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An Exploration of Potential PRE/H Activity
In the South Pacific Region

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The Office of Housing and Urban Programs
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Introductory Note

Rivkin Associates prepared this paper based on secondary sources and interviews with AID, World Bank, and United Nations Officials. Background for the assignment stems from our formulation of a draft overall development plan (1981) for the Republic of Palau, which adjoins the region and expects to achieve "Free Association" status with the United States upon termination of the current UN Trusteeship, and preparation (1983) of an Overview of Human Settlements in the ESCAP Region, on loan to the Economic and Social Commission for Asia and the Pacific from PRE/H.

Ms. Antoinette Russin conducted the research, and Malcolm D. Rivkin was Project Director.

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I. Introduction

If AID's Office of Housing and Urban Programs elects to pursue activities in the South Pacific, it will be operating in a territory distinctly different from those where it has established program experience. The region encompasses thousands of sparsely populated islands, scattered over thousands of miles of ocean, comprising 10 countries whose economies are based largely on subsistence agriculture and fishing. Within the region are literally hundreds of linguistic and ethnic groups. In very few places are concentrations of human settlement at a scale approaching those of other countries in Asia where the Office has worked. Except in these few places, provision of shelter is not a problem, as indigenous peoples have established a harmony between man and environment permitting dwelling unit construction from local materials that suffices for the prevailing style of life.

The region as a whole is prone to hurricanes, floods and other natural disasters, an issue that has been the focus for much of the foreign aid that has thus far been devoted to the shelter sector.

The South Pacific area is one in which other donors (particularly Australia, New Zealand, the United Kingdom, and the Asian Development Bank) have major commitments by virtue of political history. While AID itself has a presence, it is a modest one, geared mainly to skills development and community services, with considerable reliance on the private voluntary agencies (PVO's) and the Peace Corps as implementing bodies.

All of these distinctions notwithstanding, our investigation suggests that opportunities do exist for PRE/H to initiate some exciting program activity. Pursuit of these opportunities should be responsive to PRE/H's motto "Assess broadly but target selectively." Probes to define the precise nature for PRE/H activity should be initiated in just two countries: Papua New Guinea and Fiji which seem to have the problem conditions, basic resources, and institutional structure to absorb external assistance in shelter and urban development. Offers of technical assistance and training in specific fields could,

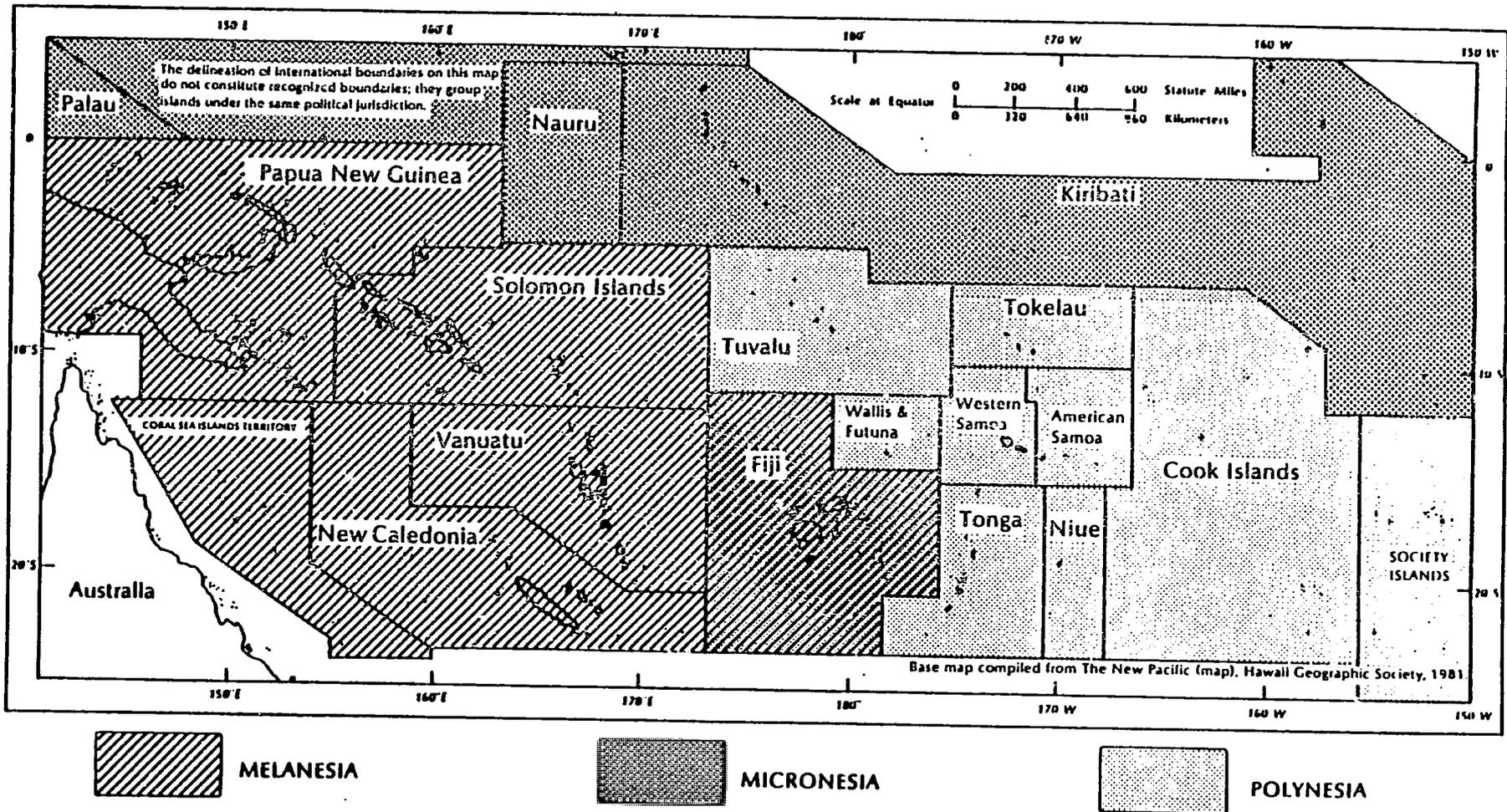


Figure 2. Cultural Areas in the South Pacific Region.

however, be made on a broader, regional basis, utilizing existing institutions with resources already tested in the South Pacific. Coordination could be initiated (and would be welcomed) with United Nations Habitat's technical assistance activities in the region.

This paper will summarize the characteristics of the 10 countries, emphasizing those dealing with housing and urban development. It will examine current international donor assistance and will conclude with suggestions of ideas for PRE/H consideration. Some key bibliographical sources will be appended.

II. Some Statistical Comparisons

Figure 1 is a map of the region and its surroundings.

The accompanying table provides the most current information on basic demographic and economic indicators which bear on human settlement conditions in the 10 countries. Information has been derived from several sources: the Asian Development Bank, the World Bank, United Nations, South Pacific Commission and the East-West Center of the University of Hawaii. The table indicates that total regional population is slightly over 4,000,000, of which two-thirds are in Papua New Guinea, with Fiji the only other significantly populated entity. Given that most of the eight smaller countries are comprised of many islands, the table suggests the dispersion of settlement which prevails.

Population growth rates vary widely, and the negative rates of two countries (Cook Islands and Niue) are explained by substantial out-migration to New Zealand and Australia.

Perhaps the only common trend is the extraordinary growth of urbanization throughout the region, considerably higher than population growth for all of the entities. Based on literature we have reviewed, much of this "urban" growth stems from a particularly Pacific Island phenomenon of "drift", where subsistence-based households migrate to the larger centers both because of lack of rural opportunities and because of attractions of a cash-and-consumption-based town economy with employment in government and services. Industries are few and far between because of lack of resources and lack of

SOUTH PACIFIC COUNTRIES: BASIC DATA

	Population (Rounded)	% Av. Annual Pop. Growth (1970's)	% Urban	% Av. Annual Urban Pop. Growth (1975-80)	Pop. In Largest City	Per Capita GHP or GDP in \$ U.S.	Largest City
Papua New Guinea	('82) 3,130,000	2.3	13.0	5.2	150,000	\$ 820	Port Moresby
Fiji	('82) 660,000	1.7	42.2 37.0	4.0 3.2	117,000 ('76)	1,641	Suva
Solomon Islands	('81) 233,000	3.4	23.2 9.0	14.0	21,000	572	Honiara
Western Samoa	('81) 158,000	1.8	23.2 21.5	4.0	34,000	350	Apia
Vanuatu	('83) 123,000	4.2	18.0	N.A.	15,000	650	Port Vila
Tonga	('82) 100,000	1.8	32.0 26.0	7.0	20,000	520	Nuku'alofa
Kiribati	('80) 59,000	1.7	32.0 36.0	8.0	18,000	279	Tarawa
Cook Islands	('82) 18,000	-2.0	31.0 27.0	3.0	4,000	963	Rarotonga
Tuvalu	('79) 7,000	2.6	37.0 30.0	2.6	2,000	564	Funafuti
Niue	('81) 3,000	-4.3	16.7 21.0	0.0	-*	867	Alofi

Data for this table came from a variety of sources: Asian Development Bank, World Bank, United Nations, South Pacific Commission. Where there was discrepancy between sources (e.g. percent urban and urban growth rates), both figures are shown. Except as otherwise indicated figures are most recent estimates for the 1980-82 period.

* All towns below 500 persons

markets. With few exceptions there is relatively little real opportunity for entrepreneurship or employment in the transformation sector.

By and large, "urban" centers in the South Pacific are small towns without the significant problems of housing and infrastructure which PRE/H has addressed elsewhere in the world. Nevertheless two relatively major conurbations do exist within the region: Port Moresby in PNG and Suva in Fiji, each over 100,000 people, each growing rapidly, and each the "primate" center for their respective countries in which most of the contemporary economic and administrative employment is concentrated.

While incomes are generally low throughout the region, reflective of the subsistence economy, several of the countries evidence per capita GNP's which compare favorably with others in Asia. The two with the largest urban centers, moreover, appear to have relatively high levels of national income. It must be underscored, however, that throughout the region income distribution is highly skewed in favor of civil servants and expatriates.

III. Country Profiles

Below is a series of country profiles which distill the principal economic and shelter characteristics of each of the entities and summarize the present nature of international donor assistance. Maps of all of the countries are included as well. The order of presentation discusses the eight smaller countries first (from west to east) and concludes with PNG and Fiji. All \$ figures displayed are U.S. except as otherwise noted.

A. Smaller Entities

1. The Solomon Islands

The Solomon Islands neighbors Papua New Guinea and has been independent since 1978. Comprised of 10 main and numerous small islands, it has a land area of 28,000 sq. km. Its population of 233,000 is primarily Melanesian.

About 80 percent of the population is rural, dispersed in 5,000 small settlements whose average size is 40 people. Population is growing quite rapidly (3.4 per cent annually) with no outlet for emigration unlike some of the other countries.

As with most of the other entities, the basis of the economy (90 percent of the labor force) is subsistence agriculture and fishing. Per capita GDP was under \$600. Major exports are copra, palm oil, cocoa, rice, timber and fish. Considerable foreign ownership of the cash crop plantations persists.

The country's survival as a state is heavily dependent on foreign aid from the United Kingdom and other Commonwealth countries. This amounted to \$34.5 million in 1980, three times the level received in 1978. The UK is the principal donor with grants, not loans, and produced almost the total capital budget (\$17 million) for 1980. Australia and New Zealand also provide funds; for agricultural projects, civil servants (expatriates) salaries, works projects in the provinces, and water resources management. The World Bank, ADB, OPEC, and the Japanese are also contributors to specific development projects. Some 48 Peace Corps Volunteers are in the Solomons, all working in rural development.

The government is politically committed to decentralize administration to eight provinces, one of which is the capital town of Honiara on Guadalcanal, and to focus more development expenditures on rural areas.

The Solomons are experiencing considerable rural-urban drift, particularly to Honiara, with a 1982 population of 21,000. Honiara is a small town with two paved streets, no stop lights, and is characterized by single story concrete structures. Plans were in process to build, with ADB and World Bank Assistance, a new hydroelectric power plant for Honiara, but poor economic conditions halted the project, and the ADB has provided a loan to examine alternative energy sources. Honiara's energy demand will exceed supply by 1986. UN's Habitat is providing technical assistance to establish a town planning framework, both for Honiara and other economic centers, working with the Ministry of Agriculture. The total project cost for this effort is about \$660,000.

A Housing Authority exists and apparently provides loans to individual applicants, but its scale of activity is unknown.

In the Solomons, as elsewhere in the region, the system of customary land tenure (tribal ownership and control) has produced serious problems in aggregating land for commercial and other urban development. Adequate cadastral surveys do not exist.

The Solomons are moderately exposed to hurricanes, flooding, volcanic eruption and earthquakes, and the government is aware of need for disaster preparedness. Intertect is currently conducting for AID a study of housing vulnerability

2. Vanuatu

Formerly the British-French "condominium" of the New Hebrides, Vanuatu became independent only in 1980. It consists of 80 small islands, with a total land area of about 12,000 sq. km. About 80 per cent of the Melanesian population of 23,000 live in rural areas. Vanuatu is faced with the serious problem of trying to rationalize the residue of two "parallel" European governmental systems, along with economic difficulties.

The economy is a dual one, traditional subsistence coexisting with a modern, monetized sector of plantation agriculture. Principal exports are copra, followed by coffee, cocoa, timber and meat. Over 80 percent of the labor force is in agriculture, with the remainder mainly in public services and trade. Much of the economy was run by expatriates, the bulk of whom departed after independence.

Foreign aid keeps the country running. Even now the British and French subsidize 40 per cent of government's recurrent expenditures, with additional sums coming from Australia and New Zealand. The ADB and World Bank have made major agricultural development loans.

The government's overall economic plan contains commitments to decentralized administration and development and emphasizes investment in cash crop agriculture, timber, and tourism.

About 20 percent of the population is urban, and concentrated primarily in the two towns of Vila and Lugainville which are apparently well-endowed with utilities and services. Indeed, the ADB has criticized past efforts (especially under the condominium) to invest in the towns with services and subsidized "low cost" housing. Based on ADB's recent review, there is external donor pressure to place whatever capital investment becomes available in building up rural areas and productive agriculture.

Vanuatu is relatively well insulated from major storms, and hurricanes are anticipated every four years. Although some work has been done on preparedness, the situation (which is reflective of the other South Pacific countries as well) is best summed up by the following comment in a recent study by the East-West Center: "the major problems related to disaster preparedness and relief are how to motivate the people to acquire a better understanding of the risks and therefore to be better prepared....."

Land tenure is a characteristically severe issue in Vanuatu, especially when it affects availability of sites for urban expansion. During the condominium period, arrangements were worked out to establish and register freehold land, especially for expatriates. The new constitution abolished this system of registered titles, and such land has officially been given back to its "customary" owners, leaving foreigners insecure. At the same time the government possesses authority to lease urban land from its customary owners.

3. Kiribati (Pronounced kiribass)

Once the British Colony of the Gilbert Islands and independent since 1979, the Republic of Kiribati consists of 33 small and dispersed coral atolls totalling about 700 sq. km. of land area. Most are uninhabited. The population is Micronesian and totalled 58,600 in 1980. About 68 per cent live the densely populated Tarawa atoll, and about half of these in the main town of Bairiki.

Kiribati is the poorest of the 10 states with a Per Capita GNP of less than \$300. Phosphate had been its main resource, but the deposits were exhausted by 1978 and exports terminated. Efforts are being made to develop cash crops (copra and fruits) and fishing. But the people currently survive on subsistence agriculture and government employment (3,700 employees in 1981, about one half the employed labor force). The economy is no longer viable without foreign aid.

The UK is the principal donor, with Australia and New Zealand also major contributors. In the shelter field Australia provided grants for a sewer system on Tarawa to alleviate pollution problems, and New Zealand is providing a coconut sawmill for construction timber. The Asian Development Bank is considering shipyard improvements as a means of stimulating the fishing industry.

Since Kiribati is outside the hurricane zone, it has not been prey to disasters, although public health as a result of polluted water supplies continues to be a problem. Peace Corps volunteers are in Kiribati, working primarily on rural public works and sanitation projects.

4. Tuvalu

A tiny independent country in Micronesia, Tuvalu was formerly part of the Ellice Islands. It consists of nine very small islands (coral atolls) with a total land area of only 28 sq. km. Of its 7,350 population (1979), over 30 percent live on the main island of Funafuti, the only one with vehicular roads and some urban services. The town itself has only 2,000 people.

The economy consists of one main cash crop, copra, supplemented by subsistence agriculture. Over 80 per cent of the economically active population works in subsistence agriculture, with most of the remainder in government employment and construction.

Tuvalu receives almost \$5 million in foreign aid annually, most from the United Kingdom, Australia, and New Zealand, and utilized to operate the government.

Land ownership disputes have been a problem since independence, and United Nations Habitat is providing technical aid for a cadastral survey.

Although disasters are not a regular occurrence in Tuvalu, as with some of the other entities, a 1972 hurricane destroyed some 85 per cent of existing housing. While the Ministry of Public Works promotes a "hurricane proof" house design, no financial assistance is given. The Ministry, as in most of the other entities, does build conventional and heavily subsidized housing for government employees.

Thus far the US has assisted with a study (by Intertect) on techniques of hurricane protection (1980) which concluded that the conventional cement-block government units are no more resistant than indigenous construction. Some PVO activity (Save the Children) is going into research on coconut wood shelter and the use of coral in concrete blocks to reduce costs. At the present time the only AID-sponsored activity is that of a PVO working on improvements to local administration.

5. Western Samoa

Western Samoa gained independence from New Zealand's trusteeship in 1962 and consists of 3,000 sq. km. on two main islands and two inhabited smaller islands. Its primarily Polynesian population of 158,000 is growing at a slow rate of 2 per cent annually, primarily because of outmigration to New Zealand and Australia. Emigration to these countries has become more difficult recently, causing considerable frustration among the young.

The economy is agriculturally based, mainly subsistence but some exports (coconut, cocoa, root vegetables, and bananas), with promising new ventures in coconut oil and veneer. There is some tourism. Over 60 per cent of the employment is in agriculture, with services at 20 per cent, followed by manufacturing and construction. Economic conditions have worsened recently, resulting in an IMF standby credit and a stabilization package including freezes on wages and salaries, currency devaluation, reduction in government expenditures, and higher interest rates. The country depends on foreign

aid. In 1980 it received \$23.5 million, of which \$13 million was bilateral. New Zealand and Australia are principal donors (and support expatriate civil servants), and the Asian Development Bank has been a major donor for rural development projects. Government's economic strategy emphasizes agricultural investment.

Urban drift has characterized Western Samoa as well, with 21 per cent of the population in and around the capital of Apia (34,000). Apia, the third largest capital in the region, is a small city with paved streets, utilities, shops, banks, and even an athletic stadium. Although rundown, it is uncrowded and has no recognizable squatter settlements. The high urban growth rate will cause substantial changes, however, in the next few years. In an effort to support long range physical planning activity in Apia, UN-Habitat prepared a \$300,000 technical assistance project which has still not been implemented because of lack of government counterpart funds and services.

Again, as with several of the other entities, customary land tenure presents serious problems in converting sites to infrastructure and commercial facilities. New Zealand is helping with cadastral work and has provided a valuer to help convert the system to contemporary requirements.

Natural disasters are rare in Western Samoa. Although some credit is apparently available for conventional shelter, many of the people (urban as well as rural) live in "Fales", which are cool and inexpensive thatch shelters, and are not always interested in more conventional structures.

6. Tonga

The Kingdom of Tonga has been a member of the British Commonwealth since 1970. It consists of 170 islands (36 occupied) comprising a land area of 670 sq. km. Total 1982 population was about 100,000, all Polynesian, of whom 60 per cent lived on Tongatapu, the largest island. About 26 per cent of the population is in urban areas, principally the capital of Nuku'alofa.

Nuku'alofa has a population of 20,000 and is the only settlement of substantial size. As the result of urban "drift", the city is now experiencing

unemployment, squatter settlements and inadequate sanitation. The other urban concentration, also on Tongatapu, is Mu'a, with about 4,000 residents. Villages on Tongatapu island have better access to goods and services than those on other islands. Reduction of this disparity is a keystone of the government's regional development policy.

Tonga's economy is based on agriculture and fishing. Per Capita GNP was only \$520 in the early 1980's. Ninety percent of all exports are agricultural products.

Foreign aid in Tonga is extensive. It received about \$15 million in 1980, and higher amounts including relief assistance following the Hurricane Isaac in 1982. Of the 1980 total, most was bilateral with Australia, New Zealand, and the UK the major donors. The latter two countries provide expatriate civil servants as part of their support.

Australian aid (US \$5 million in 1981-82) has been devoted primarily to physical infrastructure: roads, electric power, an oil depot, a dessicated coconut factory, port development, an air strip, and fire service for the capital. Following the hurricane Australia also contributed shelter materials and a house prefabrication plant.

New Zealand aid (US \$3 million in 1981-82) has focussed more on agriculture, livestock research, and provision of water wells. It has also financed a new Ministry of Works vehicles complex. The ADB has loaned for agriculture, small industries, and reconstruction of schools and health centers after the hurricane. EEC has also provided assistance for hurricane reconstruction.

Peace Corps volunteers helped with damage surveys after the hurricane. Presently there are 46 PCV's on Tonga, all dealing with rural development projects.

Shortage of land is a serious problem. Every male at age 16 is traditionally entitled to a bush allotment of 3.34 hectares and a town or village allotment of .16 hectares. Land is granted by the Ministry of Lands from the estate of

the noble on which the applicant lives, or from government holdings. Land grants devolve through the hereditary system upon death. Increased population has adversely affected the land tenure system to the point that in 1976 at least 38 per cent of dwellings were not built on owner-occupied sites. As a result, in the capital, squatter settlements have been erected, many in swampy areas. The situation was exacerbated in 1982 when Hurricane Isaac destroyed 15 per cent of the houses in the capital and damaged 60 per cent. The government is assisting victims with reconstruction and trying to supply basic water and sanitation services, but there is no mechanism for resettlement of the squatters on more solid land.

Government itself supplies housing for about 100 ministers and senior officials. It is providing, with foreign assistance, about 2,000 prefabricated units for the hurricane victims. The government has also financed upgrading of coconut sawmills in an effort to substitute local material for costly imported timber and concrete blocks. Under the Fourth Development plan, direct government involvement in sites and services schemes is to be studied.

Two finance institutions exist. The Bank of Tonga is the only one making mortgage loans to individual home buyers. Up to 90 per cent of construction cost can be financed. Employer deductions from salaries are utilized to enforce repayment. However, the mortgage terms are such that they are available only to middle income and permanently salaried employees, thus eliminating the bulk of the population. The other institution, the Development Bank of Tonga, loans only to housing projects related to farming, commercial, or industrial activity. A low cost core housing loan program is currently under consideration, however.

In the hurricane reconstruction program, the government has provided a 2/3 subsidy for 60 per cent of the households who are receiving new dwellings.

Under a USAID contract, Intertect surveyed housing in Tonga before the hurricane and pointed out the vulnerability, both of the indigenous architecture, and of poorly constructed conventional housing. Following the hurricane the government published recommendations for new dwelling unit construction, but is concerned these will not be heeded because of costs.

7. Niue

Niue is a tiny, one island, entity in "Free Association" with New Zealand which manages its external affairs. It consists of a coral atoll (300 sq. km.), and its population of 3,300 (1981) is scattered among 13 villages along the coast. The only village with more than 500 people is the capital of Alofi (under 800 residents).

Emigration to New Zealand is unrestricted, and more Niueans (6,000) are living in New Zealand than on the home island, accounting for the sharp decline in population since 1970. Indeed, most of the able-bodied labor force emigrates.

The domestic economy is service-based with most resident employment in the government sector (In this fashion Niue is similar to the U.S. administered Trust Territories further to the north and west.) Only about 20 percent are employed in agriculture (copra and fruit production). Per Capita income is relatively high (\$867 in 1979) because of the service based economy.

Niue is quite clearly a dependency of the developed countries in the region. While overall GNP was \$3,000,000 in 1979, the government budget was \$4,000,000 (Australian), with the deficit made up principally by New Zealand which subsidizes 50-70 percent of operations. In 1981-82, New Zealand's contribution was close to \$5,000,000 (Australian). Both Australia and the UK provide additional assistance in water resource development, communications, and banking.

Niue is moderately prone to hurricanes (once every four years), and the last major storm was in 1960 which destroyed almost 90 per cent of existing dwellings. Rebuilding occurred with substantial New Zealand assistance in the form of materials and loans.

A Housing Authority has existed for at least a decade and is financed largely by New Zealand contributions (\$260,000 in 1981-82). Subsidies are heavy because the government regards good quality shelter as a factor in its attempt to stabilize emigration.

8. The Cook Islands

Like Niue, The Cook Islands is a self-governing state in "free association" with New Zealand. Its 240 sq. km. of land is dispersed among 15 habited and 85 uninhabited islands.

Half the population of 17,700 (1982) is concentrated on Rorotonga and most of these in the urban area which is growing by 3 per cent per year. This is in sharp contrast to the negative population growth (-2 per cent annually) of the state, a result of continued emigration to New Zealand where the population is considered as citizens. This has lead to a shortage of incentives to produce, a shortage of manpower in the shrinking agricultural sector, a dependency on remittances from migrants, and an increased expectation for a modern life style which can not be sustained by the country's own resources.

Most modern sector employment is in services which are largely financed by aid from New Zealand. Manufacturing accounts for only 5 per cent of GDP and 14 per cent of employment. Under New Zealand sponsorship the islands are embarked on their first three-year development plan, with emphasis on agriculture, small scale industry and tourism. New Zealand pays for half the annual government budget. Other funds have been forthcoming from Australia and the Asian Development Bank.

Conventional housing is mainly in the capital, and the government considers adequate housing a prerequisite to stemming the tide of emigration. Over 90 percent of modern housing construction materials are imported (cement, iron, and asbestos roofing). The Cook Islands Development Bank grants housing loans (the only ADB-supported development bank in the region permitted to do so). About \$200,000 annually is available for "low cost" housing loans, with preference given to applicants from outside of Raratonga.

B. Larger Entities

1. Papua New Guinea

Although a small nation by world standards, in terms of land mass and scale of population and resource potential, Papua New Guinea is the giant of the South Pacific. It may also be the most promising country in which to initiate PRE/H assistance efforts, because of all of these factors plus urbanization which has already led to problems of infrastructure, housing, and social services characteristic of a developing nation.

Papua New Guinea was an Australian colony until 1975, and its predominant foreign relations are still with Australia. It consists of the eastern half of the large main island of New Guinea and nine off-shore island groupings, a land area total of 420,000 sq. km. The mainland is rugged mountain ranges, rich valleys, and coastal plains, with only 4,700 sq. km. suitable for agriculture. It is favored with abundant rainfall, considerable mineral deposits and forestry and fishing resources of good commercial potential.

Cultural diversity is extreme. Some 700 languages are spoken among the more than 3,000,000 people. The highlander Papuans are only recently removed from stone age culture. Melanesians inhabit the coast and outer islands, and Europeans and other Asians reside on the coasts and the urban areas.

Most of the population is rural, distributed among 19 provinces with a high degree of local administrative autonomy, a situation considerably different from the centralization of mainland Asia, Indonesia, and the Philippines. Only 10 per cent live in urban areas over 10,000 in population, but these are increasing rapidly as the result of the characteristic Pacific "drift". Overall population is expanding moderately at 2.3 per cent annually, while urban population grows at among the highest rates in the world (5.2 per cent or 8.3 per cent depending on interpretation of the recent census results). The legal urban minimum wage is considerably higher than the rural. Analysts see a continued increase in urban growth, along with crime and social anomie which apparently characterizes urban conditions in PNG for migrating tribesmen

who lack skills, are tempted by the glitter and wealth of Port Moresby, and can not be easily acculturated.

The economy is highly dualistic. Overall per capital GNP is close to \$1,000, but cash income is largely in the hands of government civil servants and expatriates. About 85 per cent of the labor force was in subsistence agriculture and cash crops of cocoa, copra, and coffee. Only 15 per cent is in the formal sector, and about one-third of these work for government. Copper mining produces over 50 per cent of exports, although world economic conditions have reduced its contribution to 6.5 per cent of GDP. Government services account for 25 per cent of GDP, and non-mining industry only 9 per cent.

Port Moresby is the capital and primate center of PNG, albeit a small one by world standards, with a 1983 population of 150,000. It is the largest city in the South Pacific region. Its growth was explosive in the 1960's and early 1970's, far outstripping provisions for utilities made during the Australian regime (Both power and water outages are now common.). New investments and growth of government is stimulating more urban migration during the 1980's. There are modern shopping centers and business districts, single story dwelling predominate.

An indigenous middle class does not yet exist in Port Moresby; and the extremes of wealth and poverty fuel the social discontent of migrants from the highlands.

Port Moresby has little flat land on which to build and is cut off from the rest of the country by high mountains.

Squatters have, until recently, not been a major problem because of "arrangements" made between customary tribal leaders in the "urban villages" within Port Moresby and groups of rural migrants with shared kinship. Yet the continued press of migration has begun to crack this system. Squatting has occurred on some government land and in satellite villages. Overcrowding of existing dwellings has become a serious issue (Under the Wantok system of Papuan kinship, no one can refuse to share a dwelling with a relative no matter how distant.), and the "dwellings on stilts" over tidal areas, charac-

teristic of squatting in the Philippines and elsewhere in Asia, have begun to rise. The second city of Lae (population about 50,000) is under pressure as well, partly due to the construction of a new copper mine nearby and a new system of access roads. About 50 per cent of Lae's population are squatters.

External Aid to PNG

PNG is heavily dependent on foreign assistance for operations of its public services. Interestingly enough, relatively little of this foreign assistance has been applied to the housing and urban development problems which are growing in significance.

PNG runs an annual budgetary deficit of \$300 million. Australia has made up much of this deficit since 1975 with untied grants. Current annual support (to be continued until 1985) amounts to over \$260 million Australian, all but \$10 million of which is untied. (This latter is earmarked for the salaries and pensions of expatriate civil servants.) Australia has not provided development project loans to PNG, although it guarantees some of the increasing number of World Bank loans for road maintenance and improvement, telecommunications, petroleum purchases, rural development highways, and education.

New Zealand's assistance is project oriented and amounted to \$2.4 million in 1982. This is earmarked for agriculture, education, forestry, and small industry. New Zealand supports a water and waste water training school and public service training. While New Zealand considered an urban community assistance program in 1982, this has apparently not yet been approved.

The Asian Development Bank is also a major lender, recently approving a \$13 million loan for road improvement, and a line of credit to the PNG development bank. As of 1982, ADB had financed 12 projects totalling over \$125 million for transportation, water supply, education, power, health, and rural development. Kuwait is a modest donor (\$1 million for port expansion).

The US has some 40 Peace Corps Volunteers in PNG, all involved in rural development projects.

Institutional Background

In Papua New Guinea, most conventional urban housing has been constructed by the Government for its own employees and by large private corporations for their own staffs. These have been highly subsidized. Over the past several years, however, the government has been moving away from this approach. Efforts have been made to sell units to their occupants and establish economic rents for rental accommodations, although the concept of subsidy is still strong. Faced with influx of rural migrants to satellite villages of Port Moresby which lack utilities and services, the government has also begun a modest upgrading effort for these areas. Housing activities are under the jurisdiction of the National Housing Commission, which has operated for some years and has an experienced technical staff. A Housing Development Plan was promulgated for the period 1976-86. It estimated a need for 4-5,000 housing "solutions" annually, but we have no knowledge of its outcome.

As of 1976, out of approximately 18,000 conventional dwellings (almost all of these in cities and towns), over one-half were government built for civil servants, and about 5,000 others were built under the National Housing Commission sponsorship. None are affordable to average wage earners.

Several commercial banks have been established in PNG also, but no savings and loan institutions, and little capital is available for private housing.

The country is one of the few in the region with universities (two) which offer programs in architecture, engineering, and planning; and the universities have apparently been in contact with UN-Habitat to express interest in foreign assistance for expansion of their program offerings.

To the best of our secondary source review, no international capital assistance has been directly channeled to shelter. While the Australians and multi-lateral agencies have perhaps provided technical assistance in the past (A U.S. advisor was involved in preparation of housing analyses during the 1970's.), apparently no such assistance is presently in place.

Over and above the specific issues of shelter, broader aspects of urban development also have not concerned external donors. These would include such matters as:

- establishing a structure plan to guide the growth of Port Moresby
- evaluating water, sanitation, and other utilities needs in the capital and providing financing for extensions of existing facilities.
- formulating a national urban strategy that would relate the strong commitment to administrative decentralization to planning/implementation for investments in Lae and other secondary centers.
- attempting to address the crime, drinking, and other social distress issues which are becoming serious problems within the migrant population.

On the basis of our secondary source review, we are not aware of the extent to which PNG institutions — including the NHC -- are addressing these issues.

PNG is exposed to a wide variety of natural disasters (earthquakes, droughts, and even frosts). A fairly complex system of relief organization is operated by the Defense Force. Land use planning policies have apparently been formulated to minimize building damage from floods and earthquakes (Dept. of Works and Supply), and earthquake-resistant building codes exist for the larger towns.

2. Fiji

A former British colony, Fiji has been independent since 1970. It consists of two main islands, Viti Levu and Vanua Levu, together with over 300 others, not all inhabited. The two main islands account for 87 per cent of Fiji's total 18,333 sq. km. of land area.

The population, estimated at 660,000 (1982), is about half of Indian origin (descended from imported sugar cane workers in the 19th century) and 45 per cent native Fijians of Melanesian stock. The rest are European and other Pacific Islanders. Average annual rate of population growth has been decli-

ning to 1.7 per cent (The last census was in 1976. All 1982 data utilized below are projections).

Urbanization has been rapid, however, and the urban growth rate is now up to 4 per cent annually both as the result of migration and natural increase (Families in the capital city of Suva average 6.5 persons). Suva had, by 1976, a population of over 117,000. The capital area accounts for over half the total urban population and absorbed nearly 70 percent of all urban growth in the 1966-76 decade. If this rate continues, Suva will contain over one quarter of Fiji's total population by the turn of the century. While there are few obvious pockets of poverty in Suva, both overcrowding of existing units and squatting (see below) are extensive. The only other urban area classified as a city is Lautoka, with a 1976 population of 28,800. It is estimated that over 40 percent of the population is now urban.

While urban population grows, the outer islands experience considerable out-migration. Squatter settlements in the cities and towns are proliferating. By 1981, there were an estimated 3,300 squatter units in Fiji, housing 20,000 people. Over half of these were in Suva.

Urbanization occurs without corresponding development of an industrial base. It is fueled by lack of opportunity in the agricultural sector and expanded government spending in urban areas. Unemployment is high (nearly 12,000 in 1976), about half of which was in Suva.

The rural population lives in one of two settlement types: traditional Fijian villages along the coast and in river valleys with communal, subsistence economies based on copra, root crops, and fishing; and Indian settlements, dispersed on the two main islands in agricultural areas where sugar cane and rice are produced.

Fiji's economy depends heavily on sugar cane. In the 1967-80 period, tourism (with a market from Australia and New Zealand) began to overtake agriculture's importance, and the latter's share of GDP decreased from 30 to 21.8 per cent. Tourism has been producing about 30 percent of total export earnings. In 1982, 60 percent of the labor force was employed in agriculture, forestry, and

fisheries; 16 per cent in tourism; and 12 per cent in manufacturing. Manufacturing is concentrated in the two main cities and consists primarily of agro-based industries such as sugar and coconut oil refining, flour and timber.

Although the economy is highly vulnerable to world market conditions (affecting both sugar exports and tourism) Fiji has been able to achieve the highest level of Per Capita GNP in the South Pacific (The most recent ADB estimate was as high as \$1,900.). This statistic masks the great disparities in income between urban and rural residents and among different income groups.

Long term development planning has been a tradition since independence. The 8th development plan (1981-85) emphasizes economic growth, diversification of agricultural products, and the geographic decentralization of capital investments to equalize benefits among different ethnic groups to minimize "problems arising from rapid urbanization and racial imbalances".

External Aid to Fiji

Perhaps as a reflection of its relative prosperity, Fiji receives less external aid per capita than the other island nations (e.g. \$53 compared with the Solomon's \$153). Of the \$33 million (Australian) received in 1980, most was bilateral with Australia, the UK and New Zealand as the main contributors. Australia contributed \$12 million (US) in 1982, largely in grants.

The focus of bilateral aid is varied: agricultural projects (especially cattle and sheep production), land development studies and many projects in education and health. Australia has also contributed to physical infrastructure (presumably in conjunction with other donors) particularly major projects affecting the capital area: water supply augmentation, a sewage treatment plant, and a hydro-electric scheme.

The World Bank is the major multilateral donor. Its loans include \$23 million for completed projects in highways and telecommunication and \$82 million in on-going projects (sugar development, the Monsavu electric plant and cyclone reconstruction). This latter was a pooled loan with many donors including the EEC which became the basis for creating a Department of Relief and Rehabilita-

tion after 1980. The ADB provides about \$100,000 in continuing technical assistance to the Fiji Development Bank.

There are about 150 Peace Corps Volunteers in Fiji. Most are in rural areas or outer islands. About 30 are in Suva, working in education, health, or social services. PCV's have been involved in housing reconstruction after several hurricanes.

Based on our literature review, we have not identified any external assistance that relates to shelter issues or the planning for urban growth other than as part of the disaster relief and prevention activity.

Settlement Institutions and programs.

Two agencies have primary responsibility for formulating settlement policy; the Ministry of Economic Planning and Development, and the Ministry of Lands, Local Government and Housing. The Directorate of Town and Country Planning is charged with preparing physical land use plans and town planning schemes. The Housing Authority and Native Land Development Corporation are charged with construction of residential subdivisions, primarily for low and middle income groups. The Department For Relief, Rehabilitation, and Rural Housing is another supplier of modern housing as part of disaster relief efforts (see below)

Government builds housing directly for three target groups: civil servants (at heavy subsidy), victims of hurricanes and flooding, and destitute urban residents. Between 1976-1980 the Housing Authority built 5,900 dwellings, 90 percent of its target for that period. The Authority also leased 3,400 serviced sites during the period, two and one half times its target figure. The NLDC, a commercial arm of the Native Land Trust Board, is emerging as a major supplier of developed residential sites and recently went into home-building as a profit-making venture.

Apparently no efforts have yet been undertaken to initiate upgrading of the growing number of squatter areas which lack utilities and services.

The current development plan calls for expenditure of \$18.3 million on water supply projects and \$10 million on urban sewerage. Although utilities have been improved, 40 per cent of Fiji's population lack access to clean piped water, and the majority relies on pour-flush or pit latrines. A regional water supply scheme is to be completed this year in Lautoka, that will expedite increased development in that city.

Shelter Finance

Fiji appears to have more extensive housing finance mechanisms than the other countries in the region, although little is available for lower income groups. The Housing Authority and the Home Finance Company both operate shelter finance programs, the former's capitalized by the Fiji workers Provident Fund. Maximum HA loan is \$15,000 (Fiji) repayable over 25 years at 11 1/2 per cent interest. This program operates almost exclusively in urban areas, and is limited to recipients with incomes below \$140 per week. The Home Finance Company lends to families with incomes of at least \$100 per week. The maximum loan, secured by a mortgage, is \$40,000, repayable over 25 years at a 12-13 per cent interest rate. This program, too, is limited primarily to urban residents.

Land

Land scarcity and high prices are issues affecting government programs for infrastructure construction as well as shelter provision. There are no formal programs or institutionalized approaches to land assembly or land banking. (New Zealand has, however, provided several years of technical assistance in land valuation.)

While Europeans and Fijians of Indian descent dominate economic activities, indigenous Fijians own, communally, over 80 per cent of all land which can not be alienated. Only 8 per cent is privately owned freehold land, and less than 10 per cent is owned or controlled by the Government. One of the most important constraints on economic development has long been seen as the availabil-

ity of land for productive purposes, especially its accessibility for non-indigenous Fijians. Some land is leased (especially in agricultural areas) by the Native Lands Trust Board on behalf of the communal owners.

Disaster Preparedness

Fiji is especially vulnerable to natural disasters. It has probably done more in disaster relief and rehabilitation than other countries in the region. Four hurricanes in two years stimulated, after the damage in 1980, creation of the Department for Relief, Rehabilitation and Rural Housing. This department has subsequently rehabilitated or reconstructed over 3,000 units. Overseas donors, particularly through the EEC with materials from New Zealand, are covering the capital costs of the program.

People whose houses are destroyed in a hurricane are provided with replacement housing free of charge. In addition there is a rural housing program which is gradually upgrading shelter in the agricultural districts. Hurricane reinforced units cost the owner about \$5,000 (Fijian), while the government provides transport of workers and materials.

In reviewing disaster preparedness under an AID contract, Intertect (1982) criticized certain key aspects of the program: Many of the government-built structures are poorly designed and built; the concrete block or wood panel houses provided are often as vulnerable to hurricanes as the units using indigenous materials; costs of construction with imported materials are high; due to the land tenure system non-indigenous Fijians on leased land are reluctant to upgrade their dwellings.

IV. External Aid Summarized

Appendix A presents a table portraying external aid to the 10 countries plus others in the Pacific over the period 1978-80.

The FY1984 Country Development Strategy Statement (CDSS) of AID's South Pacific office in Fiji provides an excellent analysis of trends in external assistance and AID's own program efforts which will not be repeated here. The following is intended as a summary overview of the situation as it bears particularly on shelter and urban development.

International aid to the region has been growing steadily. Except for Fiji, the value of aid received ranges from between one-third to two times what the governments themselves expend from their own resources. Bilateral aid is generally in grant form. The recent increase in total assistance stems from increased Asian Development Bank loans to local development banks and the loan involvement of the World Bank, especially in PNG and Fiji.

Major bilateral donors are Australia, New Zealand, and the UK. While all donors have projects in almost every country, the bulk of the aid goes to their former colonies or protectorates.

Australia (about \$375 million in 1982) spends 75 percent of its aid in PNG, but has major programs in Fiji, Western Samoa, Solomons, Tonga, Vanuatu, and Kiribati. Australian projects (as distinguished from government operations support) emphasize infrastructure, both urban and rural (e.g. roads, water systems, port facilities, power), although rural development is also a focus. Much of the funding goes for Australian advisors in the field and for training islanders in Australia. Smaller grants are also made through Australian NGO's (called "BINGO", bilateral aid through NGO's).

New Zealand assistance (about \$38 million in 1982) to the region goes primarily to the Cook Islands, Niue, Western Samoa, Fiji, with lesser amounts to other countries. This accounts for very high per capita aid in Niue and Cook Islands, making them entirely dependent on New Zealand. New Zealand empha-

sizes rural development (agriculture, forestry, livestock production, cash crops, and food processing). The largest non-agricultural projects are facilities for the Ministry of Works in Tonga and new facilities for the University of the South Pacific campuses in Fiji and Samoa.

The UK is particularly committed to the Solomons and Vanuatu where major recurrent budget support is provided. About \$20 million goes to Fiji, Kiribati, and Tuvalu, largely for the salaries of expatriate advisors.

In contrast to these other donors, USAID assistance is quite small, about \$5 million per year and is administered totally through private voluntary organizations and the Peace Corps. Projects are thus on a very small scale and tend to be in agriculture, fishing, development administration, appropriate education and low level technology transfer. The Peace Corps has volunteers in 8 of the 10 countries, with the largest groups in Fiji (150), Solomons (48) and PNG (40). PVO projects utilized about \$3 million of AID funds (1983) with regional organizations (e.g. the South Pacific Commission) and the Peace Corps accelerated impact program taking the rest.

A. Shelter and Urban Development Support

Relatively little external assistance relates directly to urban programs and shelter. Some projects support individual utilities needs of growing cities (water and sanitation, electricity, ports) but apparently not as part of any overall plans for these communities, or national urban development strategies. Only two recent bank loans (Niue and Cook Islands) included funds for housing, and the World Bank does not plan any urban projects in the 10 countries for the foreseeable future. Over and above these sums (See Section B below), a substantial amount of assistance is being devoted to post-disaster reconstruction in those countries affected by hurricanes and cyclones.

UN-Habitat has a modest (\$400,000 in the current fiscal year) effort in the region and has been working in four countries: The Solomon Islands have technical assistance from two physical planners. Tonga has training for a civil engineer in ferro cement construction. Tuvalu is receiving help with a cadastral survey. The Cook Islands will have a planning consultant and train-

ing for a civil engineer. The most comprehensive project conceived by Habitat (a full scale human settlement planning program for Western Samoa) has been deferred for lack of counterpart resources.

B. The Special Concern for Disaster Reconstruction and Preparedness.

Since the mid-1970's several international agencies (including AID) and PVO's have attempted to involve the governments of the South Pacific states in disaster preparedness instead of just post disaster relief distribution. Countries have become accustomed to receiving emergency food, clothing, and more recently new modern houses as part of international relief efforts. Once this aid is expected, it is very difficult to persuade societies to take avoidance precautions, especially when such precautions may be costly.

Several internationally sponsored seminars have been held to discuss issues of preparedness. The most recent (1983) concluded that preparedness was not being reflected in country plans, building code readjustments, insurance provisions, etc.

Some of the most recent reconstruction efforts, subsidized by both bilateral and multilateral institutions, may actually have been inappropriate to country circumstances: i.e. contributed significantly to a shift from use of native materials to costly imported products and may be as unsafe as the indigenous structures. Besides strengthening dependency on external donors, and the lack of safety and the cultural inappropriateness of some of the reconstruction house designs, governments have incurred enormous overhead costs in administering reconstruction programs (For Fiji it was \$7 million).

The U.S. has made some creative contributions at least to understanding the problem by financing studies (Intertect) on the appropriateness of both indigenous shelter and imported solutions. Suggestions have been made for modifying indigenous design and improving the construction of imported units or assembled imported components. Some of the governments are studying these recommendations. A modest amount of PVO and Peace Corps activity is being devoted to helping strengthen existing houses.

A major regional workshop on reducing housing vulnerability is scheduled for Jan. 1984 in the Solomon Islands. The University of Hawaii East-West Center's Pacific Islands Development Program with support from AID/OFDA is organizing the workshop. Intertect will be a major contributor.

V. Conclusions and Recommendations for PRE/H Activity

As an agency, AID has elected to play a modest role in the South Pacific, deferring to multilateral and other bilateral donors who represent the primary foreign assistance presence in the region. AID's own overall program deals primarily with human resources and agricultural development, channeled mainly through PVO's and the Peace Corps. Any initiatives from PRE/H should be taken with understanding this context. A further consideration would be PRE/H's own limited resources in light of the vast territory and dispersed population of the South Pacific region. Selectivity will be crucial to any successful undertaking.

Certain other contextual factors need to be considered in formulating an approach.

1. Urbanization is proceeding rapidly throughout the region. While urban centers are mostly small towns by world standards with commensurately modest shelter and infrastructure problems, in two countries, PNG and Fiji, urbanization is already producing serious issues.
2. Very little external assistance from the traditional donors, and none from USAID, is currently being applied to shelter and urban development issues. With the exception of loans for urban infrastructure (water, sanitation, power) to certain countries, and relief assistance after disasters, these matters are not priorities. There may well be a void to be filled.

3. South Pacific countries have a strong tradition of dependency. On the one hand there is dependence on external financing -- to a great degree grants rather than loans -- for the operations of government as well as capital works. On the other is the internal, societal dependency on government to provide free or heavily subsidized services (including housing)...epitomized by the large proportion of government employment in the formal sector and the subsidy tradition fo conventional housing.

The dependency syndrome may surface if loans for shelter and infrastructure are contemplated under the Housing Guaranty program. Cost recovery from beneficiaries is an important component of that program. While some Pacific countries might wish the financial assistance, they may offer significant resistance to cost recovery approaches. Of course, PRE/H continues to face such resistance in many countries elsewhere in the world. We underscore this for the South Pacific, however, because of the pervasive "welfare state" mentality in the region's service based economies. Identification of countries whose economic activities and prospects appear strong enough to justify a transition into cost recovery for shelter and utilities should figure, therefore, in program selection.

- A. PRE/H should select Papua New Guinea and Fiji as the two countries within which a range of program activities could be pursued. First Priority should be offer of teams to conduct Shelter Sector/Urban Assessments in each country. From these assessments precise program strategies can be derived.

Papua New Guinea and Fiji are the two countries which offer the most promising prospects for PRE/H programs. This is by virtue of their relative size, the nature of urbanization in their chief cities, and the relative diversity of their economies and economic prospects. We believe that these two countries may also have the elements of institutional structures capable of working with the Office and absorbing outside technical and financial aid.

In the shelter field, each country evidences serious housing shortages within the major urban areas not currently being met by new unit production. Informal settlement is becoming more prevalent, with upgrading of this settlement now extremely critical (PNG has upgrading experience, although Fiji has apparently done little or nothing towards resolving its even more extensive squatter problems). Availability of land for shelter and other urban uses is highly constrained in both Port Moresby and Suva and the few secondary cities. At the same time, both of the countries show some ongoing efforts to deal with shelter problems and have governmental or parastatal agencies and financial institutions with some capability in the field. Income levels (and distribution) in both countries may be sufficient to warrant application of Housing Guaranty loans to minimal cost core units, sites and services, and upgrading. Although resistance to cost recovery will certainly exist, PNG and Fiji are the two most likely candidates for more receptive views.

In terms of broader urban needs, the relatively large scale of the two capital cities merits attention to land use and utility planning that is apparently not being provided. Some help might be absorbed in formulating national urban investment strategies linked to secondary centers, especially because both countries seem committed to decentralized development and administration. Management assistance to the major cities might be warranted. From the standpoint of larger capital support, loans for the expansion and upgrading of municipal utilities may ultimately be justified.

Training of professionals in the urban and shelter field should probably accompany any country program.

While the potential exists for work in both countries, our judgment is based on review of secondary source materials, not all of which are up to date. There is need for an on-site review of conditions in each country plus discussions with country officials involved in shelter and urban development to determine willingness and ability to absorb PRE/H activity.

Therefore, we propose as first priority preparation of Shelter Sector/Urban Assessments for both Papua New Guinea and Fiji. This would involve dispatch of a U.S. team (e.g. comprised of planner, economist, sociologist) to each country for a two-three week field period of data review and discussions with host country officials. Out of the field work would come reports summarizing information and identifying both the feasibility of program activity and a set of orderly priorities. In addition to direct PRE/H activity, the assessments would identify possible projects for the Peace Corps and PVO's, in keeping with the larger AID emphasis in the region.

These investigations would provide opportunities to identify Fijian and PNG institutions concerned with the problems, their capacities, and their policies (especially towards cost-recovery). Because each of the countries is relatively small, we believe analysis combining shelter and urban assessments can be readily made. The Swaziland SSA prepared for PRE/H is an example of such joint analysis for a small country, and its table of contents is included as Appendix B.

Special Considerations

Choice of PNG and Fiji affords some special advantages for the Office.

In regards to PNG, PRE/H has direct access to two people who would be an immediately knowledgeable core of a team. Dr. Riall Nolan, current AID advisor to the Minister of Housing in Sri Lanka, spent several years in Papua New Guinea during the 1970's in community development assistance. Mrs. Christine Nolan, a PRE/H social consultant available through PADCO, served at that time as an adviser to the National Housing Corporation. Both have maintained their contacts within the PNG government. Their Cololombo residence makes them readily accessible to Port Moresby and the Bangkok RHUDO. With the addition of a physical planner/infrastructure specialist, they could handily do the job as the team for PNG.

Fiji affords a unique opportunity by virtue of its location as the headquarters of the South Pacific Regional Development Office of USAID and the presence of a senior AID official in the country. That office could make contacts for official interviews of an assessment team and could serve as headquarters for any subsequent activity. Former senior personnel of the National Housing Authority in Fiji are now detailed to ESCAP headquarters in Bangkok, and are thus accessible to the RHUDO.

Based on the results of the SS/JA's PRE/H could proceed to determine program packages for the most promising activities or, alternatively, not proceed further if initiatives seemed unfeasible.

B. Scholarship Funds should be made available for training professionals in fields related to housing and urban development.

On a broader regional basis (i.e. considering all 10 of the entities rather than just the two largest) PRE/H could expedite provision of training in shelter and urban development fields (i.e shelter finance, estate management, building design and engineering, etc.). Certainly on the basis of the secondary source review, it would appear that the entities suffer an across-the-board shortage in these fields. Scholarships should be offered (perhaps through the auspices of the South Pacific Commission in which all of the countries are represented) for both degree and short course programs, perhaps for up to 5 participants per year over a two-three year period.

In our opinion it would be most appropriate to use established Asian institutions as the site of such training. We are thinking particularly of the Asian Institute of Technology in Bangkok which specialized in tropical shelter and urban development and provides course instruction in English. Institutions in Australia and New Zealand may also be suitable.

Pending a more definite study in PNG, universities there could play a larger role in training within the Pacific region. If so, a joint effort to strengthen their resources and provide funding for students could well be a matter for discussion with UN-Habitat (see below).

At the present time we do not believe AID's annual shelter workshop, Berkley's PRE/H sponsored program, or the University of Hawaii's offerings have sufficient relevance to conditions within the region to warrant their priority as training vehicles.

C. Two substantive fields merit attention through research, discussion seminars, and technical assistance: disaster preparedness and land tenure.

On the subject of disaster preparedness, AID has made significant technical contributions and has supported some of the regional meetings in the past. Implementation is now the main issue: A great deal about the technical options is known (including how they can be adapted to indigenous architecture) but it remains to be seen whether countries will be sufficiently committed to avoiding the impacts of disasters to alter their current building practices. This certainly can not be judged from secondary source review. In light of work already done, PRE/H might make funds and technical aid available to pursue the dialogue. This could mean a range of things: continued support to regional meetings that discuss aspects of disaster preparedness; technical assistance to countries within the region who specifically request such help in adjusting local codes and ordinances or in working with local builders to refine both indigenous and conventional designs. Certainly severe cyclones and hurricanes will be continuing phenomena in the region, and AID is in a position to help mitigate their effects, if desired by the countries.

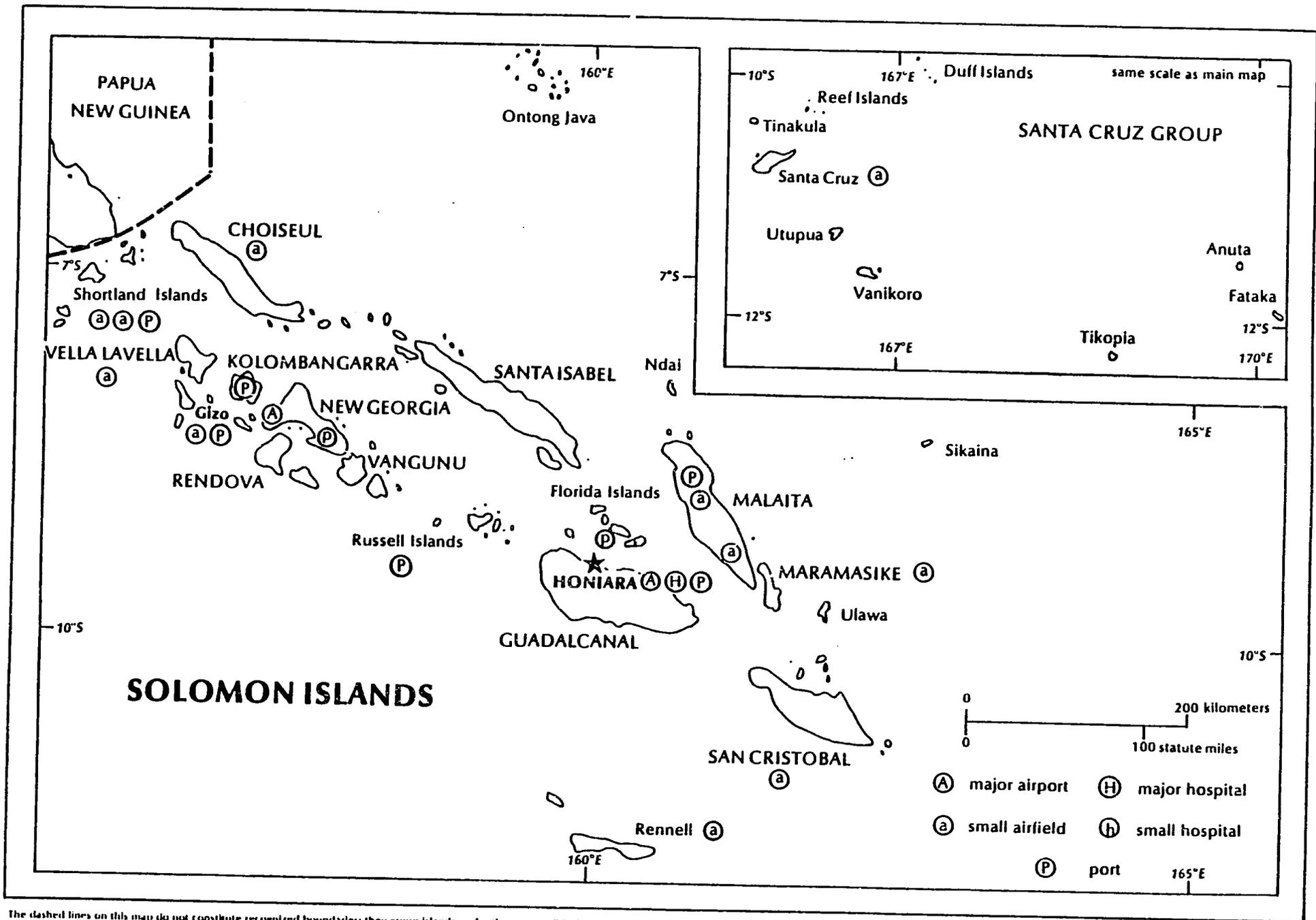
A second substantive issue which affects the entire region is land tenure. Here, too, American technical and research resources could be brought to bear. While the precise type of customary land tenure differs from country to country, in all countries it is clear that this system severely constricts the ability of both government and private parties to aggregate land for urban growth. U.S. institutions with particular background in land tenure questions (e.g. the Universities of Wisconsin and Hawaii) could be supported in comparative research and in testing the feasibility of various options. Regional seminars, exchanging ideas on land tenure questions among the entities, could also be supported through PRE/H programs.

- D. A dialogue should be conducted with UN-Habitat to examine the possibilities of evolving a joint assistance strategy for the region.

United Nations Habitat would like to engage in a dialogue with USAID on appropriate assistance priorities in the South Pacific. This should definitely be accomplished in the course of the next fiscal year.

As indicated above, United Nations habitat has for some years provided technical assistance within the region. The work varies greatly from cadastral survey assistance to stationing of experts as counterpart town planners in local government administrations. Current activity amounts to \$400,000 annually. While modest in scale, Habitat's work could dovetail with any PRE/H sponsored activity, especially in view of both agencies' commitment to and resources for training. In our opinion, serious discussions with Habitat on these matters should occur only after one or both of the proposed Shelter Sector/Urban Assessments have been conducted so that the Office will be able to speak from more first hand background on conditions in the region.

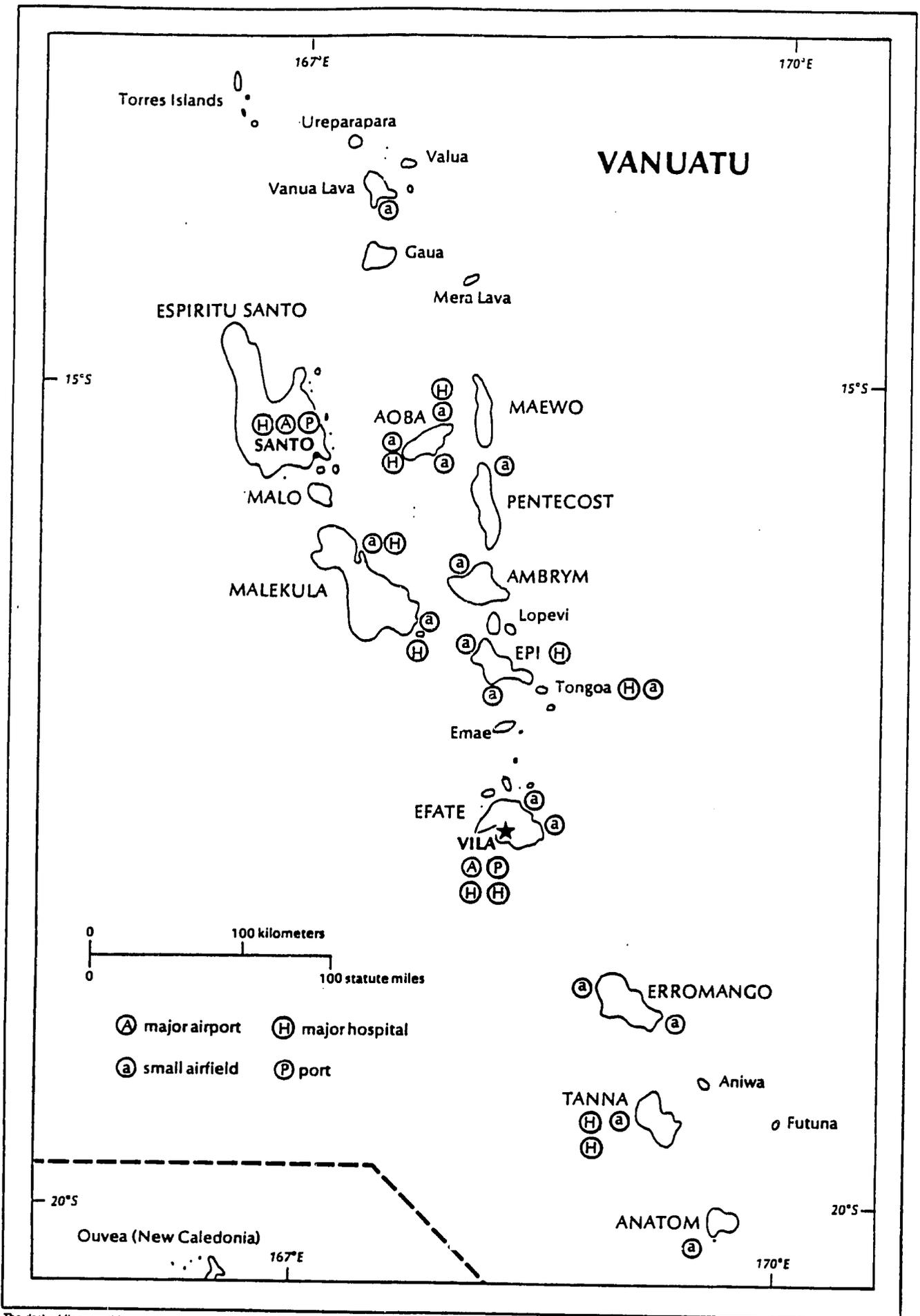
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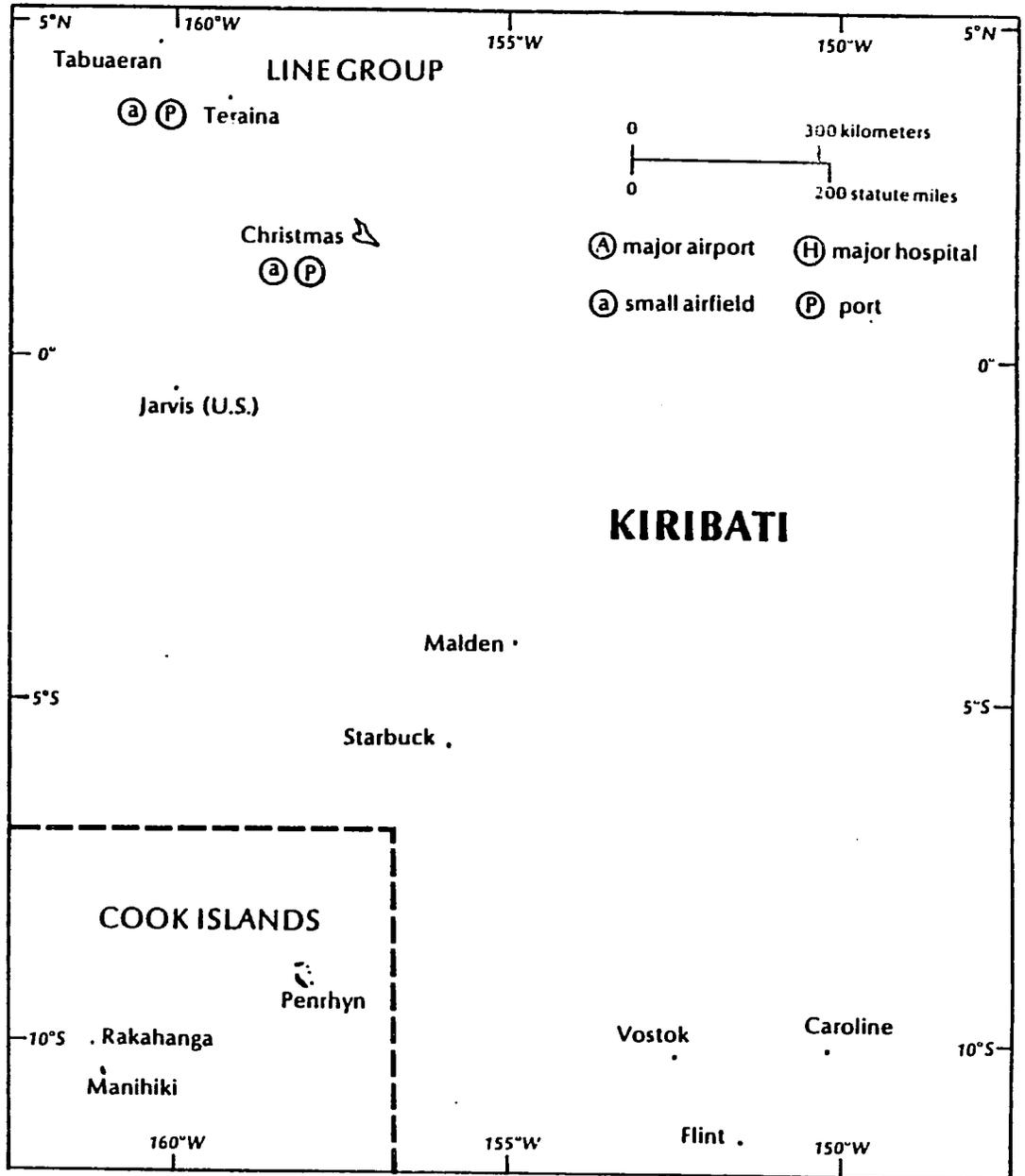
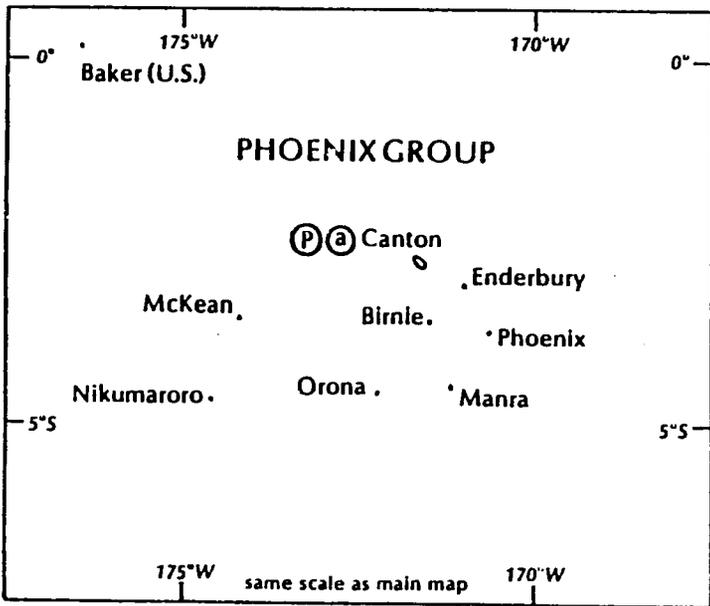
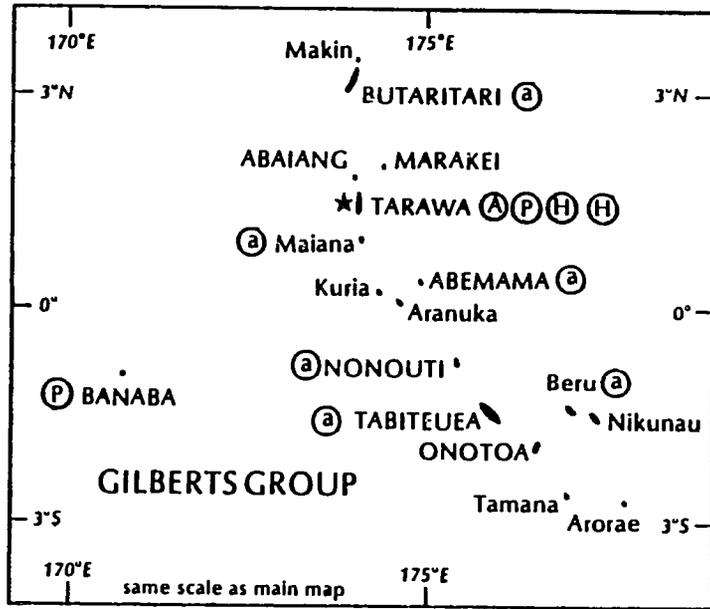
Base map compiled from World Outline Plotting Maps, U.S. Army Map Service, 1966.

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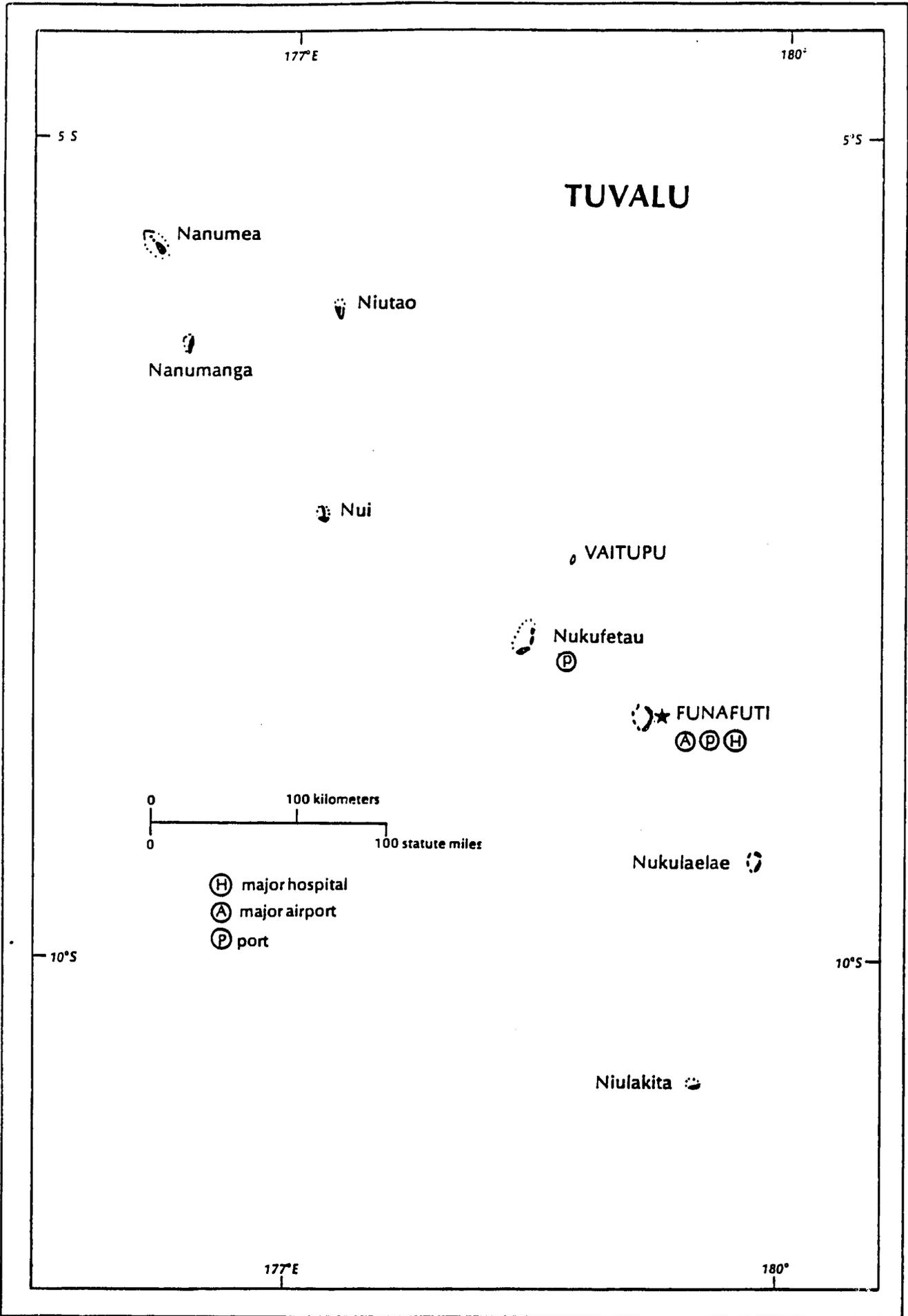
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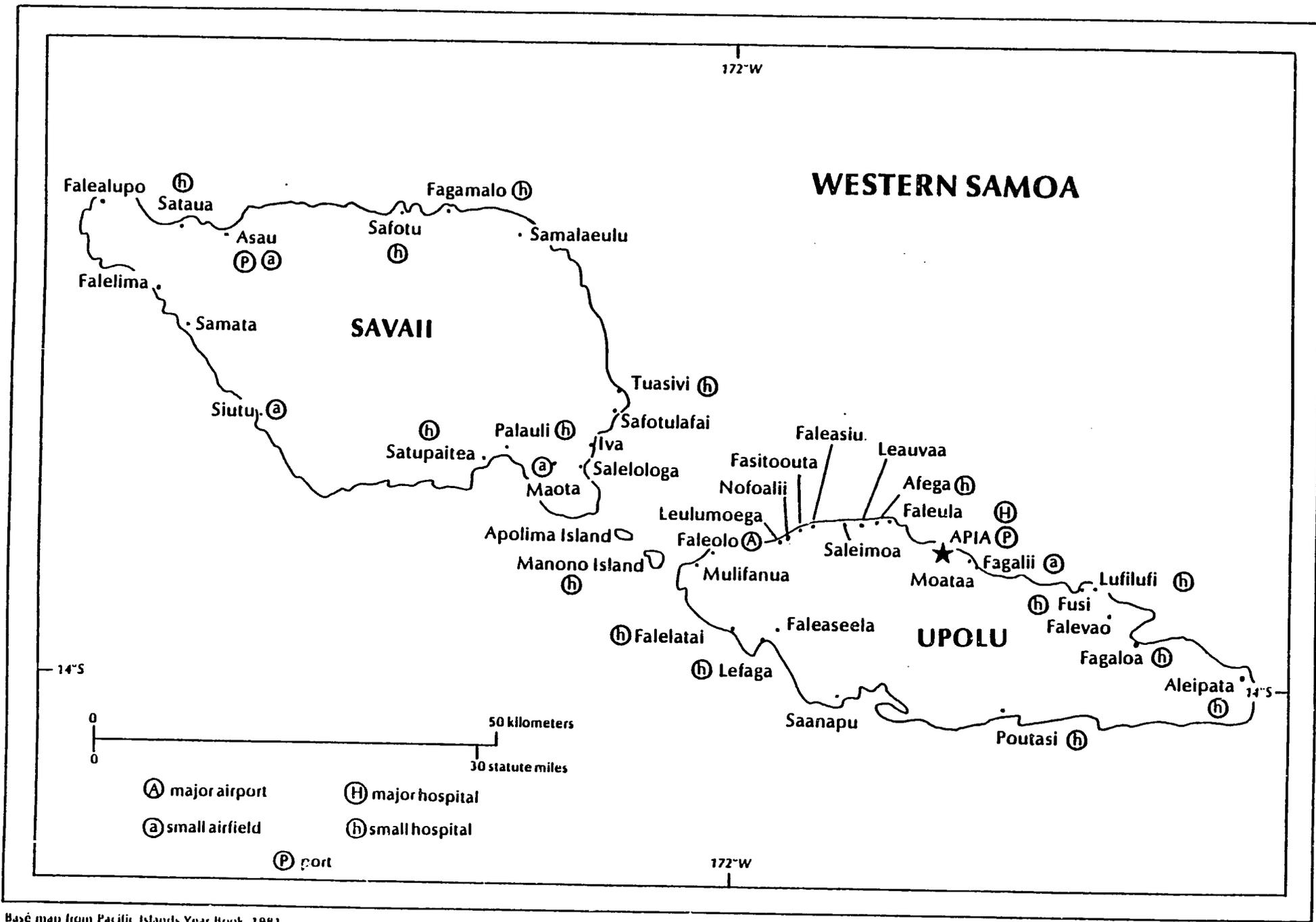
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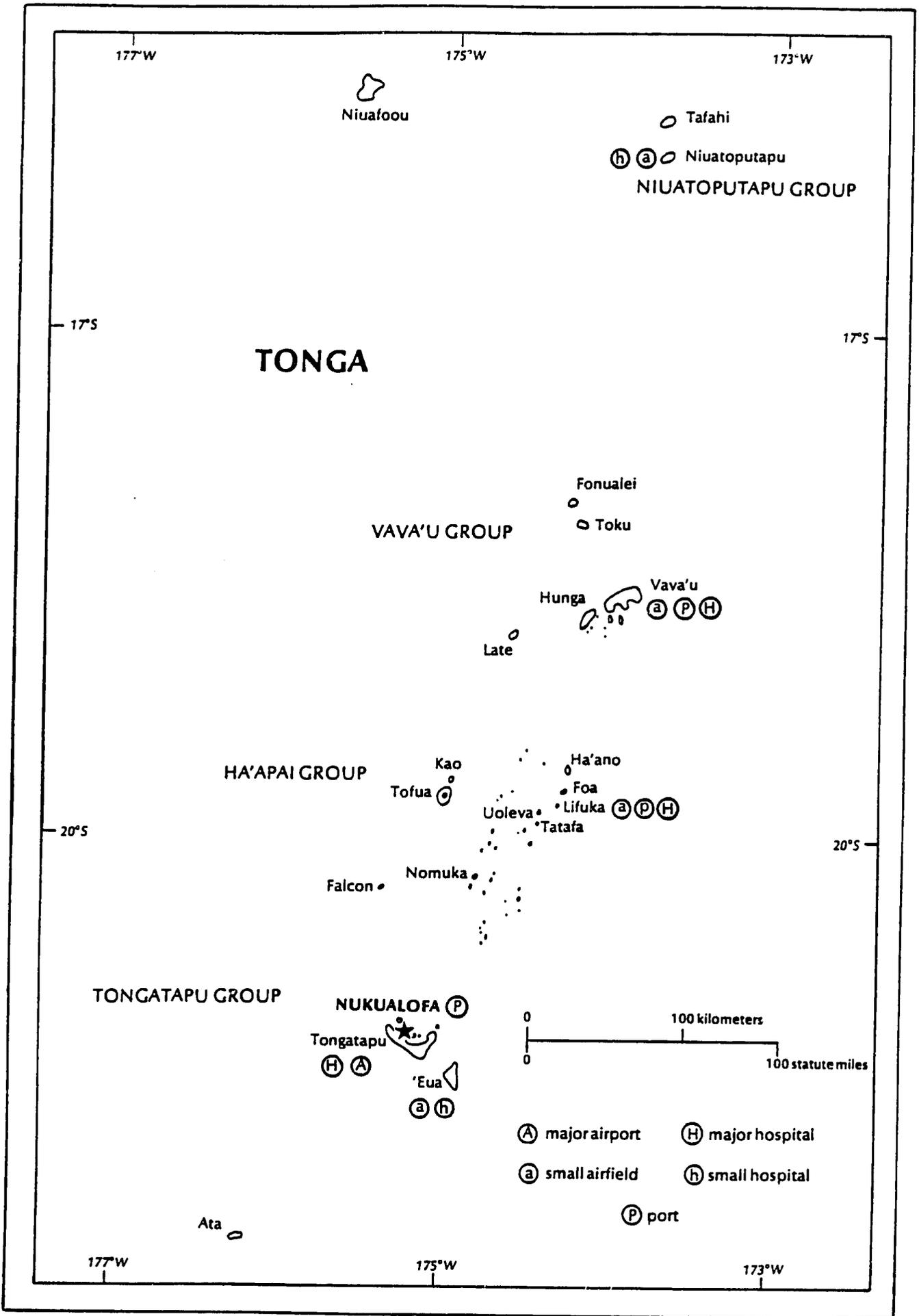
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WESTERN SAMOA

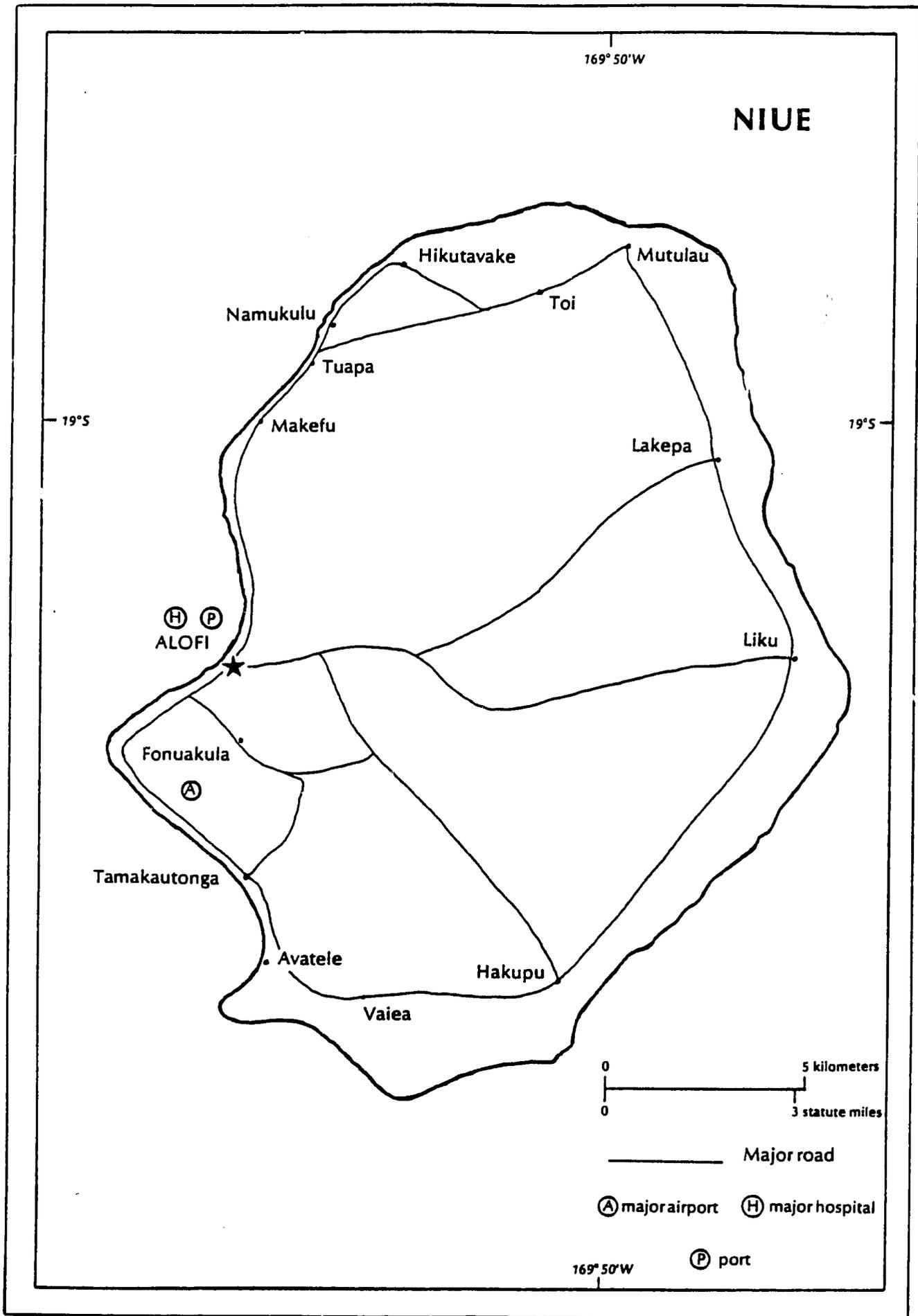


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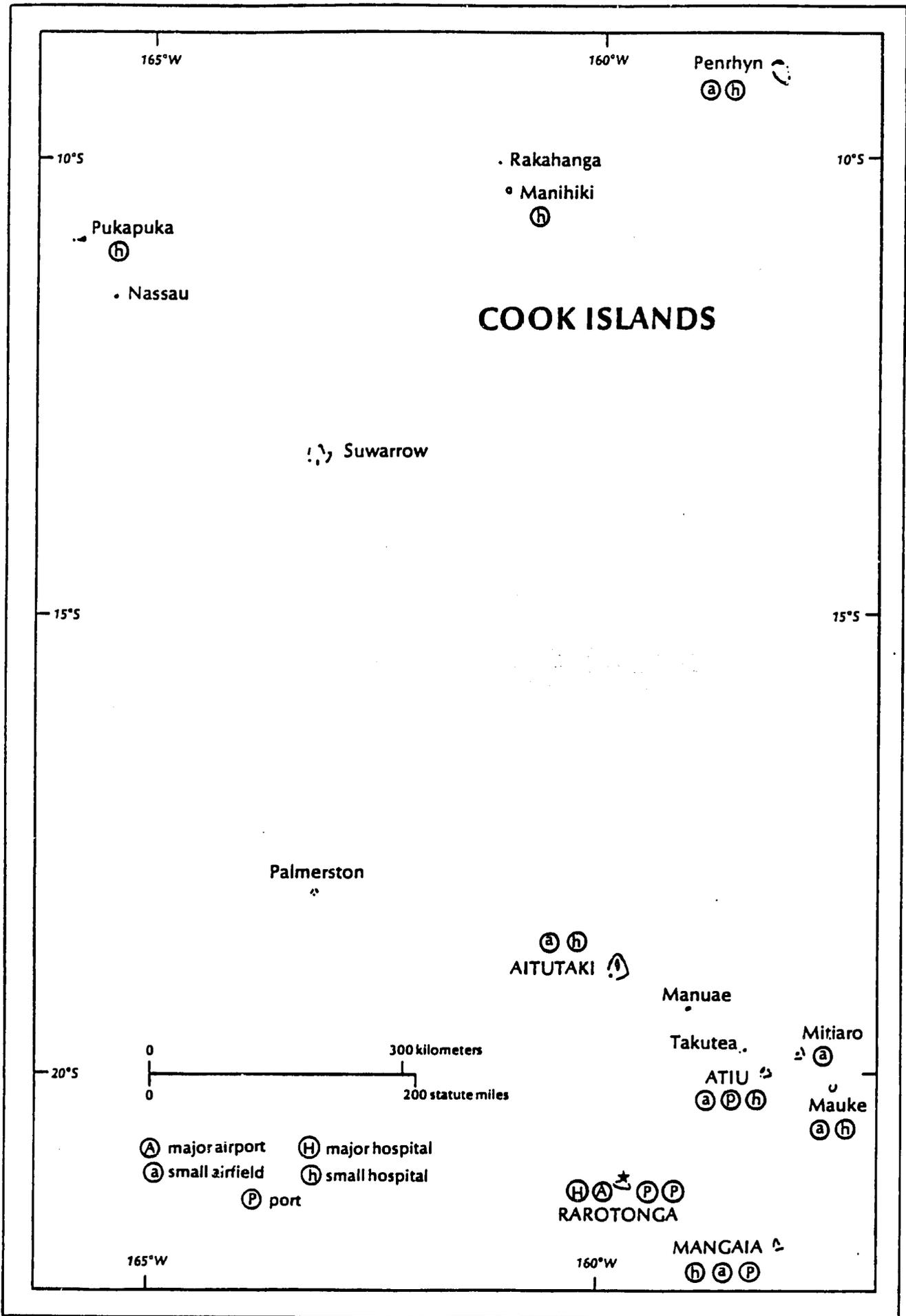
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Base map compiled from World Outline Plotting Maps, U.S. Army Map Service, 1966.

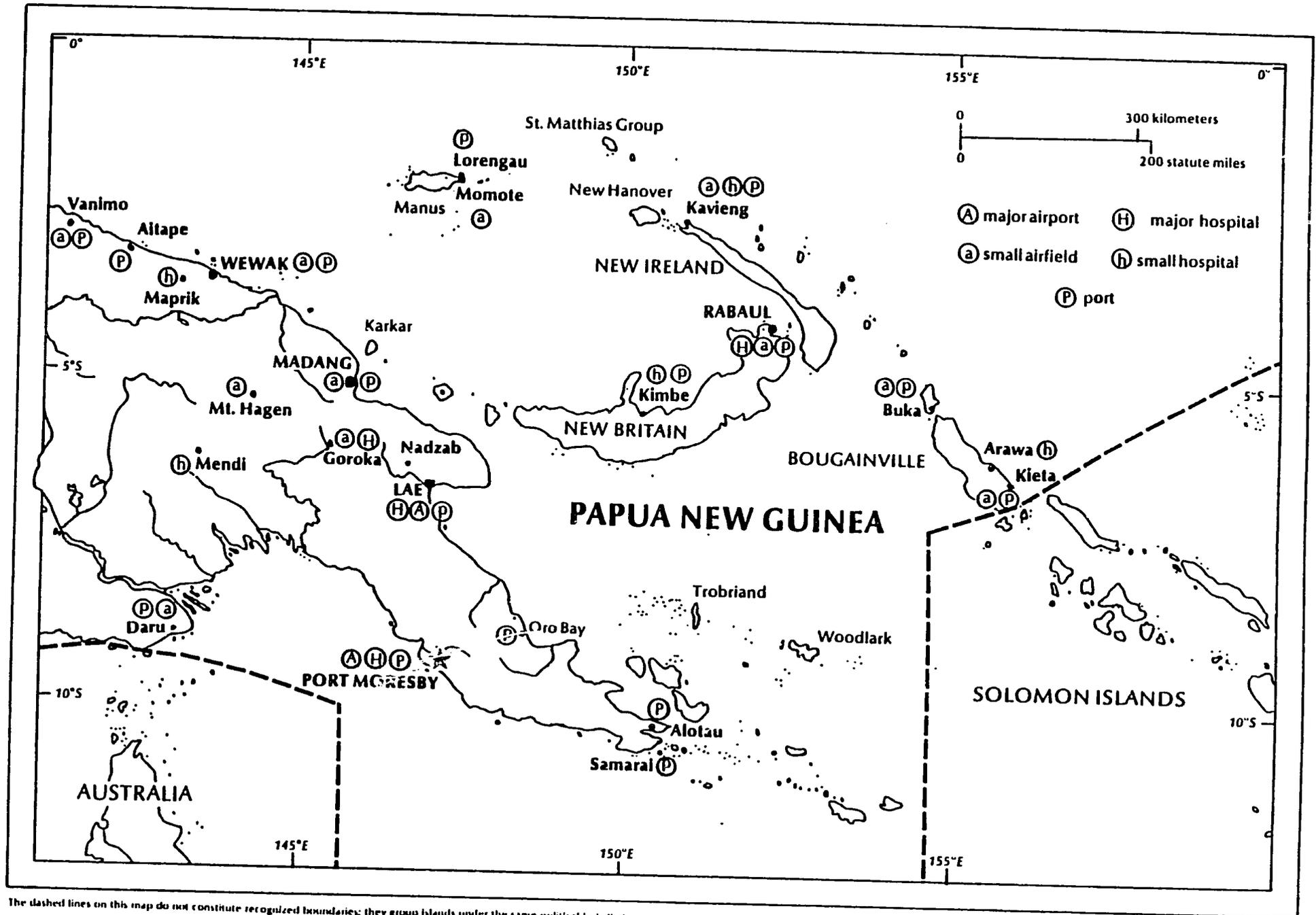


Primary map source: Atlas of the South Pacific, New Zealand Dept. of Lands and Survey, 1978.



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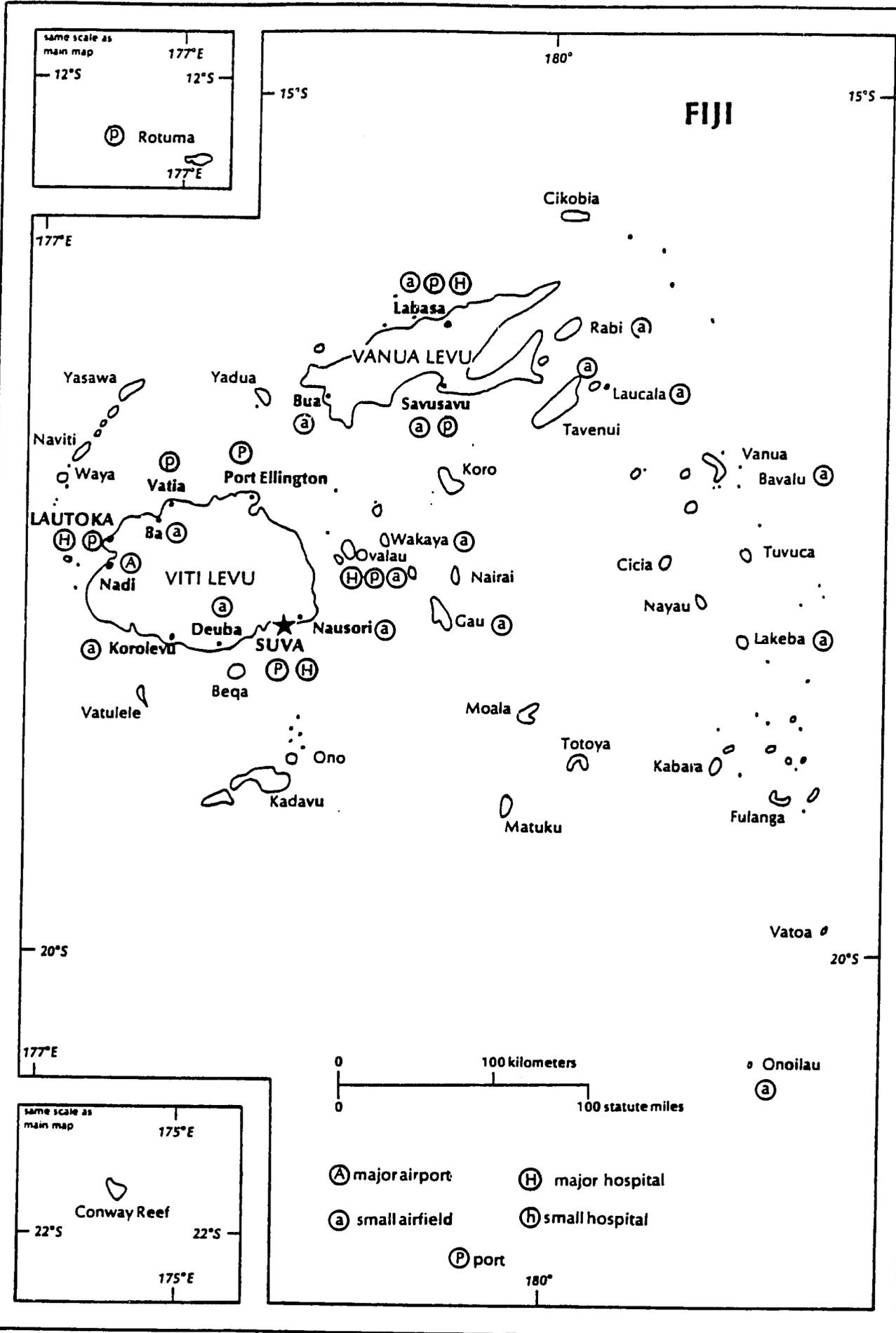
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The dashed lines on this map do not constitute recognized boundaries; they group islands under the same political jurisdiction.

Base map from World Outline Plotting Maps, U.S. Army Map Service, 1966.

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pp 20-21: discusses decentralized provincial administration. Tables on population characteristics (urban, rural) and education.

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APPENDIX A

South Pacific Commission (1982), South Pacific Economies 1980: Statistical Summary

TABLE 12: OFFICIAL DEVELOPMENT ASSISTANCE (ODA) TO THE PACIFIC (\$A'000)

Country	1978	1979	1980	1980	Total per Capita (\$A)
	Total	Total	Total	Bilateral	
American Samoa	27,913	30,536	35,351	35,351	1,091
Cook Islands	5,900	6,700	9,300	8,700	520
Fiji	22,500	27,900	29,600	27,700	47
French Polynesia	78,800	128,500	139,800	139,000	944
Guam	85,739	76,071	83,772	83,772	791
Kiribati	9,300	8,000	16,800	16,300	287
Nauru	0	0	0	0	0
New Caledonia	100,100	132,700	173,400	173,400	1,234
Niue	3,700	4,400	3,200	2,900	970
Papua New Guinea	260,000	253,400	285,400	251,600	95
Solomon Islands	23,200	23,200	30,900	27,200	137
Tokelau	800	1,600	1,700	1,600	1,063
Tonga	8,400	21,000	13,100	11,300	134
TUPI	115,304	99,700	150,615	150,615	1,101
Tuvalu	2,200	4,000	4,300	3,900	573
Vanuatu	16,300	34,000	38,000	38,000	325
Wallis and Futuna	2,200	6,900	7,300	7,300	676
Western Samoa	17,300	27,000	21,000	12,000	135
Regional Institutions Projects	8,275	12,373	22,651		5
South Pacific Region	788,431	897,980	1,066,189	991,438	217

Sources: The main source for this table is the OECD (1981) publication the full reference for which is given in footnote (10) to Table 3. Figures for American Samoa, Guam and TUPI were supplied by the U.S.A. Embassy in Fiji, and the total for Regional Institutions/Projects was obtained from a variety of official sources.

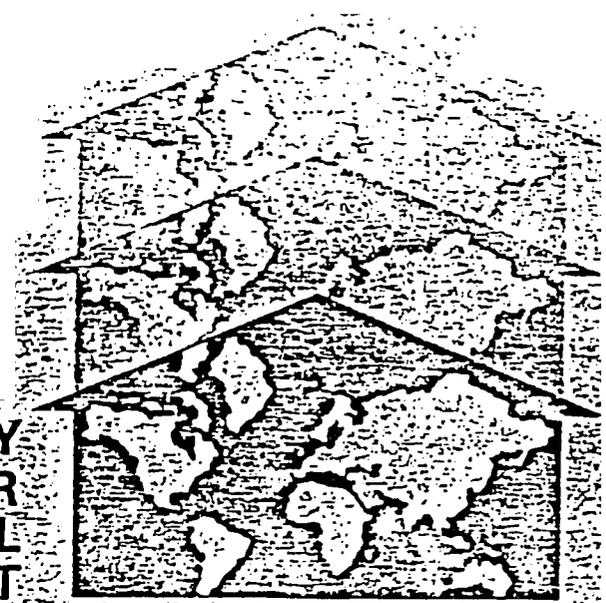
- Notes:**
- (1) The 1979 figures for American Samoa and Guam which were not available when the last edition was published are now included.
 - (2) Official development assistance (ODA) as defined by the OECD includes all flows to developing countries by official institutions, provided their aim is economic development and social welfare and they have a concessional grant element of at least 25 percent. These are net flows.
 - (3) It should be noted that in many cases the amounts of ODA given here would be understated. Collection of aid data is extremely difficult even for the donors, and there are often considerable time lags involved between the announcement of aid and its disbursement. For the American territories, for instance, only aid or transfers from the USA is given here. They did, however, receive some aid from other bilateral as well as multilateral sources, though such amounts are comparatively small. The totals in this Table are different from those in Table 13 mainly because of the different sources from which the data were obtained. The data in Table 13 is somewhat more comprehensive and more complete. The relative magnitudes for the various countries are, however, somewhat similar.
 - (4) Some donor countries also channel significant amounts not recorded here, through unofficial voluntary agencies

EXAMPLE OF TABLE OF CONTENTS FROM A SMALL COUNTRY
SHELTER SECTOR/URBAN ASSESSMENT

Swaziland Shelter Sector Assessment

July 1978

AGENCY
FOR
INTERNATIONAL
DEVELOPMENT



OFFICE OF HOUSING

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