as one of the country's three ombudsmen, and earlier this year she was awarded the OBE.

"I didn't want to accept it," she admits. "I'm not a royalist, but I accepted it through respect more than anything else."

Jean attributes her success in life to her parents.

"Much of what I've gained has been because of the push behind the scene by my parents, and that makes a lot of difference. The home environment is very important but this is forgotten a lot in modern society. The school room cannot teach you everything. You can go to a ghetto school or a grammar school but if your parents don't support you, then you'll never get anywhere."

As ombudsman she is very aware of the many barriers con-

Papua New Guinea women have come a long way in a very short time. Driven by a relentless desire to succeed in a traditionally male dominated society, women are now playing an increasingly important role in today's workforce. Talk to women at the top and you'll get a good idea of how difficult things can be for an ambitious woman. They've had to overcome all sorts of obstacles — prejudice, limited opportunities and the traditional argument that a woman's place is in the home.



fronting women.

"There's still a lot of discrimination against women today although it's not very obvious. People are very cautious.

"But today's women are very lucky. I was one of the first

women to break the ice. After that things have become a lot easier. Women are having a lot more to say than they ever did but there's still a lot of tokenism about," she adds.

Jean is unsure about her fu-

ture as an ombudsman.

"I don't expect to be reappointed. I wouldn't kick up a fuss. It's not my career. I have always been a public servant and my best times have been in the public service."

JOSEPHINE Abaijah is widely regarded as the pioneer of womens' politics in Papua New Guinea.

She is the founder and leader

of the Papua Besena Movement — a spiritual group aimed at the unification of Papuans — and was the first woman ever to be elected to the parliament.

She scored a landslide victory in 1972 in the Central Province seat, successfully held the seat in 1977, but lost it last year.

"I wasn't disappointed. That's what politics is all about — one day you're in the next day you're out."

Josephine attributes her



IN last year's Papua New Guinea elections, only 17 of the 1125 candidates were women. And the only woman to succeed was Manus Open candidate Nahau Rooney.

Nahau typifies the new, bold approach of Papua New Guinea women today and she has served as an inspiration to women throughout the country striving to get to the top in their chosen career.

In the six years she has been in Parliament she has stamped herself as one of the most outspoken and controversial politicians in the country. Now she is confident more women will pursue politics as a career in the future.

"Up until now women have seen themselves as housekeepers. I'm sure it's only a matter of time before we see women move from the more traditional jobs such as teachers, secretaries and nurses into politics.

"It's not easy in an area where the jobs have always been held by men.

"I think one day you will see a woman Prime Minister in Papua New Guinea — but probably not in my time."

Nahau's recipe for success is simple: "You don't get anywhere unless you stand up and fight for yourself".

Mrs Rooney was first elected to Parliament in 1977 as the member for Manus Open, and created history by becoming the first female cabinet minister in Papua New Guinea when she was awarded the Correctional Services and Justice portfolios.

She was the centre of a remarkable controversy in 1980 when she was jailed for one day for contempt of court.

As Minister for Justice she wrote to the Chief Justice of Papua New Guinea appealing to judges to have a better understanding of Papua New Guinea ways.

Her action was judged to be contempt of court and she was jailed only to be released a day later on the orders of the Prime Minister, Michael Somare.

"sense of adventure" to leading her into the political arena.

"When I first entered politics I had a hard time because men wouldn't accept me.

"There's a tradition that women are supposed to be left in the home, but I think the cycle is being broken. More women are taking their places beside the men."

In recent years she has dedicated much of her time to writing. During 1979 and 1980 she spent 18 months in Sydney writing a book entitled "1000 Coloured Dreams".

It has yet to be published but is a love story based on her philosophies of Papua. A Singapore publisher has shown interest in the book and it may be released soon. She has also written another unpublished book — "Health and Modern Living for Girls."

Josephine is uncertain about her future in politics.

"There is a possibility that I will stand again in the next election in 1987, but I don't know where."

"Politics can be hard," she she admits, "but I never saw it that way. I was determined to get in. If you want to get anywhere you have to work hard at it. That's how I got where I am.

"I couldn't term it rough. It was an experience. I didn't find being a woman was a disadvantage. A lot of politicians were new in 1977. I didn't feel they were better than me because we were all learning together."

Married, and with four children, Nahau admits that raising a family and combining a successful career has been difficult.

"During my absences from Manus I leave my children in the care of relatives. I am thankful for the extended family in Papua New Guinea.

"Politics takes up most of my time. It's like being a doctor — you can't turn people away."



WINIFRED Kamit is another who believes that parents are instrumental in the success or failure of a woman. Winifred was Public Service Commissioner from 1980-82 and headed a staff of more than 43,000 people.

"The changes must come from the lowest level of people. The parents' attitude is very important. We need parents to encourage their daughters.

"I have a lot of respect for women in positions of power. Some men don't take it easy working with women in positions of power. One of the worrying things while I was commissioner was that men weren't as aggressive as I expected them to be.

"A lot of people were taken aback, not only because I was a woman but also because I was young. I was 27 at the time of my appointment. There was a

lot of animosity at the time.

"But thankfully things have changed a lot. Ten years ago women couldn't be permanent public servants and they were not entitled to superannuation," she said.

Women like Nahau Rooney, Josephine Abaijah, Jean Keke-do and Winifred Kamit have undoubtedly had something to do with the change in outlook.

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IN MOST cases, independence is the stimulus towards the formation of the country's own airline. In the case of Papua New Guinea, the airline came before independence.

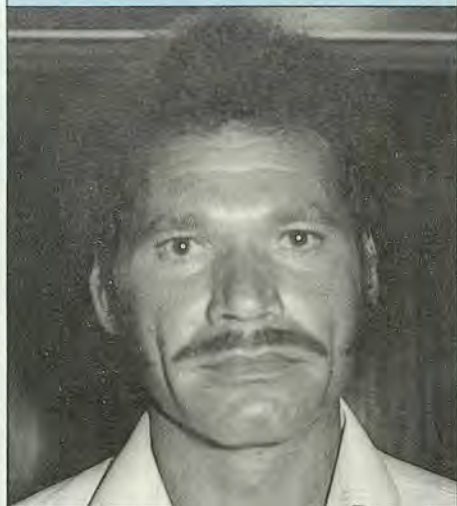
The formation of Papua New Guinea's own national airline was discussed more than two years before independence by a task force of seven men, headed by Mr. Tony Voutas, of the Australian Government's foreign aid section. Paul Pora, subsequently became the first chairman of the airline's "board", the National Airline Commission.

The early part of 1973 was spent in planning the takeover from TAA and Ansett internal services, the setting of ground rules for the ownership of Air Niugini and, more importantly, the establishment of Papua New Guinea government ownership by an equity purchased in the airline through Australian government financing. The initial shareholders were:

PNG Government	60%
QANTAS	12%
TAA	12%
ANSETT	16%

The figures remained much the same till 1977 when the PNG government bought out QANTAS and TAA's shares,

The early years

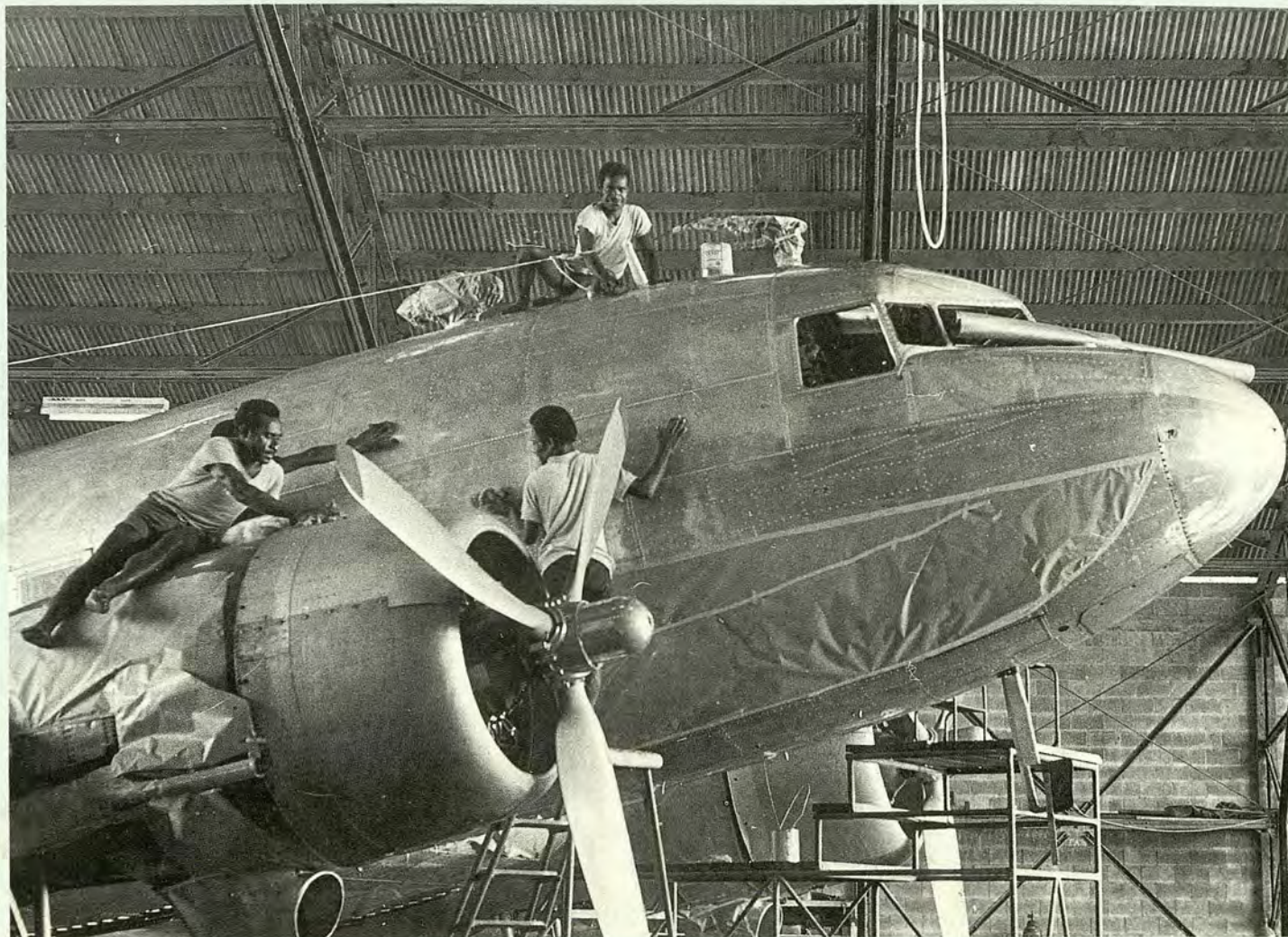


bringing its ownership share to 84%, with Ansett retaining 16%. (The government purchased the remaining Ansett holding in 1981.)

By the middle of 1973, plans for a nationally-owned airline were well underway and recruitment and training of aircrew commenced with TAA. By mid-September, preparation of a DC3, the first aircraft to be painted in Air Niugini colours, was completed in Lae. Two months later, on November 1 of the same year, Air Niugini operations officially commenced with a 20 aircraft fleet of eight F27s and twelve DC3s. The then Chief Minister, Mr. Michael Somare, cut the ribbon at Jacksons Airport and the first F27 service, PX100 to Lae-Rabaul-Kieta, was dispatched.

".....I believe Air Niugini will be more than just an airline — a means of communication," said the Chief Minister. "Airline travel has always been, and will continue to be, a major unifying force within our country."

"The aircraft has flown over geographical barriers that previously left our people isolated from each other. It has brought together the people of the islands and highlands. It has helped to create a united Papua New Guinea, far more than all the



DC3 is masked-up, ready for decoration in Bird of Paradise livery as part of Air Niugini's first fleet; top: first chairman Paul Pora.

words of our politicians...

"Because of this I believe it is fitting that when we enter self government we will do so with our own airline. I wish to convey to the General Manager, Mr. Ralph Conley, and his staff throughout Papua New Guinea, the government's faith in the future of Air Niugini...."

With those words, Air Niugini launched into its first year of operation carrying 350,000 passengers - 85,000 more than the taskforce had forecast and more than the number carried in the previous year by TAA and Ansett combined. Within that year alone, Air Niugini's fleet of F27 and DC3 aircraft flew more than 27,000 hours; some 5,000 more than was expected.

This record humbled the critics who had warned that not enough time had been allowed for planning the airline. Indeed, the critics had scoffed, the new airline's general manager had been appointed just three months before Air Niugini's operations started. They argued that it would take years to organise one national carrier from the operations of the airlines that served Papua New Guinea before Air Niugini. Encouraged by the industry critics, some sections of the

public predicted that the new airline would flop.

But Air Niugini's staff, still dressed in their TAA and Ansett uniforms, busily set about dealing with the pre-Christmas traffic.

Mr. Brian Incoll, one-time traffic systems supervisor, now stations support manager, recalls the first days of Air Niugini.

"The airline went through a lot of phases with the systems changing from Ansett and TAA. There used to be lot of animosity between the two airlines over whose system was better", he says.

"We used to have two terminals, international operated by TAA at what is now the arrival hall for international passengers, and domestic operated by Ansett at what is now the operations area. All the formalities, that is customs and so on, were done in the middle."

The airport building, needless to say, has had several changes. Initially, Port Moresby was an Ansett headquarters, and its hangar was based at Jacksons Airport, TAA had Lae as its headquarters and engineering base, while Ansett had a secondary engineering base in Madang.

"Schedules of TAA and Ansett revol-

ed around mid-day connections to and from Australia. Some would leave Port Moresby and overnight in the outports. Passengers would sit on the ground until inbound passengers who came from Australia were cleared through Customs before boarding the flight back to Australia," Mr. Incoll relates.

Mrs. Vyvian Robinson, who was Hostess Supervisor (now a training liaison officer with Air Niugini) relates her experience with the first batch of pioneer hostesses:

"The first thing I had to do when I took over as hostess supervisor with Air Niugini in November 1973 - I was with Ansett before - was to mould Ansett and TAA girls to form the basis of the Air Niugini cabin crew.

"Although I had far too few staff, the ones I worked with had been well trained and most of them knew each other pretty well because they had met in various places in PNG.

"But one of the first problems we had was that the F27 aircraft operated by Ansett had the buffet forward of the cabin. The ones operated by TAA had the buffet aft of the passenger cabin. So on day one we rostered one flight hostess



Far left: historic moment as then Chief Minister Michael Somare cuts the ribbon for the first flight on November 1, 1973; **left:** Air Niugini DC3 in flight from Jacksons Airport, Port Moresby; **above:** first General Manager Ralph Conley.

who was an ex-Ansett and another an ex-TAA together, so that whichever aircraft they were on one could show the other where everything was and help work the service from a different angle.

"One funny situation arose at Wewak when, on one of our flights, the hostess refused to open the door after a flight, stating that it was the traffic officer's responsibility. The poor passengers had to spend 15 minutes in a hot aircraft until the port supervisor sorted out the problem and opened the door.

"As we had difficulty in the early days

finding girls who were of an acceptable educational standard, and whose parents were prepared to let them take on this unusual job, it meant that the few girls we did have had to work extremely hard. One girl actually worked 119 hours in a fortnight. Because of the enthusiasm for the new airline, the girls worked hard and well.

"It's rewarding to note that there are still quite a few of those hardworking ladies on our Boeing services," says Mrs. Robinson.

Under the management of Ralph

Conley, who had 26 years experience with TAA, seven years of it in the New Guinea area. Air Niugini saw a major change in the pattern of service in Papua New Guinea. The schedules, geared to connections for flights to and from Brisbane, were reshaped more to internal needs, with a more even distribution throughout the day.

The Christmas period of 1973 did, in fact prove disastrous, but only because there were insufficient aircraft to cope with the demand. It was determined that this would not recur the following year. And so in December 1974, Air Niugini contributed another "first" to aviation in Papua New Guinea when the airline made a 30 day evaluation of a Japanese YS-11A aircraft, a 64 seat turbo-prop. The aircraft relieved the heavy Christmas service demand and, in turn, Air Niugini made a profit at the end of its first calendar year of operation.

Most significantly, it occurred at a time when some of the world's major airlines were in financial difficulties, owing to inflation and fuel costs.



Late-afternoon lineup of DC3s, one still in TAA livery, at Jacksons; **below:** Japanese YS-11 under charter and evaluation by Air Niugini.



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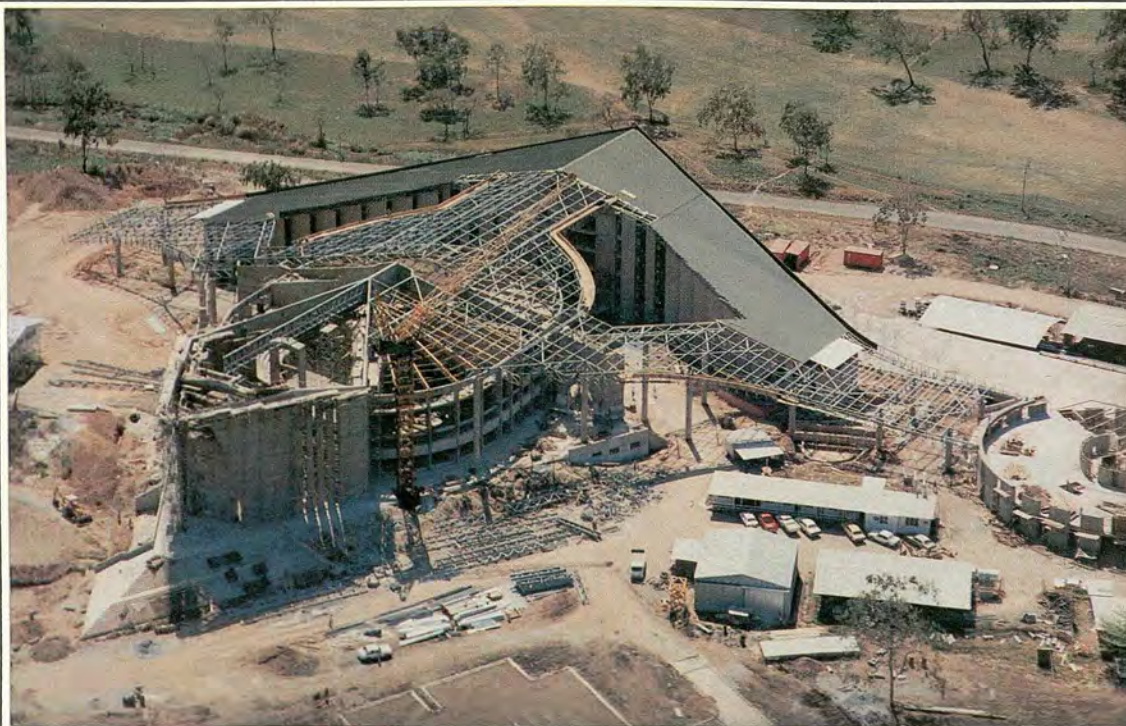
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Period of growth

Although timetables had been revised to achieve the greatest possible utilisation of aircraft and to provide greater frequency of services on many routes, the airline's capability was still limited by the number of aircraft available.

Mr. Doug Cumming, capacity control supervisor at that time, relates: "I had to keep a check on where to put in extra flights or cut back on flights, according to demand. We more or less had to keep surveying the future demands of our loadings and were working 100 per cent flat out."

After lengthy discussions and negotiations, Air Niugini succeeded in obtaining two more F27 Fokker Friendships from a Japanese airline after 12 months of operation, making the F27 fleet 10; the first of these scheduled for service in December and the second in February the following year. The new aircraft made possible the introduction of additional capacity on certain routes.

In May 1975, a DC3 "Tourliner" entered service with Air Niugini, allowing the F27s to operate the Port Moresby-Honiara service on behalf of Air Pacific in June of that same year.

As the need for additional aircraft to

cater for international ports grew, Air Niugini began wet-leasing Boeing 727s from Ansett and TAA for services to Brisbane, and it wet-leased a Boeing 707 from Qantas for a weekly service to Manila and Hong Kong. Air Niugini ran its own F27 service to Cairns.

In February of 1976, the leased Qantas 707 was replaced by a Tempair Boeing 720B to service the Brisbane and Manila routes. The Tempair Boeing 720B fanjet, painted in the colours of Air Niugini and flown by Tempair flight crew, operated a six times a week service between Port Moresby and Brisbane and a weekly sector from Port Moresby to Manila.

Initially worth 1.25 million pounds sterling the Air Niugini contract was won in the face of intense competition from other major carriers in the area, and called for the provision of the aircraft flight deck and cabin crew, as well as engineering services.

The conception of international operations and the need for expansion had been pursued by Mr. Ralph Conley, the first General Manager, fulfilling the governments desire to show the Papua New

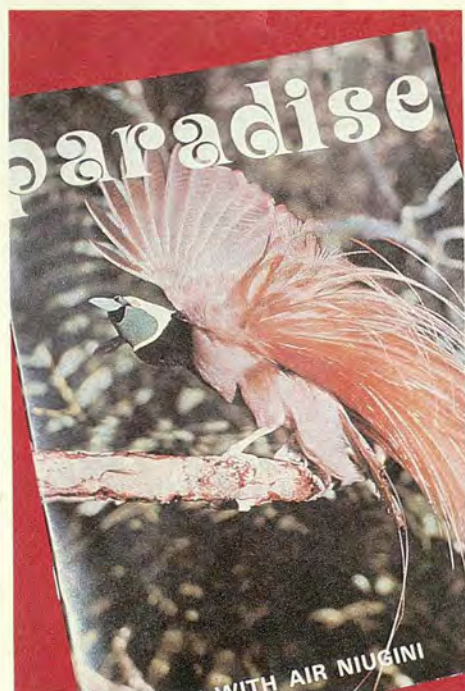
Guinea flag on the international scene.

In March 1976, Mr. Brian Grey succeeded Mr. Conley as General Manager and then followed three years of rapid expansion. During this period, arrangements were made to purchase a total of four Fokker F28 pure-jet aircraft and to acquire a second Boeing. Sydney was added to the Australian routes and services to Hong Kong and to Kagoshima, in Japan, were planned.

The month of May saw the sale of a DC3 passenger aircraft to Masling Aviation in Australia for K40,000 and purchase plans for four Fokker F27 aircraft, previously leased from Ansett Airlines, for K1,638,000. In addition, plans were made for the construction of the building now known as Air Niugini House, at Jacksons Airport.

The situation within the airline was not all work and no play. In the midst of all the activity, Air Niugini's social club organised a DC3 charter to Thursday Island for 24 hours. Mr. Ron Ryan, head office accountant, recalls the outing: "We left Port Moresby on a Saturday morning and returned the following day. On flying over, we had to circle Horn Island so customs





could come out by boat from Thursday Island. After landing on Horn Island and getting cleared through customs we were ferried across on a boat to Thursday Island. The boat fare was pretty expensive but that was the only way we could get across. As it turned out, there was a ball on that night. And as most of the Air Niugini guys were single, we had a great time."

The months that followed were spent in opening new services, leasing aircraft and preparing for the launching of Air Niugini's in-flight magazine.

Paradise has since then been produced every two months and all the typesetting, layout, artwork and editorial preparation is done at Air Niugini House. Only the colour separations and printing are done in Hong Kong. Paradise began with a circulation of about 25,000. It has since grown from strength to strength and now has a circulation of 50,000 — numbers of its readers are paying subscribers from all over the world.

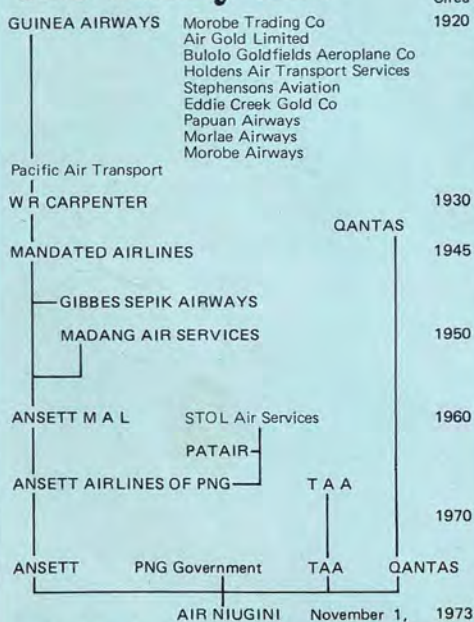
By December 1976, the Papua New Guinea government had bought out TAA and Qantas shares in the airline. The then Minister for Transport, Works and Supply, Mr. (now Sir) Bruce Jephcott, expressed his appreciation for the efforts made during the period by management and staff of Air Niugini during that year. In particular, he referred to:

- * The purchase of a Boeing 707 338C aircraft from Qantas;
- * The purchase of 4 (previously leased) Friendship F-27 aircraft from Ansett Airlines of Australia;
- * Amalgamation of the engineering bases in Port Moresby with resultant closure of the Lae workshops;
- * The start of construction of a new

K1.2 million administration complex in Port Moresby.

- * Construction of a K150,000 cargo terminal at Port Moresby Airport;
- * Negotiation of airframe and overhaul contracts valued at K3 million which would stabilise engineering activities for the next three years;
- * The installation of a leased K250,000 ICL 2903 computer;
- * Negotiation of traffic rights to Sydney, Hong Kong and Japan;
- * The installation of computer visual display unit equipment in the Brisbane and Sydney offices for K40,000;
- * Reconstruction of Port Moresby passenger terminal to provide more efficient passenger handling, including mechanised luggage conveyors for K70,000;
- * The introduction of modern tarmac equipment in the form of aircraft air conditioning and ground power units at a value of K105,000;
- * The commencement with roadworks of a K4.5 million housing estate at Korobosea, and the acquisition of Qantas and TAA shareholding in Air Niugini for the sum of K967,000.

The family tree



While Air Niugini as an independent entity is now 10 years old, its genesis can be traced back more than 60 years. Its lineage includes some famous names and a storybook full of adventure and achievement.

Pioneers who opened up the country's mountainous hinterland followed the trails blazed by the aeroplane. Gold miners, who created much of the early development, were able to exploit the earth's lode because the early air companies flew world record-making cargo lifts ... dredges, vehicles, even a township ... bit by bit.

From these rugged beginnings, and the hardy efforts of successive aviation enterprises, Air Niugini was born on November 1, 1973. It is well bred for its role as the national carrier.



Top left: an in-flight magazine is born. First issue of *Paradise* featured the airline's symbol on cover; **below:** the Boeing 720B leased from Tempair, which operated in Air Niugini colours to Brisbane and Manila.

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Come with us!

Exit DC3; enter F28

The DC3s were withdrawn from service on July 31, 1977 — except for one, which was mounted outside Air Niugini House in honour of Captain Larry Blackman.

Larry Blackman first flew a C47, the military version of the Douglas DC3, nearly 40 years previously and when he retired had flown 17,000 hours in this type of aircraft. He joined the RAAF in 1937 at the age of 18 and flew in Burma, Singapore and in Europe during the Second World War. After the war he flew on the Berlin Airlift carrying supplies into that devastated city.

Returning to Australia, he left the Air Force and joined TAA in 1951, flying DC3s in Queensland before being posted to PNG in 1960, where he flew for 19 years, firstly with TAA and later with Air Niugini, until he retired with a total of 23,000 flying hours during his career.

To ensure that Captain Blackman and his contribution to civil aviation was not forgotten, the DC3, an aircraft which he flew so often and now mounted outside Air Niugini House at Jacksons Airport, was named in his honour at a ceremony on Tuesday, October 6, 1981.

Captain Larry Blackman had passed away in Australia on September 18 that year just two years after his retirement from Air Niugini. At his own request, his ashes were flown from Australia and strewn over Rabaul harbour from an aircraft.

Possibly the best remembered DC3s in in Papua New Guinea are the "Sidesaddles", inherited from TAA and Ansett.

The DC3 "Sidesaddle" got its name from the way its seats were arranged: Sixteen seats on each side of the aircraft with passengers facing each other, their luggage placed under the seat or lined together and strapped down the aisle.

Mr. Brian Pickering, now on Air Niugini marketing staff but at one time a purser on the "Sidesaddle", recalls serving morning tea on the floor in the cockpit or preparing a smorgasbord lunch while sitting on a hot water urn. There were no heating facilities on board so if the hot water placed in the urn turned cold, everyone had to settle for iced coffee on the return from points such as Jayapura.

The DC3 "Sidesaddle" was an early version of today's "quick change" aircraft. The seats could be folded away and the aircraft used for cargo. Seat belts were stowed together in the toilet until needed for the seats.

One of his more memorable flights was with Captain Blackman: "We were



AIR NIUGINI

TAA 'SUNBIRD' FLIGHT LOG
SAVE BILONG DISPELA FLAI

CAPTAIN KEPTEN B. Rogers

FIRST OFFICER FES OFISA A. C. P. P. P.

HOSTESSES Mrs. B. Pickering

ISSUES BILONG BALUS

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HEIGHT ABOVE SEA LEVEL 7500 FEET

ARRIVING Wewak AIRPORT AT PLES BALUS LONG

WEATHER AT DESTINATION FINE

DATE 10 Jan 76 CAPTAIN KEPTEN P. P. P.

ADVANCE WATCHES HLE TO 6.30

WE WILL PASS NITABO AT 0920

PLEASE PASS ON

SALIM I GO



Top: left, the DC3 named after Larry Blackman and mounted on display at Air Niugini House. Right, one of the F28s that brought jet service to much of Papua New Guinea; left: early flight log for Qantas sector from Jayapura operated by Air Niugini bore signs of TAA heritage; right: purser Brian Pickering and hostess Mary Maragum lay out smorgasbord on spare seats in DC3 "Sidesaddle."

on the last leg of our Minj-Banz-Baiyer River-Goroka-Lae trip. On the flight to Goroka we had a brood of chickens in the toilet. At Goroka someone else decided to bring a live turkey into the aircraft. We couldn't allow that but we had a Kellogg's Cornflakes carton. Anyway we finally allowed the turkey on board, and all the way to Lae we had chickens clucking in the toilet, and a squawking turkey in a cardboard box bumping around in the aisle. It was a flying zoo."

As the last of the DC3s was being phased out, a decision was being taken to acquire another type of aircraft that would equally develop into the workhorse of Air Niugini operations — the Fokker F28 Fellowship jet.

Air Niugini's first two F28 Mk 1000 aircraft were purchased from another Pacific airline, Air Nauru, at a total cost of K7.5 million, including about K1 million worth of spare parts.

The first of these jets, later to earn the nickname "pocket rocket", arrived on delivery from Melbourne on October 23, 1977, with Capt. Syd Goddard and Capt. Bob Millett at the controls. On the aircraft also was First Officer Aria Bouraga, the first Papua New Guinean to complete F28 training and attain endorsement on turbo-jet aircraft.

Five days later, Capt. Goddard and

First Officer Arne Rasmussen delivered the second F28, direct from Nauru. Capt Goddard, later to become Air Niugini's Director of Flight Operations, but then with Ansett-MMA in Western Australia, remained in Papua New Guinea for another six weeks in 1977, initiating training and establishing the F28 operation.

The F28s were brought on services to Lae (Nadzab), Madang, Wewak, Manus, Kavieng and Kieta, slashing domestic flight times and providing a new standard of comfort for internal services. Internationally, the F28 operated initially a direct service to Honiara, Solomon Islands (the aircraft were later to extend scheduled jet operations to 11 domestic points and also to Cairns and Brisbane in Australia).

While the F28s' arrival had considerable impact on the domestic services of the airline, there were also developments internationally.

In April 1977, the airline, extended its routes to include Hong Kong. An agreement had also been signed with Japan for a weekly flight from Port Moresby to Kagoshima, in the south of Japan, and the service was inaugurated on January 6, 1977. In March 1980 it was extended to Fukuoka. But neither destination was viable and lacking rights to fly to Tokyo,

the airline was eventually forced to cease operations to Japan.

Before 1977 came to an end, the first houses on the Air Niugini housing estate at Korobosea in Port Moresby were occupied. With so much to do in the way of planning and development for the years ahead, the General Manager Mr. Brian Grey had this to say.....

"It has been a fairly eventful 12 months with the introduction of F28 aircraft, the grounding of DC3 operations, the entry of Qantas with their Boeing 747 to Port Moresby, the introduction of Philippine Airlines on the route, the establishment of the Qantam computer system and indeed our own ICL domestic reservation system, has all worked towards the changing image of the airline and the accessibility of Port Moresby....."

From inception, a localisation programme was planned and one of the most significant developments occurred in September 1978 with the appointment of Captain Minson Peni as the first Papua New Guinean to take command of an all-national crew in an F27 aircraft. His co-pilot was First Officer Lekwa Gure from Babaka, Central Province, later to become a Dash 7 captain. Capt. Peni from Nonopai Village, New Ireland, started

flying training with Patair on July 30, 1969. When Patair was later taken over by Ansett, Capt. Peni was transferred to Ansett and then Air Niugini.

Other achievements during that year included Air Niugini's first-ever Papua New Guinean aircraft engineering and airframe students graduation in Lae. Among the graduands was first PNG engineering tradesman Komini Kanawi, from Manus Province, a licensed DC3 aircraft engineer. Komini returned from Dubbo, in New South Wales, where he successfully completed a course on basic gas turbine. Educated at Manus, Komini had joined TAA in 1972.

The first of the original F27s were withdrawn from service at the end of April 1978. Air Niugini signed a contract for the sale of three F27 aircraft for a total of K3,572,179, including spare parts and accessories, to Rio Sul Servicos Aeros, a Brazilian airline.

Historic moment at Fukuoka as Air Niugini inaugurates service to the Japanese city.





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Times of change

During the course of the year 1979, Mr. Brian Grey advised his intention not to accept a further contract, due to personal commitments in Australia. He was succeeded in June by Mr. Gerald Fallscheer.

Air Niugini was not ungrateful for Mr. Grey's achievements and long term plans. In the words of Mr. Bart Philemon, now National Airline Commission chairman.....

"You simply can't run an airline as a government department and at the same time operate efficiently, make a profit, or compete with other airlines. Mr. Grey has made a name for himself in the airline industry world-wide despite the handicaps he has worked with. While there are many people who know of his many achievements there are few who can appreciate the brilliance of the five-year plan he has produced, which he would have little difficulty in achieving if he stayed.

"There is nothing I'd like to see more than the five-year plan being implemented. His plan would make Air Niugini an extremely profitable and efficient regional and domestic carrier, had he been given the chance....."

In 1979, Air Niugini opened up routes both East and West - to Honolulu, and to Singapore via Jakarta (Singapore has been served direct since October 1980).

Achievements throughout 1979 included the establishment of new catering facilities at Jacksons Airport, opening of sales offices in Hong Kong, Tokyo, Europe and the United States, negotiations with the PNG government for a second Boeing B707 aircraft and discussions for landing rights in Singapore.

In February and April of 1979, Air Niugini acquired another two F28s, both purchased from Transair of Canada. After overhaul and refurbishing at the Fokker factory in Holland, the first was delivered under the command of Capt. Millett and the second with Capt. Val Lysenko in command.

The same year saw delivery of the two Boeing 707s currently in use. P2-ANA, which came to Air Niugini on June 9 and P2-ANB, delivered on September 27, were both originally Qantas aircraft and were leased from ITEL, then later the Chemical Bank of the United States. The



Mr Brian Grey



Mr Gerald Fallscheer



Mr Joseph Tauvasa

two aircraft replaced another former Qantas 707, P2-ANH, which Air Niugini sold before entering the leasing deal.

In 1980 localisation history was created with the appointment of Mr. Joseph Tauvasa as the new general manager of Air Niugini, the first Papua New Guinean to be appointed chief executive of the airline.

Mr. Tauvasa's appointment was announced by the Chan Government's Deputy Prime Minister and Minister for Transport and Civil Aviation, Mr. Iambakey Okuk, on the National Airline Commission's recommendation.

Mr. Tauvasa, who moved into the general manager's chair at a crucial time in the history of the airline, had gained a Masters degree in Business Administration and had also mastered in Aeronautical Science at Embry Riddle University, Florida, United States, not long before his appointment. He had graduated from the University of Papua New Guinea with a Bachelor of Arts Degree and he worked as a patrol officer for 7½ years. Prior to his involvement with the national airline, Mr. Tauvasa served as superintendent of Air Transport (Civil Aviation Department) and was appointed Controller of Civil Aviation in 1975. From Hoskins, West New Britain, he was Secretary of Transport immediately before joining Air Niugini.

Other events of that year included the appointment of the first national to manage an overseas office, Mr. Tony Lavutul, of Yawakeke village, East New Britain Province, posted to Honiara. Mr. Tauvasa said: "Mr. Lavutul's appointment sets yet another milestone in the history of our national flag carrier. His appointment is part of the airline's progressive localisation programme."

The general manager's wife, Mrs. Aivu Tauvasa, herself a MBA, was appointed head of planning and research, the first national woman to be given such a responsible position within the airline.

Mr. Ben Sabumei, a Goroka business man, replaced Mr. Paul Pora as chairman of the airline commission, and Ms. Elsie Paisawa became the airline's first national training co-ordinator.

By November 1980, arrangements were being made for Air Niugini to enter

into a tripartite agreement with Cathay Pacific and Philippine Airlines. The agreement was for the three airlines to operate a joint scheduled passenger and cargo air transport service between Hong Kong, Manila and Port Moresby, flown by Air Niugini Boeing 707s.

The year 1981 will be remembered for the introduction of the De Havilland - Canada Dash 7 to commercial aviation in Papua New Guinea, following approval by the National Executive Council for Air Niugini to acquire three of the aircraft. The first of the three arrived in Septem-

ber 81 and the second in December that same year. The last one arrived in April the following year.

The Dash 7 demonstrated its versatility and its short take-off and landing ability with four quiet turbo-prop engines won admiration.

But the introduction of the Canadian-made aircraft was not without controversy.

Following the purchase of the Dash 7 a report by the consultancy firm of McKinsey and Co. stated that the Dash 7 appeared financially burdensome.

The consultants were convinced that

the Dash 7 purchase by the former Government would seriously worsen Air Niugini's cost position. While the report recognised that political and social objectives were important factors in the decision to buy the Dash 7s it viewed the purchases as an economically unattractive means of accomplishing those ends.

Other developments during 1981 included the introduction of the stand-by fare system. The system was initially introduced in 1980 on a trial basis for the Moresby-Lae and Moresby-Wewak sectors. (Standby fares, offering significant



savings on the basis of seats becoming available at a late stage before departure, were later replaced by Wantok discount fares offering confirmed seats provided tickets are purchased 30 days in advance.)

Left: Capt Ian Phillips surrounded by spectators on whistlestop tour by Dash 7 around Papua New Guinea after first delivery; and Dash 7 in flight over Highlands; **below:** one of Air Niugini's current Boeing 707 aircraft, P2-ANA, pictured near Port Moresby.



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Days of development

In 1982, a contract was let for the upgrading of Air Niugini's computer system at a cost of more than K2 million, one of several developments that signified the airline's advancement. The installation, completed in 1983, not only brought the latest in modern technology with major enhancements in the uses to which the system could be put, but also produced estimated savings of more than K1 million above its own cost in the first five years of operation.

The electronic progress was accompanied by other improvements. Among them were new sales locations for Air Niugini in Singapore and Hong Kong, providing the airline with upgraded, more visible outlets in the two Asian hubs. At home, one of the significant achievements was the opening of F28 jet services to Rabaul. Internationally, a new direct service linking Auckland, Port Moresby and Hong Kong was inaugurated in November by Air New Zealand, Air Niugini and Cathay Pacific in partnership.

Charter work burgeoned. The airline had become a regular operator for the United Nations, ferrying peacekeeping units from Fiji to Lebanon, and also won a contract to carry Fijian observer forces for the multinational contingent in the Sinai (both arrangements were secured again in 1983). Both routes



Above: updated K2 million system gives Air Niugini latest in computer equipment;
below: tripartite service linking Auckland, Port Moresby and Hong Kong gets off ground.

operated by Boeing 707s. The four-engined jet was also used on a charter flying reciprocal goodwill parties between Port Moresby and Tokyo — the first commercial direct connection linking the two cities.

The F28s were not overshadowed. Config-

ured in a special lounge layout, one of the aircraft provided VIP transport for the Prime Minister, Mr. Somare, to Fiji and back. Other special services included a F28 charter trip to the island of Guam, a proving flight for a series of seven specials to and from Guam in 1983, and the transportation of children on holidays from school in Townsville back to their families in Bougainville.

The F27s were regularly used on domestic charter services and the Dash 7s provided a cargo lifeline to the giant Ok Tedi mine project on the border with Irian Jaya when the Fly River level lowered dramatically during drought conditions and barges were unable to reach the river port of Kiunga. The successful solution to this supply crisis led to Air Niugini winning an 18-month contract to serve Ok Tedi with a regular six days-a-week passenger/freight charter operation. The Dash 7 also began ordinary scheduled flights to Kiunga and added Mendi and Chimbu (Kundiawa) to the Highlands ports served by Air Niugini.

Mr. Bart Philemon, a former assistant general manager, had by then replaced Mr. Ben Sabumei as chairman of the NAC.

There were bigger developments on the air-political front. The McKinsey Report on Air Niugini, received without action by the



Chan Government, was given consideration by the returning Somare Government soon after it regained power in August 1982 and it decided to pursue the matter. The three main recommendations of the report were that the Dash 7s should be put up for disposal, contract management should be hired and aircraft should be wet-leased for international services.

Thus, the National Airline Commission announced on November 25 that it had accepted the Government decision to engage management assistance and it recommended that Dutch airline KLM be engaged to provide an executive team (proposals were also sought from Pan American and Air Canada). On December 10, the airline told a press conference that negotiations with KLM had been successfully completed and formalisation of the agreement was expected before the end of the year. "We will take advantage of outside assistance to achieve the objective of growth," commented the general manager, Mr. J.J. Tauvasa. He noted that Air Niugini had performed with great credit to return to profit in a period of extreme difficulty for the aviation industry, but added: "Working alongside the people who have worldwide experience will give us a broader perspective of managing all aspects of airline operations."

Under the management assistance, KLM provided a team of four executives for a period of three years from February 1, 1983. Former KLM director of operations and Boeing 747 pilot Leen van Ryswyk headed the group from Holland and took up the position of deputy general manager of Air Niugini. One of the early tasks of the KLM team would be to look at the other recommendations of the McKinsey Report and provide conclusions.

In 1983, Air Niugini provided an all-jet service to the New Guinea Islands reg-

ion with the inauguration of F28 flights to Hoskins in New Britain — the eleventh of 20 domestic ports to get jet transport — on March 31. At the same time, Dash 7s opened up services to another Highlands port, Tari. On May 5, Mr. Philemon pressed the button to officially activate the new computer system, remarking that Air Niugini was "the acknowledged leader in modern technology in Papua New Guinea."

The series of Guam special flights which got under way in August proved very popular with Japanese who flew from Tokyo to make the connection. The main objective of most of the visitors was to visit the battle areas where relatives had fallen during the Second World War. The positioning legs between Papua New

Guinea and Fiji for the UN charter flights, which provided the opportunity for residents to have a short holiday in Fiji, were also well patronised flights. And the introduction of "Weekender" packages, which provided discount air fares, hotel tariffs and hire-car rates for weekends at domestic destinations, were winners with Papua New Guinea residents.

As the 10th anniversary of Air Niugini in November approached, Dash 7 disposal moves were under way and a KLM study on the airline's international fleet and network, providing for future expansion, was under consideration. Both developments were targeted at putting Air Niugini in shape for another successful decade.

Researched and compiled by Loujaya M. Kouza. Edited by Robert Wallace.



Left: KLM's Leen van Ryswyk at Jacksons Airport; **below:** F28 in VIP configuration, fit for a Prime Minister; **bottom:** Rabaul gets F28 jet services.



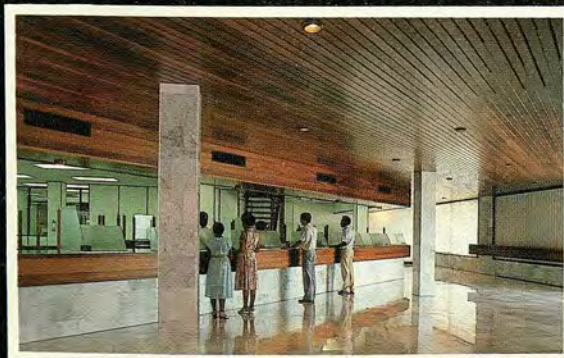
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A certain well-known identity in Port Moresby recently said of the Highlands Show: "It's not what it used to be". The man in question was referring to an age when, in the last days of the Australian Administration of Papua New Guinea, a "guestimate" of between 20,000 and 70,000 tribal dancers attended the Highlands Show in Mt Hagen.

In those days the *kiaps* — expatriate patrol officers whose job it was to both administer the government's ordinances as well as maintain order, build

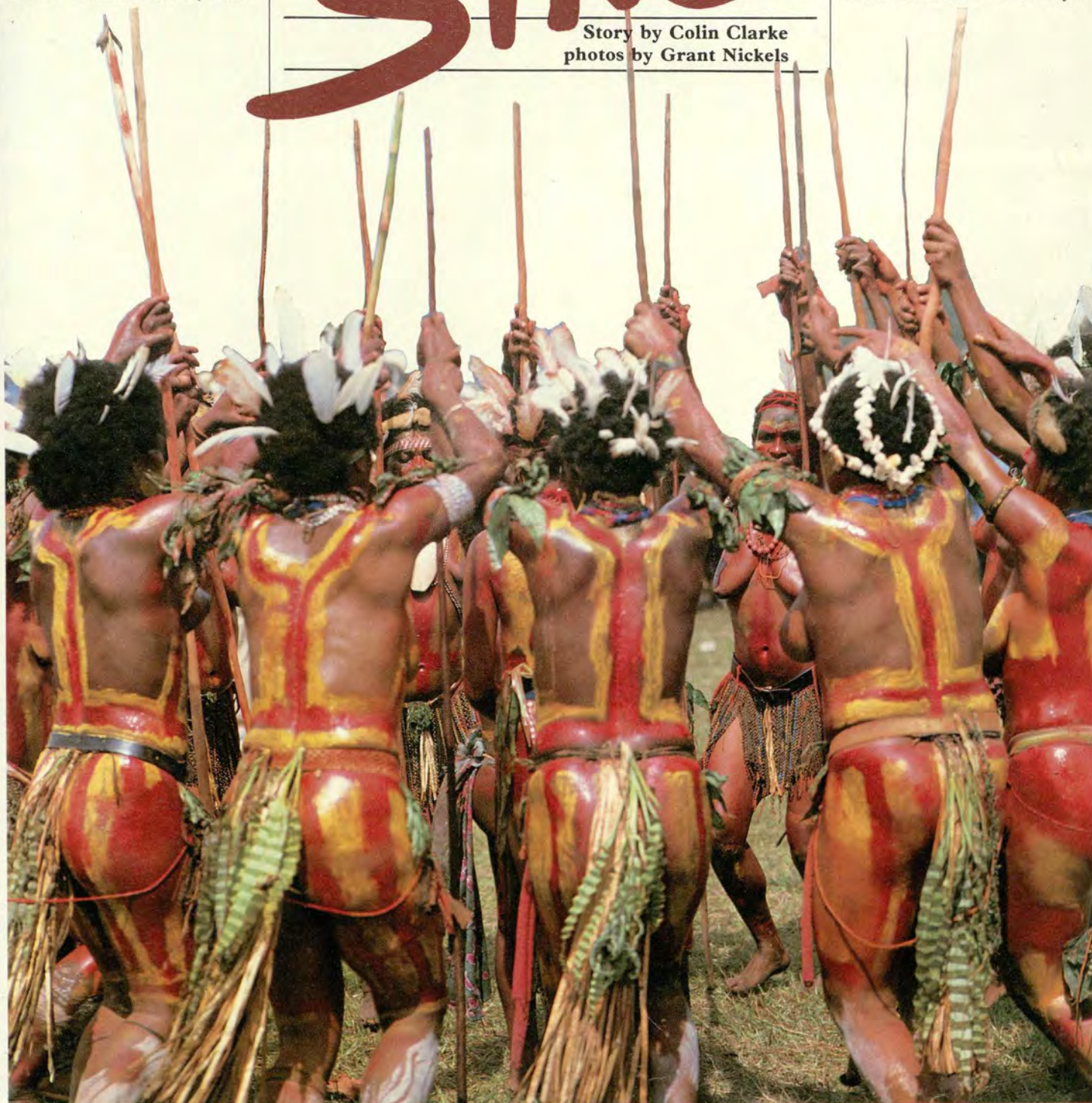
A Memorable

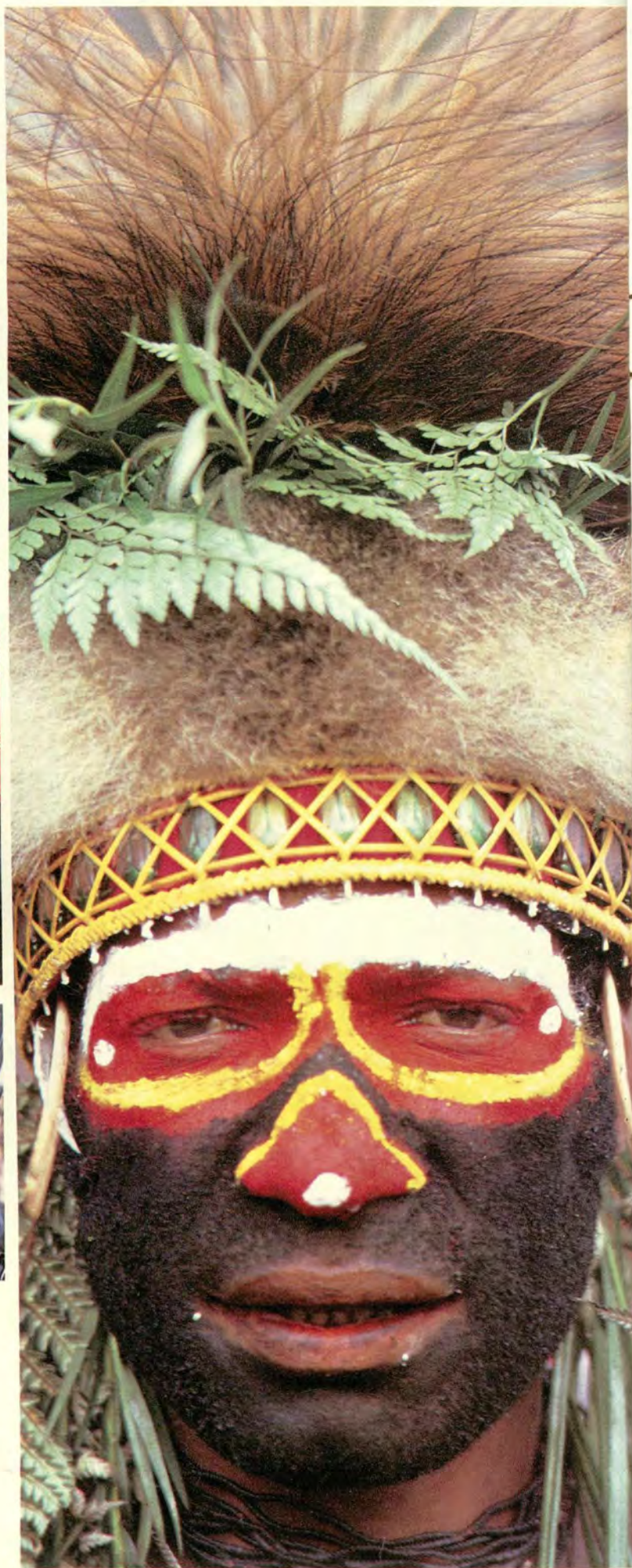
SING SING

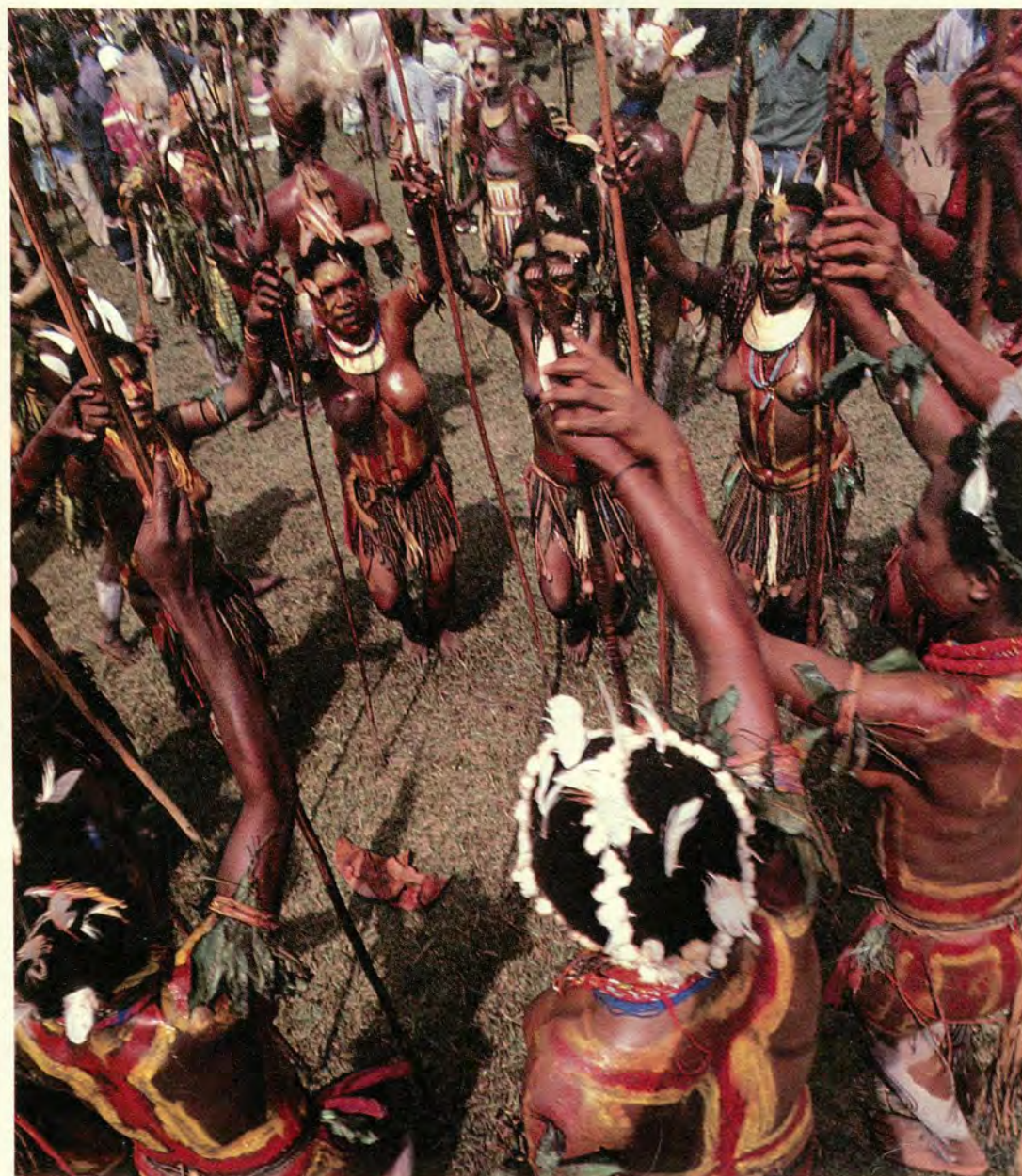
Story by Colin Clarke
photos by Grant Nickels

roads and ensure taxes were collected — looked upon the Highlands *sing sing* as an opportunity to show their brother officers just how talented the peoples of their particular area were. A high degree of competitiveness grew up between the groups.

Memories of those shows have no doubt been gilded by the passing years, but regardless of arguments about comparative numbers, the Highlands Show, held alternative years at Goroka and Mt Hagen, remains one of the most memorable events one can see. This year







some 15 different tribes participated, each bedecked in the most remarkable of tribal costumes which certainly compared most favourably with the 1981 Show at Mt Hagen, belying the statement of the well-known Port Moresby-ite.

But the *sing sing*, as the meeting of the dancers is known, has more than just Show appeal. For the average villager the Highlands Show is an opportunity to visit a major centre and to relate to people from other areas of the region. And underlying this superficial reason is a much deeper one. This is an opportunity for the "Big Men" of the village to discuss their problems, to talk politics and to make decisions on local affairs.

At a village level a *sing sing* provides the opportunity for the return of favours between tribes and usually involves a pig kill which can take on monumental proportions. Some three years ago an estimated 10,000 pigs were slaughtered at a *sing sing* in the highlands province of Chimbu, an event which took almost two years to bring to fruition.

For the villagers who have made the trek to the show the day begins early. Faces have to be made up with painstaking care. Headdresses — prized possessions comprising Bird of Paradise and other local feathers — are placed in the



men's wigs symbolically. Once satisfied with their dress the groups practise their songs and dances before finally gathering in the arena where, in the wide spaces, they can perform unencumbered.

It is an awesome sight; a very special, fascinating event. The *Show sing sing* is a reflection of a culture which exists today from times long past. Saturday and Sunday mornings the tribes try to outdo each other in enthusiasm and effort. Somehow the Governor-General, resplendent in ceremonial uniform, looks not the least out of place among the dancers as he officially opens the Show. In fact for him to be dressed otherwise could well be interpreted as an insult to those who have made the effort to dress-up themselves.

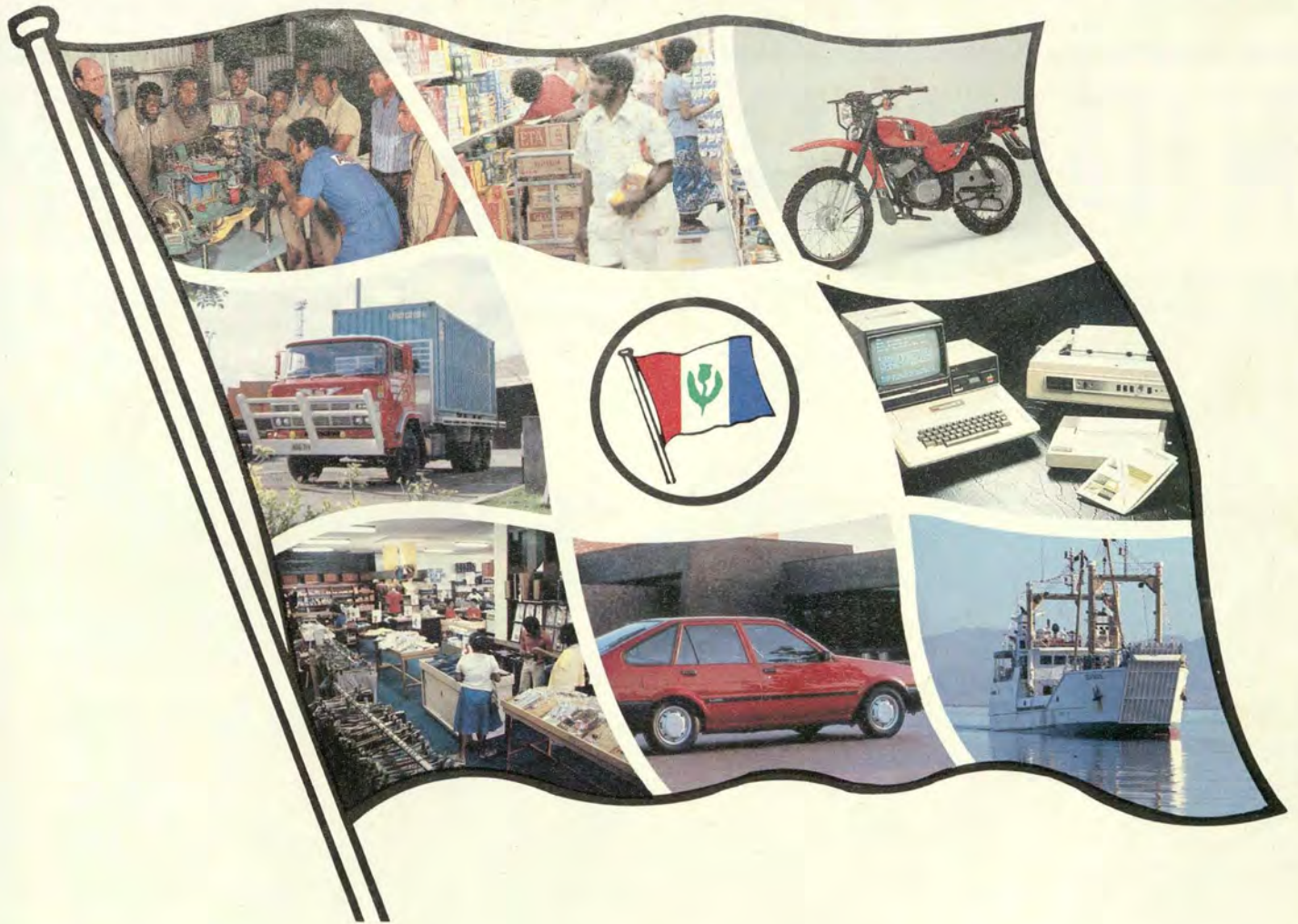
For the tourist, the opportunity to walk among the tribes and to take photographs at will is an invitation to make the sales of film rocket. The dancers delight in seeing the enjoyment of the visitors, who pose among groups of fierce-eyed Wahgi or Enga tribesmen with a "look at me Mum" smile on their faces.

It would be dishonest to say that things haven't changed in some way. Tinsel and bottle tops have crept into some tribal costumes; brassieres are worn by some of the shyer maidens. But, hopefully, the true spirit of the *sing sing* won't change entirely. For those tribes who walked the muddy tracks to visit the Highlands Show, and to participate in this display of what is so peculiarly Papua New Guinea, a vote of thanks needs to be recorded.

A 70-year-old American who had visited a different country for every one of his years, summed it up: "Boy, I thought I'd seen it all — now I realise I'd seen nothing."✿

Air Niugini provides daily jet services to Mount Hagen and Goroka, the main centres of the Highlands region.





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NUMBER ONE STRIP



MILNE BAY

by Robert Kendall Piper

AMERICAN Company E, 46th Engineer Service Regiment, departed Port Moresby in June 1942 for an "unknown destination". They arrived by ship on the 25th of that month at Gili Gili plantation, inside Milne Bay, and immediately bivouaced at the adjacent mission.

After spending five days establishing camp the men commenced work in earnest on what was then simply called No. 1 Strip.

A true tropical paradise, Milne Bay is 300 kilometres south-east of Port Moresby. Thirty kilometres long it varies from eight to 16 kilometres wide. On either arm of the bay are mountains clothed in thick green equatorial jungle, later to claim many war aircraft in bad weather and poor visibility.

Many servicemen who were to visit the area remembered it most for the amazing five metres of rain that poured down each year. Any construction

around the bay then required good drainage as a first priority.

Gili Gili's immense coconut plantation was selected as the best site for an aerodrome. The property belonged to Lever Bros (the famous soap manufacturers) and 426 acres were cleared; 23,850 coconut trees were lopped and removed before the runway could be laid.

Under the watchful eye of unopposed Japanese reconnaissance aircraft, who made regular visits at lower and lower alti-

Milne Bay, in the remote south-eastern tip of Papua was only introduced to aviation with the coming of the Second World War. Prior to this the occasional seaplane had passed through the area, hugging the coast around from Moresby to Lae. The defence needs of this tranquil outpost quickly became apparent to all allies in early 1942 as they were pressed on all sides by the successes of the Japanese forces.

tudes, the construction of the drome continued throughout July. Obstinate stumps were hastily dynamited out and a complete strip of marsden matting was laid to overcome the mud and slush. This unique new method of building a stable surface of interlocking steel sheets would provide the key to success of many future allied Pacific campaigns.

As many as 300 Australian troops often picked up shovels, because time was of the essence,

and bolstered the ranks of the American engineers. Two bulldozers shipped-in speeded the operation. Trucks hauled gravel from nearby pits to further consolidate the runway and surrounding roads.

The honour for the first, unexpected landing went to 75 Squadron Royal Australian Air Force, on July 22.

Squadron Leader Peter Turnbull had earlier led six P.40 fighters in dive-bombing anti-aircraft guns at Gona; Japanese Hamps (clipped wing Zeros) intervened and a dog-fight ensued. Short of fuel, Turnbull, Flying Officer Bott and Sgt. Carrol had to set their Kittyhawk fighters down at 4 pm at Milne Bay to refuel. No. 1 Strip was operational in just 22 days! (Squadron Leader Turnbull was killed on August 27, 1942 while attacking Japanese tanks in the Milne Bay area.)

Seventy-five Squadron arrived in strength two days after the first "unofficial" landing. Conditions for the pilots were appalling, particularly after heavy downpours. Mud seeping through the steel matting, caused the fighters to skid and crack up. Touchdowns and takeoffs had planes throwing spray like speedboats, often skidding so violently they slewed off the runway.

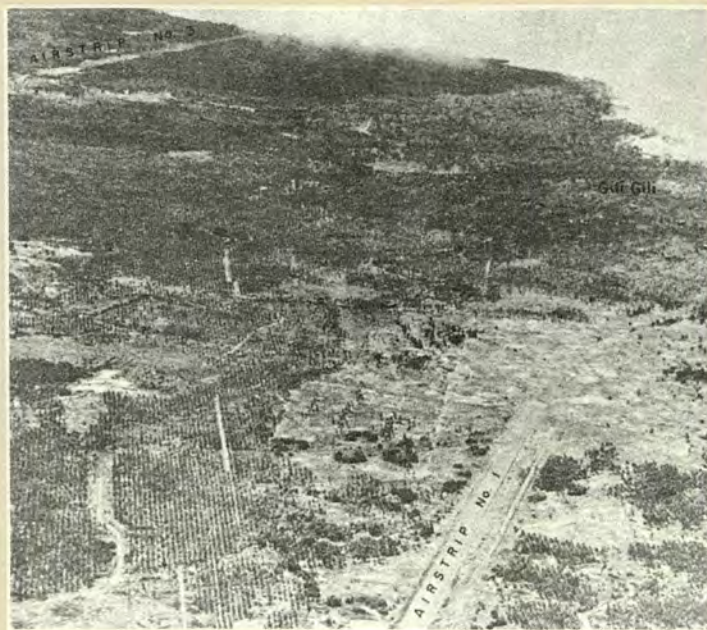
In an attempt to remedy the situation the bulldozers scraped the mat daily and deposited the mud in piles on either side. Total length of the linked steel airfield was now 1525 metres, with a width of 24 metres. Even so, the Kittyhawks often required the full distance of the strip to become airborne.

As the first runway was completed, two others were under construction nearby; No. 2 to the west, at Waigani, and No. 3 to the east. Coconut tree trunks, which were in abundance, were used as revetment walls to help protect parked aircraft from air attacks.

The first air raid was at 4 pm on August 4, 1942. Six Zero fighters zoomed in low from the south-west and spent 30 min-



Opposite page: a striking impression of Kittyhawks operating out of Number One Strip, Milne Bay, in August-September 1942. The painting is by the famous Australian artist William Dargie; **below:** Gurney in the foreground and Number Three Strip (Turnbull) in the distance.



utes strafing the strip and surrounding plantation. Only slight damage resulted and one of their number was believed shot down.

The Japanese seaborne landing occurred on the night of August 25. Opposing them was Australian General Cyril A. Clowes with a combined force of 9500 men. In the majority they were Australian combat and service troops, supported by 500 RAAF and 1400 Americans — the latter mainly engineers and anti-aircraft per-

sonnel. Instructions were to "protect the airfields and deny Milne Bay to the enemy".

High rainfall and cloud often obscured the bay from the air and probably accounted for the long time that it took the Japanese intelligence to discover the presence of the Allies in the area. The attackers were also to seriously underestimate Australian strength there.

Eleven days of bitter fighting occurred on the ground, in the air and over the surrounding seas before the Japanese

withdrew during darkness on September 5. At one stage the invading marines had penetrated right to the perimeter of No. 3 Strip before being driven back. Their ships had bombarded the installations at night on several occasions.

RAAF Kittyhawk pilots were airborne as soon as they were re-fueled and re-armed. Indeed it was their relentless efforts that turned the tide. Strafing of the enemy, their stores and barges was to prove tremendously effective. It was the first defeat of Japanese land forces during the Second World War and the Australians had done it.

Casualties were high. Six hundred Japanese, 123 Australians and one American were killed. More than twice that number had also been wounded on both sides.

Number One Strip was rebuilt after the battle and No. 3 completed. At No. 2 (Waigani) work was abandoned, the decision being made to concentrate on the others as drainage and bridge building for the former would prove too time consuming.

To the Americans, No. 1 Strip was Fall River, but as early as July 1942 the Australians had begun calling it "Gurney" — after Squadron Leader Charles Raymond Gurney, RAAF, who had lost his life two months earlier while acting as a co-pilot in a U.S. B.26 Marauder bomber.

Squadron Leader Gurney at the age of 35 had already become a legend in aviation. Arriving in Papua New Guinea during the early 1930s, he piloted Junkers and DH.60 Moths for Guinea Airways. Notable early accomplishments had been the first landing at Moge, then Bena Bena (near Goroka), for the Leahy Brothers expedition on Christmas Day 1932. Later he flew the first Ford Trimotor, VH-UTB, over the ranges.

Gurney, wishing to broaden his experience, joined the fledgling Qantas in mid 1936 to fly their DH86's and later

Empire Flying boats on the Sydney-London run. In September 1939, Captain Gurney, as with many other pilots from that company, signed up with RAAF when war broke out.

Later, as the commanding officer of 33 Squadron and with his extensive Papua New Guinea flying experience, Charles Gurney was a natural in assisting the newly arrived American crews in adapting to tropical flying conditions. In doing this he was to give his life on May 2, 1942.

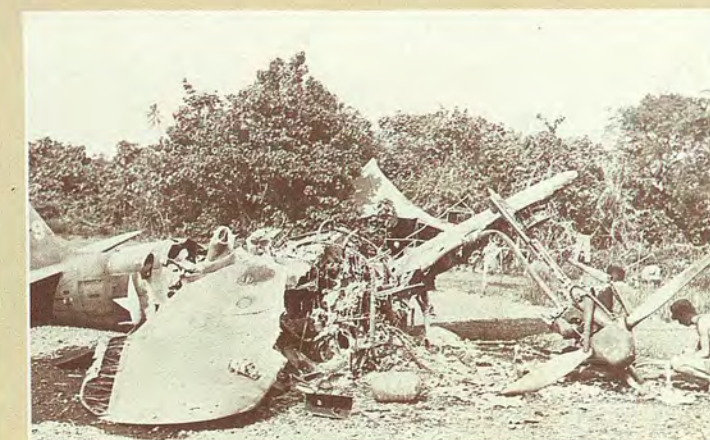
Damaged over the target at Rabaul the twin-engine U.S. bomber limped away on reduced power. Attempting a forced landing on Owi Island in the Trobriands the pilots, for some inexplicable reason, lowered the undercarriage before touchdown. Second Lieutenant Christian I. Herron and Gurney were killed instantly as the B.26 Marauder (No. 40-1426) careered through the soft surface, dug in, and somersaulted over on its back. Five remaining crew members in the rear of the aircraft were not seriously injured and returned to Moresby by Catalina flying boat.

Lieutenant E. Whitehouse, then with ANGAU as an Assistant District Officer at Dobu, described the tragedy as follows: "The pilot when attempting to land on a long straight stretch his wheel tracks plowed deep and his undercarriage collecting ferns, trailing vines and debris completely obscuring the mechanism of his undercarriage ... the centre wheel fouled an obstruction, tearing it from the fuselage. The ship somersaulted completely burying its nose together with both engines to main driving shaft, whilst rear gunners glass dome remained intact and unbroken".

On September 14, 1942 North East Area signal Q821 was issued. Fall River and No. 1 Strip were now authorised officially to be called Gurney Strip. Nearby No. 3 Strip became Turnbull after Squadron Leader Peter Turnbull; a fitting memorial to the two men.



Above: end of a Japanese raider, Milne Bay, April 1943, from painting by Dennis Adams; **left:** (top to bottom), Capt Gurney in Qantas uniform; Squadron Leader Gurney in RAAF uniform; overturned Marauder in which Gurney was killed; RAAF Kittyhawk lands beside Australian anti-aircraft crew at Gurney; **right:** (top to bottom), Kittyhawks taxi in mud; Flying Fortress ablaze at Gurney; P39 Aerocobra after raid on Gurney; American Dakota at Gurney.



Aerial action over Gurney Strip was to continue until mid 1943. Throughout the war the strip continued serving as a major staging centre for thousands of Allied aircraft. Many planes bypassed Port Moresby and flew in direct from Townsville and Cairns across the Coral Sea. During this time the strip was further consolidated and sealed, eliminating many of the wet weather problems. After the war Gurney was retained by the then Department of Civil Aviation to serve as a vital transport link and gateway to the people of Milne Bay and surrounding islands. Still surrounded by coconut trees and the occasional Second World War relic, its 2000 metres of bitumen runs west — east, only 20 metres above the nearby waters of Milne Bay.

Air Niugini now operate their F27 Friendships and four-engine turboprop De Havilland Dash 7s to the field. Modern navigational aids are a non directional radio beacon (NDB) and distance measuring equipment (DME). Appropriate instrument-landing procedures are now being devised which will permit approaches in adverse weather conditions.

This article would not have been possible without the invaluable assistance of Bruce Hoy and Richard Leahy in Papua New Guinea, as well as RAAF photographer Kevin Ginnane.

Air Niugini flies from Port Moresby to Alotau (Gurney) six days a week.



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Submarine SCULPTURES



Story and photos
by Trevor Smythe

DIVE PNG! say the advertisements. Immediately one conjures up visions of scuba-outfitted divers exploring the deep waters of exotic Madang and Milne Bay areas. Yet, equipped with just flippers and snorkel, even a novice floating in the shallows can experience a diving inspiration.

Although ignorance and the vicissitudes of encroaching commercialism threaten the local mariculture, Papua New Guinea still has endless easily accessible reefs which provide a liquid sanctuary from the modern world.

Fish are the initially most obvious dwellers of the underwater world. But a closer focus reveals a kingdom teeming with life in breathtaking, sometimes bizarre, but always captivating form.

These miniature sculptures, sometimes perfectly camouflaged, but more often dazzlingly colourful, abound in a tranquility far removed from our noisy environment above water.

All sorts of problems confront the underwater photographer. Water magnifies its subject by 25% and it is a medium that absorbs, scatters and refracts light. This varies the colour according to the weather, the sun's angle, the presence of algae and plankton, the water depth and the type and colour of the sea bottom. To top it all, the water, photographer and subject are always in motion.

Macro-photography was used in taking these photographs. The equipment was a Nikonos 1 on a 1:1 ratio extension tubes with Nikonos flash bulb unit at f22 and 1/60th of a second.

Sponges

The sponge we use in the bath could still be described as a mass of porous cells. Now, it no longer filters organic material for food as it did when it was a living animal. Where the current is strong, they usually grow as round or flattened clumps but in calmer waters they branch out like trees. By means of folded walls and secondary

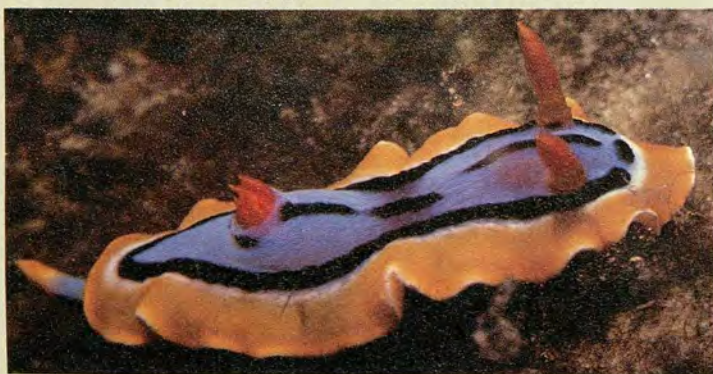
water inlets, called ostia, they can increase their size and filtration efficiency. They can be found attached to rocks, hard-shelled animals or sea-weed. In this way, sponges and tunicates form part of the sea-bed. One type of familiar tunicate is the sea-squirt — so named for obvious reasons. But it only ejects water when disturbed.



Nudibranches

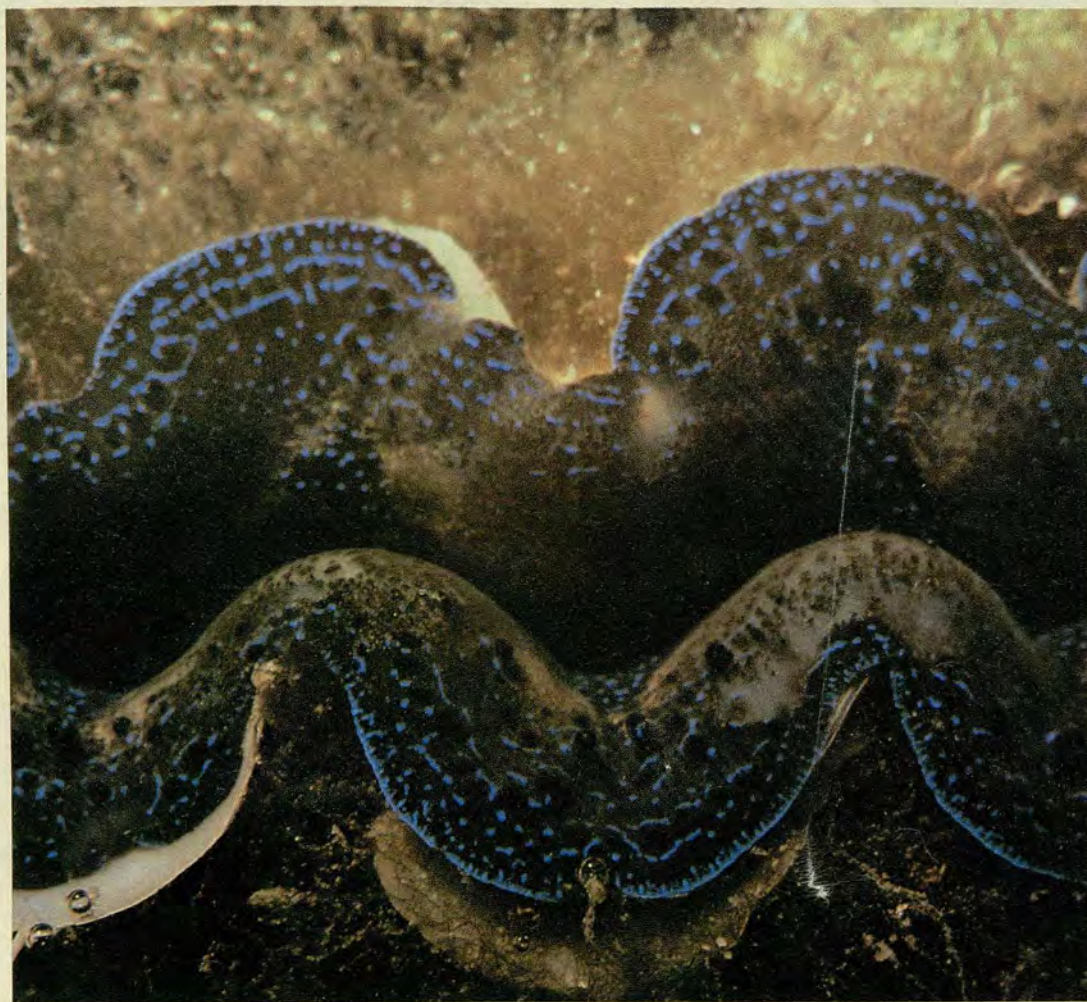
Most of us are more familiar with the uglier form of sea-slug. So it comes as an initial surprise to discover the exquisitely coloured nudibranch belongs to the same family. In technical terms, the nudibranch is a gastropod mollusc without a shell — basically a snail that lost its shell. But what a colourful difference! Nudibranch means “naked gill” and refers to the feathery tentacles or frills on the back of the animal. There are usually two pairs of tentacles. When frightened, one pair may withdraw into an external sheaf. They usually grow

to only about 5cm and live on the sea bottom, (although one or two species are planktonic). So it takes a bit of diligent searching to find one. They are visually impressive, but if touched, can cause the human skin to blister or inflame. It can actually swim short distances, but more often glides on a flat, muscular foot, at a “snail’s” pace. Although it is a predator and feeds off other invertebrates, it eats food no other predators seem to want; for example, sponges and anemones. Isn’t it the most curiously fascinating of sea-slugs?



Clams

One can easily find clams buried in coral rocks or lying on the bottom because, of all the molluscs, the clam is the most sedentary. It filters organisms and plankton for food. The clam is a bivalve mollusc because the shell valves are held together by two large muscles which are connected by an elastic ligament. The eye-catching iridescence of its colours is due partly to algae living in its tissues.



Cowries

Strangely enough, though it has spots like a leopard, this mollusc shell is called the Tiger Cowry, an adaptation of the Hindu and Urdu names. Its career as a currency dates back to the first century. The Chinese first used it as such. It was introduced to the international market in the Maldives Islands from where it went to Europe through India, Persia and Afghanistan. The Arabs dispersed it southwards along the African trade routes. The cowry was

even used to purchase negro slaves. Although some cowries reached America, the American Indian had shell currencies of his own so he remained unimpressed. By the late 1900s the cowry lost its value as a world currency and is now only used as small change in some native markets. Mostly, however, it is collected and admired for its polished beauty. The polish is caused by the mantle of the animal which spreads over the shell when alive.



Corals

In earlier days, reefs were a nightmare for navigators, but nowadays, the more common romantic image prevails of a tranquil world of subdued light. The mystique arises from the combination of aesthetics and unreality. It was first recognized in 1744 that corals were actually animals — feeding on plankton by means of polyps and then secreting a hard limestone skeleton which is the basis of coral islands and reefs. These stony corals, which have six, or

multiples of six, tentacles are differentiated from the soft corals, the alcyonarians, which have eight, or multiples of eight, tentacles. The alcyonarians are leathery and fleshy in appearance. Lacking a compact skeleton, they are supported by scattered limestone needles in their flesh. As corals survive in water temperatures higher than 20 degrees Celsius, the Papua New Guinea climate is ideal for the abundance of reefs along its shores.



Tubeworms

No bigger than a few centimetres, these ravishingly coloured tubeworms, or *Spirobranchus giganteus*, are found in abundance living within the skeleton of living cells. They need to be observed with more or less bated breath because literally in the blink of an eye, they retire into their skeletons if alarmed. Some tubeworms wave their feathery gills as they feed on plankton, looking somewhat like colourful fans. These types are sometimes named fanworms. 🐛



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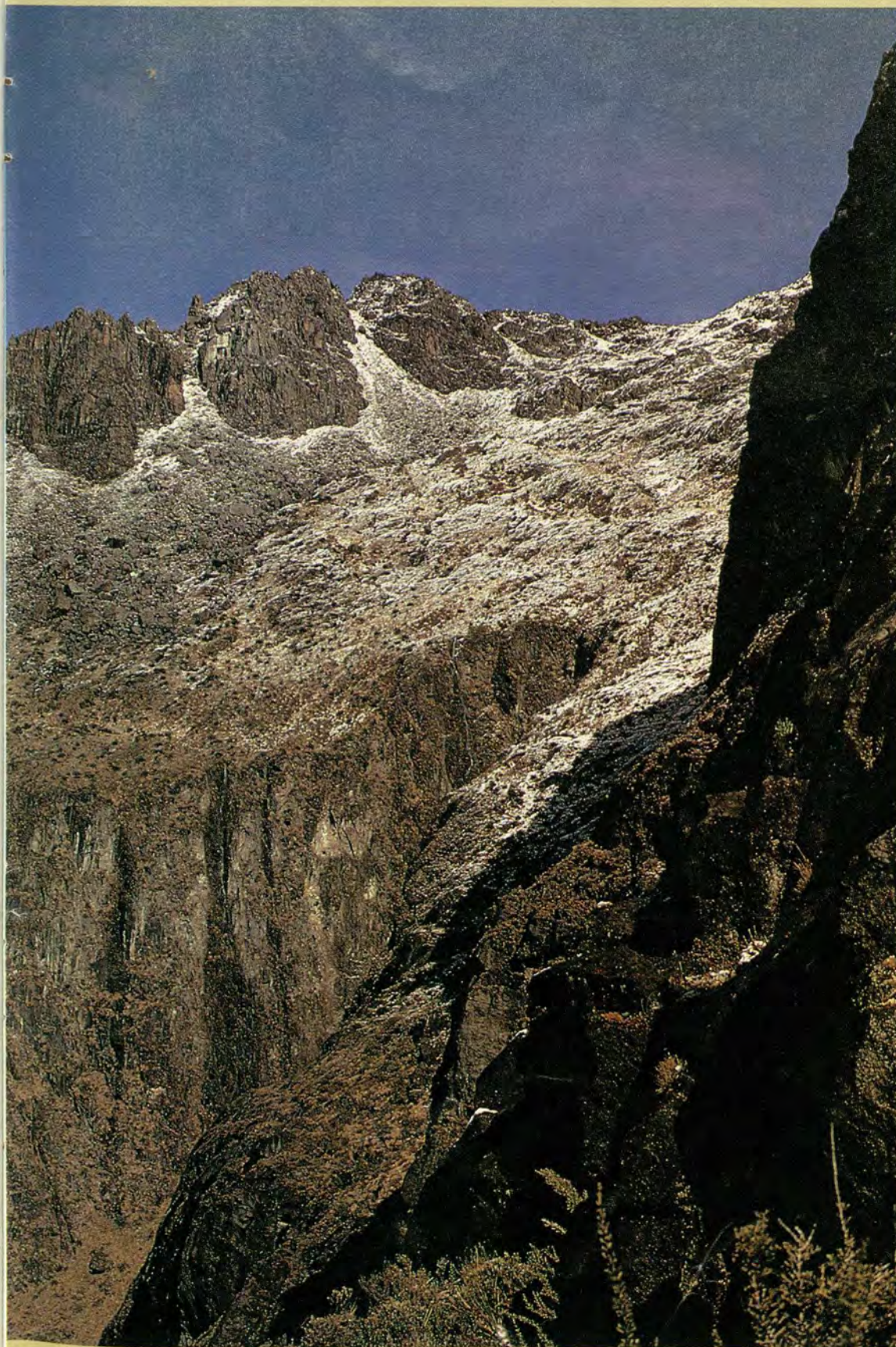


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EQUATORIAL SNOW

Story and photos by Dr J.M.B. Smith



HIGH mountains at equatorial latitudes have exerted an almost magnetic pull since the earliest voyagers from higher latitudes visited the tropics.

Stories of snow-capped peaks in places near the equator were initially dismissed as fanciful, false, and sometimes downright fraudulent. Such was the reception given to many of the novelties from newly explored regions. The hoax which was suspected when the first platypus specimen was seen in Europe is a notable example.

Yet the tales persisted and eventually were confirmed, and the high, cold peaks have lured travellers ever since.

The closest equatorial snow to Australia lies in New Guinea.

The highest mountains, and the only permanent snow, are in the less accessible western part of the island. Mt Jaya (formerly Carstensz) is a limestone pyramid rearing up to 4884m; several other peaks and ridges nearby exceed 4500m. The whole area would be one of the most remote from the modern world were it not for the presence of a major copper mine, to which there is however no road or other public access.

Almost as high, cold and beautiful, and much easier to get to, are some of the mountains in Papua New Guinea. Highest of these, measuring in at 4510m, is Wilhelm.

I have had the good fortune to spend nearly 12 months of my life, over a five year period, living on Mt Wilhelm. It is not quite my second home, but impressions of the place are burned deeply into my mind; soaked rather than burned, perhaps, because moisture is a paramount facet of the New Guinea mountain environment.

An average day (if such a thing can realistically be deemed) dawned clear at the aluminium hut that was my

home and laboratory. The sunlit grasslands high on the valley side, usually sodden from the rain of the previous afternoon, had an orange hue, changing to ochre as they dried. I woke at dawn on most days, but the sun did not strike the hut till my breakfast was finished because the high ridge to the northeast cut off the first sunshine.

Early starts were essential. After a few hours the valleys filled with mist, light curls at first, but soon coagulating into a clammy fog. By mid-afternoon it was commonly raining — not heavy, spectacular storm rain but slanting, fine drizzle, soon dampening notebook, clothes and spirits alike.

The mist, and the rain it turned into, came from below. The sun-warmed ground created convection currents in the atmosphere, in turn drawing in moist winds from lower altitudes. Cooling led to condensation and then to precipitation.

At dusk the gentle winds dropped, and then became reversed as cold air began draining downslope from the higher ridges. The rain and mist disappeared, and a starry sky presaged a frosty night and another clear cold morning to follow.

Of course not all days conformed. Especially in the dry season from late May to early September (it would be more honest to call it the "less wet" season), some days were rainless. Rare days were even



almost cloudless. On the other hand in the wettest November-February period, almost continuous rain occurred.

Snow could fall in any month, but only at altitudes higher than my hut. I lived, at 3480m, beside the lower of two lakes in the Pindaunde Valley southeast of Mt Wilhelm. Across the lake was a waterfall and beyond that the cliffs and crags of the summit region.

Up there, above about 4000m, snow could be seen about once every three weeks. It probably falls more often, but if the whole mountain is blanketed in mist, with steady rain, it is hard to find the energy to climb a thousand metres to discover if there's snow at the top.

Gleaming yellow in the low-angled rays of the dawn sun,

snow on the high ridges is a beautiful sight. By noon it is almost all gone. In shady places high up, small drifts may persist for a few days, but the great bulk of the snow is melted within hours.

My work was with the flora. The high mountains of New Guinea have a rather peculiar flora. These high wet grasslands, heaths and mires comprise plants of divergent geographical affinities and ancestries, some of which grow together nowhere else.

The botanist from Australia, or New Zealand, one even from one of the subantarctic islands if such a person existed, would find many friends.

The biddy-biddy (*Acaena anserinifolia*) of pastures and mountain gullies in cool parts

Mountain flora: **below:** upper-mountain forest (top) *stypelia* shrub, with white flowers and red berries, found in cold, wet environment (bottom); **below right:** *rhododendron buxifolium*; **opposite page, bottom:** red-flowered, bird pollinated *rhododendron*, growing high on Mt. Wilhelm.

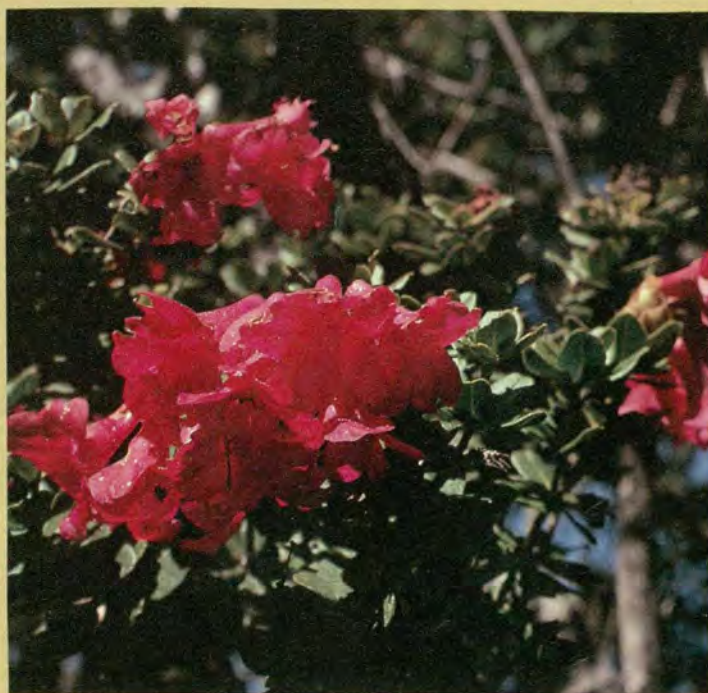


of southeast Australia and New Zealand grows here too; so do several familiar sedges, including representatives of the southern genus *Uncinia* with its hooked fruits.

Among the shrubs are daisy bushes (*Olearia*) and epacrids (*Stypelia*; *Trochocarpa*) both with close relatives to the south of New Guinea.

The northern botanist may also feel at home. Forest edges at higher elevations are bright with the tubular red blossoms of rhododendrons. Australia has only one rhododendron, on the mountains of the Atherton Tableland in northeast Queensland; the northern hemisphere, where they originated, has hundreds.

Also clearly northern in their origins are the yellow



The valley shapes, with precipitous sides and flat bottoms, clearly indicate a period of former glaciation.

cinquefoils (*Potentilla*), the bilberry bushes (*Vaccinium*) and the tiny blue or white gentians.

To complete the muddle, many other plants are distributed in cool places to both north and south; others again extend from New Guinea only to such places as Hawaii, or Borneo; and yet others are entirely restricted to a few mountaintops in New Guinea.

How this plant-geographic kaleidoscope came about was a large part of the justification for my living beside my cool, misty lake. Part of the answer lay around me, in the form of the cliffs and valleys, and of the lake itself, which carried all the hallmarks of former glaciation.

Twenty thousand years ago, the snowline in New Guinea lay more than a thousand metres below its present level. Mt Wilhelm, like other mountains in New Guinea higher than about 3500m, was capped by ice. Its valleys were occupied by glaciers. Grinding their way downhill, they eroded steep, flat-bottomed chasms in their upper reaches. Lower down, they deposited the eroded material as large moraines.

In the Pindaunde Valley the ice at its deepest point was probably more than 200m thick. The terminal moraine marking its furthest extent lies at 3200m altitude.

At the same time the forest limit was depressed to about 2000m. A greatly enlarged area (compared to today), between the forest and the ice, was occupied by the tropicalpine flora — the same plants whose origins seem today so confused and interesting.

By 10,000 years ago the ice had gone, melted away after the glacial climate warmed to become similar to the present day climate. The formerly frozen moraines, ice-filled valleys and snow-clad ridges also became available to colonising cold-tolerant plants.

So far we only have good evidence from New Guinea for one glaciation — the last. There are indications that climates were

The cliffs and crags of the summit region are almost lost in the ever-present mist; a view from the Pindaunde Valley.

cold and unstable at earlier times, but the evidence for ice in the mountains has either been destroyed by more recent glaciers, or still awaits discovery.

It is known from the ocean sediment record and from elsewhere, however, that there were at least sixteen periods of glaciation, between them occupying most of the past 1.8 million years.

The bulk of the tropicalpine flora seems to have immigrated to New Guinea, from various distant sources, during such glacial periods or their aftermath. At these times there were relatively large unforested areas available for colonisation, periodically with disturbance to the vegetation through climatic changes which may have favoured establishment of newcomers.

Similar mountain areas throughout Indonesia could have acted as stepping-stones from the northwest.

Only a minority of the tropicalpine plants — usually those without near relatives in distant places — probably evolved from forest ancestors. All of New Guinea was probably low and warm enough to be blanketed by forest until only a few million years ago — relatively recently by earth history standards!

Quite how this migration of plants took place is not clear. Successful seed dispersal and seedling establishment need not be frequent to nevertheless be effective. One success every ten thousand years can accumulate a hundred different immigrants in a million years.

I suspect that birds carried many seeds. Experiments with wild ducks, for example, have shown that they often swallow seeds in variety and in large numbers. Many seeds are retained in their guts, in viable condition, for up to 120 hours. A duck can fly a long way in that time. No doubt other sorts of birds have also been involved.

How the plants got where they are is, of course, mainly just of academic concern. They



can be seen, studied and appreciated without knowing their origins. Another area of interest concerns pollination.

Here the ever-present mist and drizzle intrude again. Cross-pollination is accomplished for most plants in most environments by flying insects or by wind; most coloured, showy flowers are insect-pollinated.

In the cool, misty weather typical of Mt Wilhelm, insects find it hard to fly on most days simply because they cannot get their bodies to the right operating temperature. I have more than once found beetles resting motionless inside buttercup flowers.

It has been demonstrated in the Arctic that the curved, glossy petals of such flowers can act as parabolic reflectors of sunshine, raising temperatures inside flowers by measurable amounts. Perhaps the beetles were trying to get warm.

Several plants on Mt Wilhelm have given up insects. Instead they attract and utilise

warm-blooded pollinators which are not dependent on sunshine to get themselves moving. The honeyeaters are a mainly Australian bird family, but several species live in the highest forests and adjacent grasslands on Mt Wilhelm. They visit the flowers of many shrubs.

Different species of honeyeater, with different beak lengths, feed on different shrubs, with nectar-providing flowers of appropriate dimensions.

One thing all these bird-pollinated flowers have in common is their red colour. Birds are attracted to red.

Rhododendrons demonstrate a link between flower colour and type of pollinating animal very neatly. At higher altitudes, near my hut for example, all the various rhododendron species had scarlet flowers. So did several other shrubs, and all were visited by birds.

Below 3000m, as I plodded through montane rainforest,



my daydreaming was sometimes interrupted by the sight of pale pink blooms beneath my booted feet. These had fallen from the forest canopy, and belonged to different rhododendrons, pollinated by nocturnal hawkmoths. The flowers were fragrant, and their pale colour stood out at night.

Lower down, in the gardened areas below 2700m, an orange-flowered rhododendron species was common. This was pollinated, by day, by butterflies.

Many aspects of the mountain's flora, and its environment, excite wonder and curiosity. Some have been studied cursorily, others not at all. Mt Wilhelm may not be a comfortable place, but it is certainly a beautiful and an interesting one.

It is not too hard to get to. Kundiawa, capital of Simbu Province, is where the road towards Mt Wilhelm branches off the main Highlands Highway. A few hours along this road by four-wheel-drive vehicle takes you to Keglsugl, at about 2700m. Keglsugl also has an airstrip, to which light aircraft can be flown from Kundiawa or Goroka.

From Keglsugl you walk. A guide and porter can be arranged there, as can accommodation in a waterproof hut at 3500m on the mountain. The climb to the hut, overlooking the lake, takes about four hours. Next day you can go to the summit in a further four or five hours.

If you start before dawn your chances are enhanced of a view uncluttered by clouds when you get to the top. You can also get all the way back to Keglsugl the same day, if you hurry.

But it's better not to hurry; better by far to linger awhile, to soak up the atmosphere. I should know — I soaked it up for months! 🐦

Air Niugini flies from Port Moresby to Kundiawa, springboard for Mt. Wilhelm adventures, twice a week.

A daisy bush (oleria), a New Guinea mountain plant with close relatives in New Zealand and Australia.



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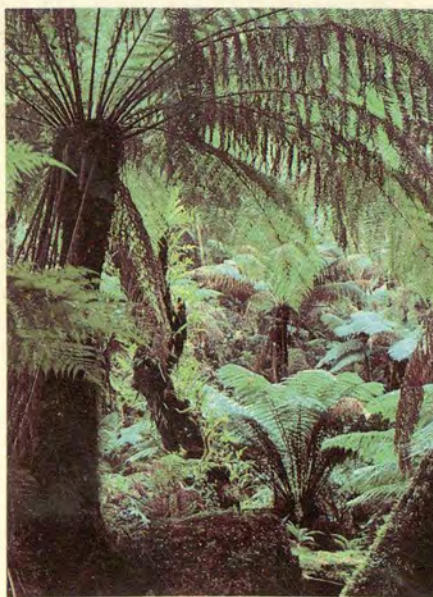
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