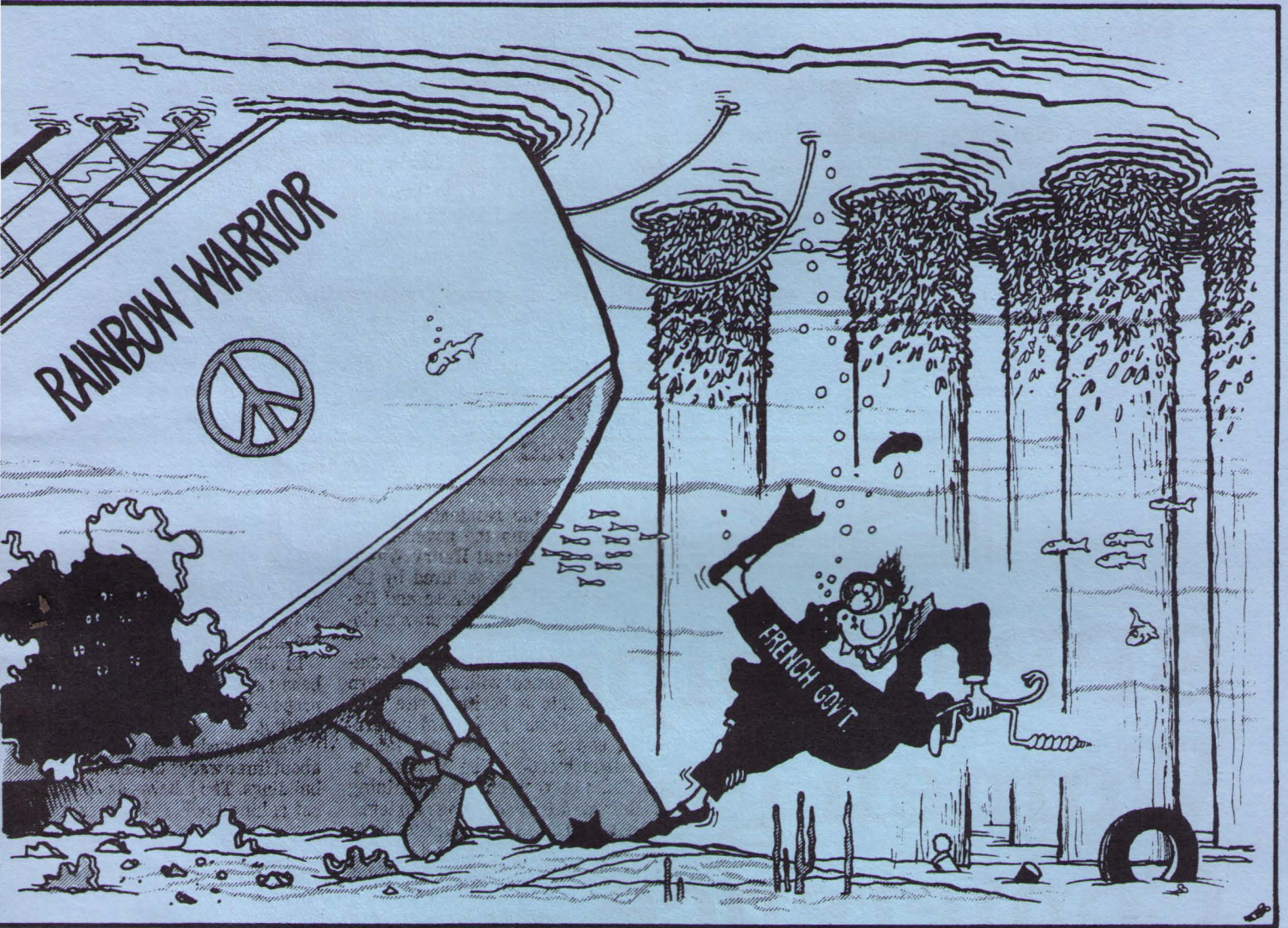


# Tok Blong SPPF

OCTOBER 1985 #13

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TOK BLONG SPPF is pidgin english as used in many parts of the Pacific. It might literally be translated as "this talk belongs to SPPF" or, SPPF Newsletter. TOK BLONG SPPF is published four times per year by the South Pacific Peoples Foundation of Canada, 407-620 View St., Victoria, B.C., Canada V8W 1J6, and is available to donors of SPPF (minimum \$10 yr.). SPPF exists to raise critical issues in the South Pacific to a Canadian audience through a variety of public education methods, and to assist in getting relevant Canadian financial, technical and other assistance into the South Pacific to assist islanders in their self-development. TOK BLONG SPPF is edited by Phil Esmonde.

# Issue Focus to Stay

Response to our last newsletter [Focus on New Caledonia] has been very positive. Supporters we heard from liked the in-depth nature of the issue, and felt it gave them a more thorough understanding of the current situation in New Caledonia.

This was our first issue where we focused on a particular country. Given the response, we will try to give each up-coming TOK BLONG's more of a focus. However, rather than focus the entire issue, we will try to keep to a 50/50 formula: 50% on the issue focus and 50% on broader issues and SPPF's plans, activities, etc.

We would like to hear your comments on this new approach, and any other matter you wish to raise.

Thank you for your attentive support.



## SPPF Helps Pacific Women get to Nairobi Conference

In co-operation with the Canadian government, the South Pacific Peoples Foundation funded four Pacific Island women to attend the Women's Conference in Nairobi this past July.

The women funded were Hilda Lini (in charge of the Women's Bureau of the South Pacific Commission), Mrs. Vereara Maeva (of the Cook Islands National Council of Women), Ms. Afu Billy Sade (of the Solomon Islands National Council of Women) and Mrs. Papiloa Foliaki (women's activist from Tonga).

We hope to carry excerpts of their trip impressions in a further edition of Tok Blong SPPF.

# HAPPY 10th PNG!

September 16, 1985 marked the 10th anniversary of Independence for Papua New Guinea. This issue of Tok Blong SPPF focuses on Papua New Guinea, a country often touted as moving "10, 000 years in a lifetime", a reference to the differences between the introduction of modern technological society and the traditional tribal society.

As Prime Minister Michael Somare put it at independence:

"No other country in the world has ever made such a dramatic transition from a totally tribal/village lifestyle to a Western democratic style of government in such a short time, and under such almost unbelievably difficult conditions of language barriers, people barriers and geography barriers."

This "dramatic transition" has brought both success and failure. But more so, it has challenged Papua New Guineans to build the "bridges of development" which allow for maximum positive impact while both minimizing societal stress/collapse, and nurturing the positive traditional elements of PNG society.

PNG currently faces one of its largest tests, as petty and serious crime increases and youth gangs ("rascals") take over the cities at night.

Perhaps in some ways little different than youth in the "western" world (dreams, hopes, and the glimpse of an "easy" future they have been sold running into a reality of unemployment, lack of skills training and societal support), the youth of PNG are in a different situation: they still have the traditional strong support of their extended family - their "Wontok". This traditional support system is running headlong into the new law and order society of an independent and growing Papua New Guinea.

The youth problem in PNG is a dramatization of the tension of rapid change in that country: the "10, 000 year" leap.

We hope that the following articles will give some insight and understanding of PNG. We realize it would take books and more books to do the subject justice.

# An Introduction To PNG

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Papua New Guinea forms the eastern half of the island of New Guinea which is the second largest island in the world after Greenland, and the largest non-continental island in the Pacific. The country lies just north of the north-eastern tip of Australia between the equator and 11 degrees South. It comprises a large mountainous mainland and some 600 smaller offshore islands, and has a total land area of about 463, 840 square kilometres. A massive mountain range running north-west to south-east forms the backbone of the country; in the centre peaks of up to 4, 500 metres are found and there are more than 100 volcanoes.

There are five major river systems - the Fly and the Purari, flowing south into the Papuan Gulf; the Sepik, which drains the western part of the central depression and flows into the Bismarck Sea; and the Ramu and the Markham which occupy the central and eastern parts of the great depression. Both the Sepik and the Fly rivers are navigable to small boats for about 800 kilometres.

Papua New Guinea's physical characteristics determine its climate. The country lies wholly within the tropics, but the climate is tempered by oceanic and altitudinal influences. The monsoon, which approaches from the north-west, lasts from December to March, while the south-east trade-winds dominate from May to October. Most parts of the country have heavy rainfall with source recordings as high as 7, 000 millimetres per annum. The major exception is the National Capital District which lies in a rainshadow and has an average annual rainfall of less than 1,000 millimetres.

Approximately 3.5 million people live in Papua New Guinea; people of a wide variety of physical and cultural types all described as Melanesians. The overall population density is very low, especially by the standards of the country's Asian neighbours.

The main concentrations of population are in the rural highland valleys and in the main towns - Port Moresby, Lae, Rabaul, Madang, Wewak, Goroka, Mount Hagen and the Arawa-Kieta-Panguna urban area.

Before colonization by Britain, Germany and Australia in the late nineteenth century, there was no centralization of government or power in Papua New Guinea. It is often pointed out that there are over 700 languages in Papua New Guinea, but it is clear that the number of autonomous communities was much larger than this since the basic unit of organization was the village. Most village communities were run in an open, democratic style. A complex system of exchange marked social relationships, with warfare determining territorial and many other social arrangements. Successive colonial administrations gradually imposed themselves on Papua New Guinea society, but without totally destroying the traditional system of government.

Few opportunities for political involvement by local people were provided by the colonial administration, but in the latter years of Australian rule representative government was slowly introduced. Following a period of self-government from the end of 1973, full political independence was obtained on 16 September 1975.

Papua New Guinea follows a Westminster parliamentary system with three branches of government - the executive, the legislature and judiciary. Legislative power is vested in the National Parliament, which is a single-house assembly of 109 members elected by universal adult suffrage. Some members represent entire provinces. Executive power is vested in the National Executive Council, which comprises the Prime Minister as its head and a maximum of twenty-seven ministers whom he chooses; all must be members of parliament. In order to govern, the Prime Minister must command a majority of the votes in parliament. Papua New Guinea is a member of the British Commonwealth, with a governor-general who is elected by parliament as ceremonial head of state.

A decentralised system of government was introduced in 1976 in order to bring administration closer to the people. Nineteen provincial departments were created and a separate National Capital District. In each province there is a provincial government with control over its own administration and budget. Each has provision for a nineteen-member Assembly (although several provinces are currently reviewing this under the Electoral Act) and each province has adopted a ministerial system of executive government.

Below the level of the provinces there are districts and subdistricts. These are purely administrative units and have no political role. There are also a number of elected local government councils or (in some provinces) community governments. These vary in effectiveness but all now have fairly limited powers over a number of typically municipal activities.

Excerpted from "Economic Profile of Papua New Guinea", PNG Embassy, Washington D.C. (June 1985).



## Kiwanis Now in PNG

David Anere, previously a PNG student studying at the University of Victoria, writes to inform us that the Kiwanis Club of PNG started in May 1985. There are currently 35 members, with David serving as the Vice-President.

Anyone wishing to be in touch can contact them at P.O. Box 293, Port Moresby, NCD, Papua New Guinea.

# PNG's Economy

This overview of Papua New Guinea's economy is from a booklet published by the PNG Chamber of Commerce and Industry, February 1985.

Papua New Guinea's economy remains largely dependent upon its natural resources both in terms of minerals and primary industry. It is noted for producing copra, palm oil, cocoa, tea and most importantly, coffee - all these items along with an increasing number of spices such as cardamon are exported to markets around the world. Forestry is also an important source of revenue with plywood, hardwoods and logs being exported on a regular basis to Japan, New Zealand, Australia and Europe. A growing fishing industry is providing another source of income - the surrounding waters contain prawns, crayfish, tuna, barramundi and in the Eastern Highlands, trout are raised on a commercial basis.

Papua New Guinea produces its own sugar and fully meets the demand on the local market. A limited amount is available for export. Local poultry and beef producers provide nearly all the nation's requirements for chickens, eggs and beef and the import of these foods is now subject to import control. The capacity to produce the nation's fresh vegetable requirements locally exists and is being encouraged. An import quota system was recently introduced to control the amount of produce brought in from overseas as well as promote the development of a local vegetable industry.

Mineral development includes the very large copper mine in North Solomons operated by Bougainville Copper Ltd., a division of Conzinc Rio-Tinto Australia, and the gold and copper mine in Western Province, Ok Tedi, which recently began its first production run. Ok Tedi is a joint venture between the government of Papua New Guinea and several large overseas companies and finance organizations.

Continued exploration of mineral and gas/oil prospects have revealed the presence of gas and oil in the Southern Highlands, the Porgera gold deposits (Placer Developments) in Enga Province, gold deposits on Lihir Island, copper and gold in the Sepik region, nickel and chromium deposits in the Ramu valley. The nation has considerable mineral wealth, the full extent of which has yet to be assessed. Prospecting continues but at the present time many of the known mineral deposits are uneconomic to develop because of the low prices on the world's metal markets and the high cost of establishing and servicing mining operations in remote areas which are difficult to reach.

Commercial and business enterprises in the country tend to concentrate upon retail and wholesale trading, light manufacturing, transport and shipping. The industrial and manufacturing centre of the nation is Lae. Port Moresby is a city based upon government and financial institutions but does have a large industrial sector as well as being a busy port.

There is a good working relationship between the private sector and both the provincial and national governments. This relationship has been fostered by the national government in recognition of the fact that while the economic strength of Papua New Guinea will always lie with its natural resources, a strong and healthy industrial and commercial sector is important to the balanced development of the country. In an attempt to diversify the economic base both provincial and national governments are actively seeking investment from overseas in joint business and manufacturing ventures.

Many of the large companies operating in Papua New Guinea are subsidiaries of overseas companies, most of which are based in Australia or New Zealand. Prior to independence ownership of almost all commercial and industrial operations was in expatriate hands but as Papua New Guineans have become more active in the business community, a greater percentage of ownership has become local. This has been achieved by direct purchase or the establishment of a business, acquiring shares and joint ventures between a citizen and a non-citizen or between the government and an overseas based company.

Participation in the business world by Papua New Guineans has also increased as a result of national government policy on localisation of jobs and the requirements regarding the training of employees to take over positions held by non-citizen staff. Certain categories of work are now designated as not open to non-citizen employment and certain business may not be owned or operated by non-citizens.

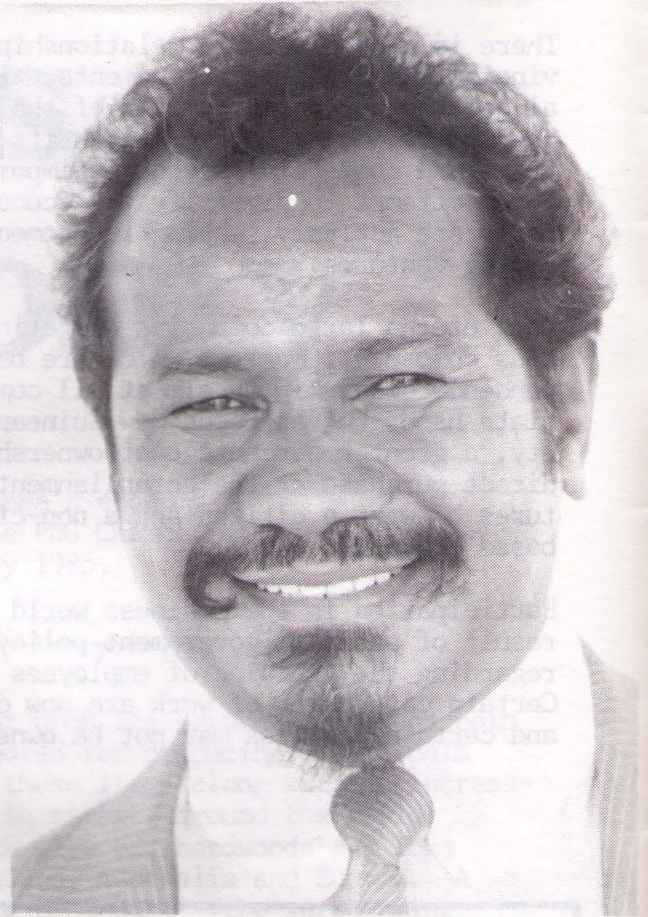


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# Some General Reflections

## by

# Renagi Lohia



# 10 Years of Independence

Following are some excerpt from an interview with Renagi Lohia, PNG Permanent Representative to the United Nations and High Commissioner to Canada. Mr. Lohia has been the PNG U.N. Representative for over 2 years. Prior to this he was the Director of the PNG public Service Commission, Vice-Chancellor of the University of PNG, and Dean of Education at U.P.N.G. The interview took place on a ferry between Victoria and Vancouver, British Columbia this past July.

An important aspect of any country's development is the unity of its people and its sense of purpose. Because of the terrain of Papua New Guinea, there are problems (for example we have over 600 islands). In terms of topography there is a high degree of diversity. There is diversity in terms of population. The vast majority of the country is very densely populated. In 1975 we found ourselves in a situation of a high degree of diversity in economic development.

Our biggest challenge and our biggest achievement was in unifying the diversity of people. Our resources have been unified into a national economy.

There has been tremendous development in providing economic infrastructures. In 1975 it was very difficult to travel by road, sea or air. Today we have a modern communications system (I can call anywhere in PNG from my New York office).

We have also developed a mature political society. The principles of democracy are very imbedded in our traditional life. We had an open society where criticism was



allowed in village meetings. This has been adopted to a modern democratic political life.

Our politicians and bureaucrats in PNG are still village-based and, on the basis of knowledge of who we are and where we come from, we are capable of determining the future on the basis of our potential and knowledge of customs.

A number of Papua New Guineans have made shifts from a combination of village and modern life. Some have shifted completely from one to the other. Some are pursuing a lifestyle which will be questioned by village-based people. This will be a continuing area of movement over the next 10 years. Many people have no problem living in both village and modern life - they take advantage of both.

As the elders pass away, attitudes on marriage and custom will change. Parents are starting to let the children decide on marriage. Western freedoms are becoming more a part of PNG society.

However, the principles of sharing, reciprocity and family will continue to be important. The modern schools are trying to maintain the traditional values.

We still have a tremendous challenge in developing our resources. I hope the exploitation of resources will continue to be for the benefit of the total population. There is a tendency for our leaders to be more "people-oriented" and I hope that this will continue.

I hope development will not be allowed to blind our people and bureaucrats as if it is only answer to the good life.

We learned a good lesson from the Bougainville Copper mine. The chemicals from the processing plant were released into the river as waste. This killed fish and plant life. Also debris was carried to the mouth of the river and this had an effect on the currents and the patterns of fish.

One village in the area was more or less dug up and moved for the development. This was a complete and sudden change for the people and removed their spiritual association to the land.

We are trying to apply these lessons to the Ok Tedi mine. The important things are restoration of the land and that development and exploitation be for the people.

#### Some Main Challenges Over the Next 10 Years

On the international front, we will continue to encourage technical co-operation agreements. We view the development of partnerships in the development of our country's resources as important. This helps to develop a sense of family in the region, and this hopefully overflows into the rest of our relationships with the world.

A great challenge is to see that self-determination and independence is achieved by those in the region who wish it. This will continue to be a priority.

We are all challenged by the added pressure to minimize the arms race; the stock-piling and development of new weaponry for war. We will continue to play an active role in discouraging nuclear waste dumping and nuclear testing in the Pacific. We start with our immediate area, and bring the same concerns to the world area.

Internationally, we are also challenged by, and will continue to fight against, apartheid and racism.

At home, we face economic challenges. We must continue to ensure the unity of people and purpose, and ensure people are fed and properly housed. The handling of our resources is important. People must be able to take part in this wealth.

We have one of the unique constitutions in the world. It takes into account our traditional heritage. But it still needs some refinements.

Our constitution clearly defines the equality of women, yet some traditional structures suppress women. This is being recognized.

Basically we are happy and proud, not forgetting we have problems and have to keep working on them.

Perhaps our greatest challenge over the next 10 years will be the ability of our political and bureaucratic leaders to maintain the constitutional requirement that our traditional heritage is the basis of our development. Some people will want to change this.



nasal septum: The cartilaginous membrane between the two passages of the nose. The Australian aborigines, tribes of New Guinea and others throughout the Pacific region, often bored through this septum so that they could insert wood, bone or boar's tusks. These served as decoration and also for ritual purposes, when the various decorations meant various things: e.g., when the boar's tusks are pointing downward, they are going to war. Pictured is a New Guinea warrior with boar's tusks through the septum.



Shown are a Hombuli mask, used for bridal payments in the Sepik area, a shell necklace from the Milne Bay Province, and a shell necklace woven from seeds found in New Ireland Province.



# A LETTER FROM PNG

July/August 1985

Right now the French have a roving ambassador, Secretary of State for Foreign Affairs, Jean-Michael Baylet, touring the Pacific (currently in PNG) trying to repair the reputation of France in this region. He has visited New Caledonia, Vanuatu and PNG so far. He will go on to Western Samoa, Tonga and Tahiti. There doesn't seem to be any change in the French position re: dumping, testing or colonial policies. It amazes me that the French express 'surprise' at the negative reputation they have here.

Vanuatu has given favourable consideration to a Russian proposal for fishing rights and for establishing a fishing base there. Given that Kiribati is also considering granting fishing rights to the Russians, the U.S. and Japan must be worried about what the final decisions will be.

There are increasing diplomatic manoeuvres amongst the 'big powers' here in the Pacific. A number of 'investments' on the part of Japan are clearly establishing their dominance. The Japanese have been contracted to build a huge sports complex here in Port Moresby - considered an 'aid' project. They'll also work on the Lae-Port Moresby road.

It will be interesting to see how PNG treats the development of new gold reserves discovered here recently. Deposits are much much larger than what is now being mined by Ok Tedi in Western Province.

There are few 'forums' that can unite Pacific countries in decision making. All are influenced by current colonial powers and PNG, which has the potential of being quite influential, is torn apart from internal struggles - Paias Wingti's break-away, the state of emergency here in Port Moresby, aid cuts from Australia - as well as complete copy-cattng of Australian foreign policy. This is more accurately described as running with the haves and hunting with the hounds.

The Irian Jaya problem remains unresolved although PNG foreign affairs department says that their stance is clear - ie. there is no recognition of refugees. Meanwhile last week 120 more 'boarder crossers' joined the already over-flowing camps.

So the situation here is becoming more complex.

As we gear up for independence celebrations I think the major problem PNG is facing is creating real change in rural isolated areas, as well as keeping in focus what realistic expectations people can have. Over the last 10 years most Papua New Guineans have generally gained more access to what might be called 'government social services.'

There are more roads, more school, more local government participation, better amenities, increased health delivery systems, certainly more vehicles and a dramatic increase in urban populations. The problem is some have benefitted, others haven't.

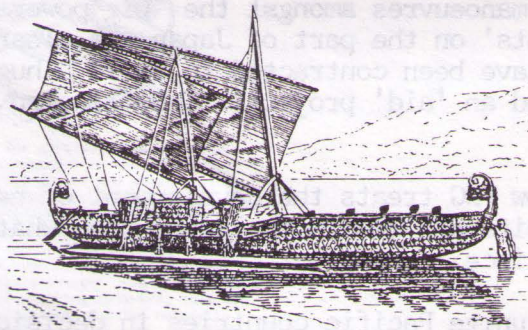
One can either be optimistic or pessimistic about the future. All changes have traded one set of problems for another and few people seem to 'understand' the process overall.

Instead of Prince Charles 'Bikpela pikinini bilong Missis Kwin' attending Independence celebrations as he did 10 years ago, Australian Prime Minister Bob Hawke will lead the parade this time.

While PNG is clear about its priorities in some sectors, others remain quite muddy. The story is only just beginning to be told. How independent PNG remains will depend on how clear the country can steer its way against economic, then political domination from larger powers which are much more interested in the Pacific now than 10 years ago. Indications are that PNG has the resources to do this. It'll be up to its leadership to help define the course it takes.

In many areas what we hoped would be 'bottom up' development has turned 'top down'. The outcome of the struggle remains to be seen.

The Prime Minister initiated a 'name - change' competition here several months ago. No one seemed really excited about the need for a change, but indicative of the problem was one suggestion that PNG be called 'Papua Yugimme'. I'd settle for the more 'identity' suggestion of a change of spelling rather than the name itself. The odds on favourite seems to be Papua Niugini.



Hermit Islands canoe:  
These large canoes were built from several lengths of timber on a dugout hull, with a single outrigger and lee-balancing platform.

THIRD WORLD RESOURCES has available a four-page guide on Asia and the Pacific that lists 65 international organizations, 75 books, 43 periodicals, 34 pamphlets and 37 audiovisuals on the Asia and Pacific regions. Send 66 cents in U.S. postage stamps for a single copy (or equivalent money order) for a single copy. Inquire for bulk and overseas rates. Third World Resources, 464 19th St., Oakland, CA 94612 USA.

# SPPF HOSTS LOHIA

SPPF arranged an itinerary for and hosted the visit to Victoria and Vancouver of Mr. Renagi Lohia, Papua New Guinea High Commissioner to Canada and permanent Representative for PNG to the United Nations from July 18 to July 23.

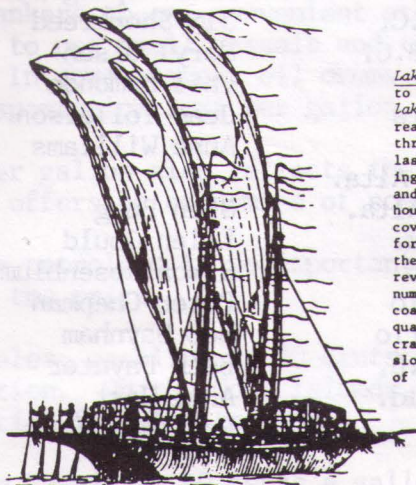
Mr. Lohia took the opportunity of Sanguma's playing at the Vancouver Folk Music Festival for his trip, which was in itself quite successful, and assisted in the development of several major program ideas.

One of these will be the hosting of a PNG art exhibit from Port Moresby by the University of Victoria (UVIC) Art Gallery. The exhibit will be yet another way of raising awareness in Canada of PNG. In unison with the exhibit - which is making Victoria its only North American stop - SPPF is working with UVIC officials to put together a program of public talks and movies. The exhibit will be opened in early July 1986 by Mr. Lohia, and efforts are underway to have Sanguma play a benefit for SPPF at the opening.

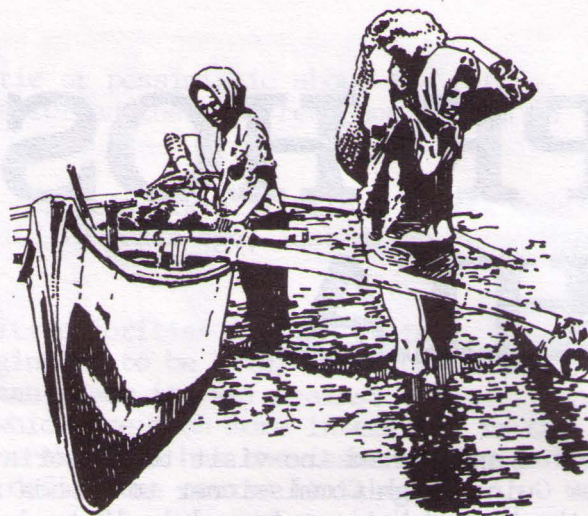
Mr. Lohia met with other UVIC officials concerning the development of an exchange program between UVIC and the University of Papua New Guinea.

Other meetings included the Deputy Commissioner General of EXPO '86, which is considering an "Islands Pavilion"; the President of the newly-formed Asia-Pacific Foundation of Canada, who offered assistance for a possible PNG trade mission to Canada in 1986; CUSO personnel in Vancouver; and officials of Simon Fraser University who are interested in providing assistance in distance education techniques, technology, etc.

Anyone interested in more information should write to Phil Esmonde at SPPF.



Lakatoi from SE New Guinea: Allied to the *matlu* double canoe, the *lakatoi* of the Motu people is really a large composite raft of three or more dugout canoe hulls lashed together with a deck covering them all, and with two masts and crab-claw sails. The deck-houses and bulwarks are generally covered with palm leaves. Stays for the mast lead to one side of the hull only, and the craft is reversed when tacking. Note the numerous steering paddles. Long coastal trading voyages with large quantities of cargo are made by craft of this type, but they are slow and cumbersome and make a lot of leeway.



# What is Going on in the Pacific?

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Roman Bedor of Belau [Palau] and Owen Wilkes of New Zealand will be touring Canada during October, sponsored by the SPPF, Project Ploughshares and the Nuclear Free and Independent Pacific support network.

Roman Bedor is the chairperson of the Nuclear Free and Independent Pacific movement and a lawyer. He has been actively involved in defending his country's nuclear free constitution.

Owen Wilkes is a researcher for the New Zealand peace movement and formerly worked with the Stockholm International Peace Research Institute.

Both are extremely well-informed and we urge your attending their talk in your city. Following are dates and places and contact people.

October 10	Vancouver, B.C.	Helen Spiegelman	731-8464
October 12	Nanoose Bay, B.C.	Jim Shortreed	468-9427
October 13	Port Alberni, B.C.	Meryl Olsen	724-2353
October 16	Victoria, B.C.	Phil Esmonde	381-4131
October 17	Calgary, Alberta	Jean Tollefson	289-4780
October 18	Lethbridge and Pincher Creek, Alta.	Anne Williams	329-2501
October 19	Medicine Hat, Alta.	Glen Bugg	529-2656
October 20	Saskatoon, Sask.	Ellen Gould	244-9722
October 22,23	Ottawa, Ontario	Simon Rosenblum	563-0757
October 24,25	Toronto, Ontario	Peter Chapman	731-7539
October 26	Hamilton, Ontario	Bob Baynham	521-2100
October 28	Fredericton, N.B.	Beth Paynter	454-5581
October 30	St. John's, Nfld.	Anne Hart	737-7475
October 31	Halifax, N.S.	Pat Kerans	424-3760

# ISLANDS ENERGY

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The subject of Pacific islands' energy needs was addressed by PHILIP KINNICUTT, Vice President of Marketing of Pacific Resources, Inc. at the 10th Annual Pacific Islands Studies Program Conference in Hawaii.

In the Pacific, the problems of providing the necessary cheap and plentiful supply of energy are many and difficult, and are generally touched on quite well by Mr. Kinnicutt in his talk, run here in a slightly edited version.

The talk is taken from the Pacific Islands Program (University of Hawaii) newsletter.

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Although each Pacific nation has its own set of difficulties, they all suffer from one common dilemma: a growing demand for energy - a commodity that has become extremely expensive in the past ten years.

In recent years, the primary source of energy has been petroleum, and the demand is growing - not only for transportation, domestic and commercial use, for communications, lighting and refrigeration for food and medicine but also to fuel the hoped-for economic growth, including refrigeration and freezing facilities on remote islands to support the fishing industry.

As you know, the New Pacific covers a third of the world's surface, 25, 000 islands set in 55 million square miles. This vast expanse is home to a mere 5.5 million consumers.

They consume about 40, 000 barrels of petroleum per day - the equivalent of about a third of a gallon of gasoline each. By comparison, each person in Hawaii consumes about four and a half gallons of petroleum per day.

When you realize that in Hawaii, the military and civilian populations use three times more petroleum in one day than all the Pacific islands use, you begin to put the islanders' energy dilemma into perspective.

The cost of delivering petroleum reflects a geographical fact of life. You can't bring your tankers to one convenient stop and unload huge quantities in the Pacific. You have to use small vessels and travel from place to place unloading in small quantities. In some places, oil drums are literally floated to shore. This increases the transportation cost per gallon.

The cost per gallon also reflects the cost of storage facilities, and in the Pacific their size offers no economies of scale either.

But because petroleum is so important, a secure supply is higher on the priority list than the price.

In Los Angeles, gasoline is 70 cents per gallon delivered from the refinery to the service station. On the Cook Islands, that same gallon is \$1.75, delivered to the service station from the terminal.

Jet fuel in Hawaii is 89 cents a gallon; and in Kiribati it sells for \$3.40. The increases in world prices of oil over the past decade have severely affected the

island nations' economies. Rising prices have acted as a barrier to expanding the economic base, and they threaten the industries already doing business.

Providing electric power to small communities consumes much of the petroleum they import. Currently, electricity is primarily generated by burning petroleum.

Across the Pacific, the costs of generating and supplying electricity are the responsibility of the local governments. They pay for fuel, operations and maintenance costs. And they sell the electricity generated at artificially low rates that heavily subsidize the consumer.

In many nations, the true government costs for energy are so high that other services have to be neglected. In the Northern Marianas 30 percent of the budget goes to produce electricity. In Kiribati, it is 50 percent.

Many of these generating plants are antiques, built years ago. The operating costs associated with providing electricity are so high that there are no funds for capital investments in new plants or other needed facilities.

The situation is compounded by the need for more energy. The desire for "gadgets" is growing, stimulated by seeing the "lifestyle of the average Western family" in outside media. Look at the advertisements in magazines serving the Pacific islands. They contain many ads for stereo equipment, VCRs, etc.

Competition will continue to bring some price relief for the consumers of the Pacific islands, and it appears now that supply will not be an issue of great concern in the near future.

The good news according to industry experts is that prices may fall another few dollars a barrel by summer, and the cushion of excess capacity in the world today is at a level which poses little threat to energy security of economic growth.

However, in the Pacific islands, the movement away from petroleum is a wise path because costs will continue to remain higher than almost anywhere else due to the transportation, storage and other cost factors of distance and scale mentioned earlier. In addition, petroleum often has a negative impact on the islands' environment and sociological values.

I think it is sage to say that without exception, the local governments are exploring encouraging alternative energy sources as the possible answer to their cost-dependence squeeze.

However, the bad news is there is no magic solution. There is no black box or magic windmill that now exists or is just around the corner to answer all their problems.

There are many alternative devices that are too technical, too complex, too unreliable and too difficult to maintain to be really ready for service anywhere in the industrial nations of the world, let alone on a remote Pacific island.

And there is one universal theme that surfaces over and over again when we discuss alternatives to petroleum for the nations of the Pacific: On island after island, you can see dead, nonworking energy equipment lying around, rusting in the sun.

If you believe all the stories, the islands are a veritable graveyard for diesel generators, powerplants and windmills and solar systems that have broken down. A harsh climate combined with lack of maintenance, repair expertise and parts



along with remoteness does them in everytime. They lie in the weeds, waiting for expert attention, which seldom comes, or they wait for parts, which may turn up after six months. Or never.

And even when the technology is simple, the end product may not be a commodity the marketplace really needs.

Much of the simple alternative energy equipment that is now available produces hot water. But really, that's not what is needed in the Pacific except for hospitals, hotels and a few commercial operations.

In addition to transportation fuels, what is needed is electricity. There are two alternative sources that seem to fit the circumstances and offer promise, particularly in remote situations: photovoltaic cells (or PVs, as they are called in the industry) and biomass conversion equipment.

Photovoltaic cells - that convert the sun's rays directly into electricity - are extremely practical. Although developing the technology has been and continues to be costly, and the units themselves are not cheap, PVs are virtually trouble free after they are put into operation.

They can provide power for lights, communications and refrigeration.

In the French Territories, the government is converting to photovoltaics, an island at a time. They have determined that the negative environmental and sociological effects of diesel generating systems on remote islands outweigh their benefits.

They have launched a major government effort to develop, manufacture and install PV systems. They are also exporting their expertise and equipment into other areas of the Pacific.

A study done in Fiji for rural villages, found that a 13 watt fluorescent tube powered by PV would cost 33 cents for eight hours of lighting. Using a kerosene-fueled lantern costs 35 cents; and benzine costs 39 cents. Note that in remote rural areas, the kerosene and benzine would have been higher still.

Of course, PVs are going to require government subsidies, but so do all viable sources. And once they are in place, they provide free power from the sun, rather than from a barrel of fossil fuel.

An added advantage is that this is one energy source that won't wind up in someone's gas tank, either. In addition, if the supply ship fails to arrive on time, PVs won't run out of fuel.

Converting biomass to useful energy to displace fuel oils also has promise and a number of island governments are putting a great deal of money and effort into developing this energy source.

The person who comes up with simple, inexpensive gasifiers or generator systems to convert coconut husks, or haole koa (also called tangun tangun), or other agricultural materials into useful energy is going to be very rich and an island hero.

In more urbanized areas on islands such as Guam, Saipan, and Fiji, where power and hot water are needed and where there are technicians to keep these units working, dependence on petroleum-based energy can be reduced by higher tech energy conservation systems like heat pumps, and heat recovery systems.

Cogeneration, another heat recovery technique that simultaneously produces electricity and useful heat from one fuel source at the user's site, is another possibility.

Solar water heating is also appropriate in these areas for domestic and small commercial use where it can displace electricity, as long as the solar panels do not act like sails during a hurricane.

But what about wind? What about OTEC?

Wind was originally thought to offer a lot of potential. Simply put, it has been discovered that windmills break - frequently. And windmills are not a very appropriate technology for hurricane-prone islands.

OTEC - ocean thermal energy conversion - is in the testing phase of development, and there are still major technological problems that have to be resolved before they can be adapted for the Pacific islands.

We must be cautious. The technology of the equipment must not outstrip the ability of the resident population to operate, maintain and repair it. The availability of parts is another major consideration. And perhaps most important in the long run, what will be the environmental and sociological impact?

There are no quick fixes to the plight of the energy-hungry Pacific islands. There is a lot of misinformation floating around, a lot of carpetbagging and exploiting of the situation by companies and individuals out for a fast buck, and too much hope - false hope - in what high tech can bring at this time.

Nothing is going to completely solve the situation overnight, or even in the next decade. It is imperative to balance technology with resources, to go with the simple, proven devices. There are just a few good candidates for success in conditions as they exist.

The bottom line is that no easy or short term solutions are on the horizon. Photovoltaics are a good alternative for the remote islands for now. And developing biomass converters shows promise for islands like Saipan where there is a great deal of agricultural material to process.

Also, proven energy conservation equipment can make a significant impact on the larger islands in large scale applications.

But above all, I hope we will not see large scale testing and experimental projects in the Pacific islands. Even though they may be conducted and funded by outsiders, it is a tremendous waste of scarce financial and human resources to use these islands as a testing ground for something that should be done elsewhere. Islands tend to become dependent on the test source so it is a blow to the morale when they break down or the test ceases.

Let the basic testing be done in parts of the world that already have other reliable energy sources. Once the new technology is proven to be effective and reliable, it can be adapted by islanders on their islands for their own use.

Tests and experiments are just that. They do not represent solutions to current problems. Let's not create any more energy graveyards in the Pacific islands.



**At time of press, governments from around the world are meeting in London to decide whether to allow the dumping of nuclear wastes in the oceans. Despite the Prime Minister of Japan stating that Japan would not dump its waste into the Pacific without Pacific people agreeing, there is continuing concern — especially in the Northern Mariana Islands — that Japan (with behind scenes support from the USA) is only waiting for the international “green light” at the London meeting before going ahead with her plans.**



# South Pacific Forum Endorses Nuclear Free Zone

The South Pacific Forum has endorsed in principle a nuclear-free zone treaty. Eight of the thirteen member states have already signed the treaty.

The Forum, which was held at Rarotonga in the Cook Islands, is the annual meeting of the heads-of-government of the 13-member countries. The 15th forum held in August was dominated by a nuclear agenda, including the setting up of a nuclear-free zone, continued French testing at Mururoa Atoll, and proposals to dump radioactive waste in the South Pacific.

The nuclear-free zone treaty was immediately signed by Australia, New Zealand, Western Samoa, Niue, Fiji, Kiribati, Tuvalu and the Cook Islands. Four other member states are expected to sign after domestic consultations. Only Vanuatu is expected to have difficulties with internal ratification.

The adopted nuclear free zone will be bordered by the Equator in the north, Easter Island in the east, Antarctica in the south and the West Australian coast in the west. The treaty includes:

- No South Pacific country which becomes a party to the treaty will develop, manufacture, acquire or receive from others any nuclear explosive device.
- There should be no testing of nuclear explosive devices in the South Pacific.
- There will be no testing of nuclear explosive devices in the territories of participating states.
- Nuclear activities in the region, including the export of nuclear material, will be conducted under strict safeguards to ensure exclusively peaceful, non-explosive use.
- South Pacific countries will retain their unqualified sovereign rights to decide for themselves such questions as access to their ports and airfields of vessels or aircraft of other countries.
- International law regarding freedom of the seas will be fully respected.
- Performance of obligations by parties will be verifiable by international safeguards.

The treaty also strongly opposes the dumping of nuclear waste in the sea.

However, for this treaty to have any efficacy its three protocols must be signed by the five current nuclear-weapons states - The United States, The Soviet Union, France, Britain and China.

The first protocol invites France, Britain and the United States to apply the provisions of the treaty to their South Pacific territories. The second and third protocols invite all the nuclear-weapons states not to use or threaten the use of nuclear weapons to parties to the treaty.

A working party will be set up to attempt to persuade the nuclear-weapons states to

support the protocols. Yet, despite diplomatic pressure, France is not expected to sign and will not accept a restriction on continued nuclear testing at Mururoa. Because the U.S. is perceived to be the "mentor" of most countries in the region, White House approval is seen to be very important to the treaty's implementation. Prime Minister Hawke is "hopeful" that the U.S. will sign. Hawke has also said that he hoped the other nuclear powers would sign, thus putting pressure on France.

According to the governments of Vanuatu, the Solomon Islands and Papua New Guinea, the Nuclear Free Zone Treaty is too weak and should address the questions of nuclear capable vessels and planes passing through the zone. Vanuatu is expected to have domestic problems in finally endorsing the treaty. However, Fiji and Tonga expressed doubts that the treaty was too tough and would embarrass their friend and ally, the United States.

By endorsing the treaty the forum has taken the view that international law prevents the Pacific nations from prohibiting the transit of nuclear weapons through the regions. According to the Australian Minister for Foreign Affairs, Bill Hayden, no country can stop the vessels or aircraft of another nation from using international waterways or airspace.

What this gives us of course is a nuclear-free zone in which American nuclear-armed ships will continue to cruise, patrol and carry out military exercises with their allies. It will also make very little difference to France which will no doubt continue its program of underground nuclear tests at Mururoa Atoll. Nuclear-armed ships will continue to dock at Fremantle and other Australian ports although individual countries will be able to decide whether or not to admit nuclear warships (at least clearing the path for New Zealand to continue its anti-nuclear policy and proceed with its proposed legislation to ban nuclear-armed vessels). Under the treaty, Australia will also be able to calmly continue the mining and export of uranium, and joint U.S. defence facilities will continue to operate and function just as effectively as they did before the forum. The treaty could also allow, for example, the testing of the MX delivery system.

Criticism of the treaty ranges from its being the final nail in the coffin of ANZUS to being a treaty which will make little or no difference to the nuclear-free security of the region.

The effectiveness of the treaty will be in showing the Reagan Administration that the peace movement in the Pacific is not a small isolated voice ineffectively calling out across the ocean, but rather a large growing mass movement which is demanding a limit to the escalating nuclear arms race. Although the treaty will do little to remove the nuclear threat in the Pacific it will force the United States to realize that New Zealand is not alone and isolated in its anti-nuclear stance, but rather supported by more conservative allies, even if only on paper.

The U.S. has viewed the declaration of the treaty with displeasure and trepidation, particularly in relation to the growing anti-nuclear feeling in the Pacific region. THE FORMAL REACTION OF THE WHITE HOUSE WHEN APPROACHED TO SIGN THE PROTOCOL WILL BE VERY SIGNIFICANT.

The stand by the member countries and the Pacific Forum is a blow for the U.S. All Pacific countries have been, or are, subject to some form of colonialism and for this reason the treaty should, and could, go a lot further than it does, but at least it is a significant if moderate step in the right direction.

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From: "Coleman's Comment" by Ruth Coleman, Senator for Western Australia.

# DEAR PRESIDENT MITTERAND...

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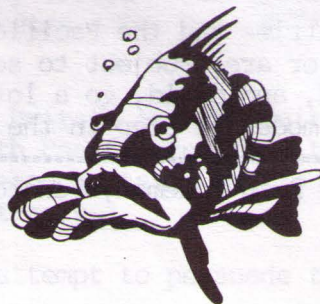
In late May 1985 an International Symposium on Coral Reef Ecology was held in Tahiti and attended by some 500 scientists from around the globe. The following petition was circulated at that meeting and signed by almost 100 leading scientists. We received this copy from Dr. Graham Baines of the Solomon Islands during a brief stop he made in Victoria. The petition was circulated at the Symposium after Dr. Baines criticized French nuclear testing at Moruroa.

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Tahiti May 29 1985

CONCERNED about the unsuitability of coral atolls for nuclear weapons tests and of the strong possibility of the release of radioactivity from Moruroa atoll into the marine environment, we, the undersigned scientists, gathered together in Tahiti to report on and discuss the latest advances in knowledge and understanding of coral reefs and the environments in which they function,

RESPECTFULLY call on you to direct your government to quickly cease its programme of nuclear weapons experiments in coral reef structures and to make available to the international scientific community data on environmental radioactivity at and about Moruroa atoll, and scientific details of the effects of underground nuclear weapons tests on the geological structure of the atoll.



# Feedback

"We have and are continuing to enjoy your newsletter and I take this opportunity to thank you and your staff for filling in the many many gaps that our small overseas missions are unable to fill."

Morea Vele  
First Secretary  
Embassy of P.N.G.  
Washington D.C.

"Here is my donation for \$25. I hope this is of some help. I have enjoyed Tok Blong and look forward to receiving it for another year."

T.A. - Victoria, B.C.

"Enclosed is my donation to help you continue with your impressive work."

D.R.B. - Toronto, Ont.

"Enclosed is a cheque for \$25. Your July 85 issue of Tok Blong SPPF was very informative to me, pushing back my mind-haze on New Caledonia."

G.K. - Sidney, B.C.

"Enclosed is a \$50 donation to renew my membership. I do enjoy your newsletter and appreciate the importance of the work you are doing. Keep up the good work. I'm with you in spirit."

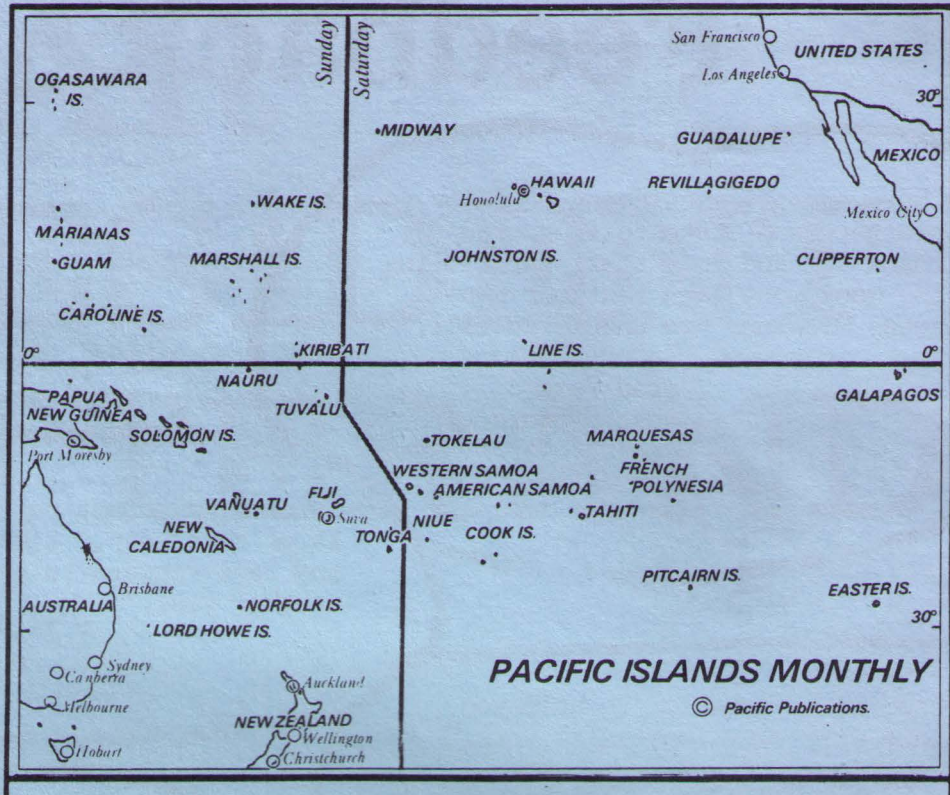
P.A. - Cereal, Alberta

"Enclosed please find my donation to SPPF. I always look forward to the arrival of your newsletter as it is one of the few newsletters in which one actually learns something. I like the way it is more like a journal than a newsletter."

M.P. - Etobicoke, Ont.

"The arrival of Tok Blong SPPF in my mail this morning prompts me to write as I have been meaning to do for some time. I have greatly enjoyed your newsletters. They are varied, well-written and highly informative and I always look forward to receiving them. I commend you on your fine work and have enclosed a donation with the hope that it provides some assistance."

M.A.K. - Vancouver, B.C.



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