MicronesianRenorter

THIRD QUARTER 1977



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Adrian P. Winkel, High Commissioner; Strik Yoma, Director of Public Affairs. The Public Information

Division, Department of Public Affairs, Trust Territory of the Pacific Islands.

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PRODUCTION STAFF: Graphic Artist, Nicolas C. Guerrero; Photographer, Johannes Ngiraibuuch

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This Quarter's Worth

BILINGUAL EDUCATION

Bilingual Education is not new to Micronesia. As Masa-Aki Emesiochl points out, "... since the German era in Micronesia, it became desirable to be able to speak in the language of the western world." When Japan entered the scene, it became even more important for Micronesians to speak Japanese; and schools at that time complelled the students to read, write and speak in the new language. After the war, a similar educational pattern was followed in teaching English language in schools throughout Micronesia. Later the Congress of Micronesia, and the Micronesian parents called for a well-structured bilingual program. Thus in 1970, the Trust Territory Government contracted with the University of Hawaii to establish and develop a Bilingual Education Program in Micronesia. Today the program is handled by well trained and qualified people.

SOCIAL SECURITY

Every so often one enters into a conversation about going to his home island to fish and rest all he wants. Fine. But you have to come back to work sooner or later, right? Well, start counting the years you have been working and paying your Social Security. Maybe in a few more years you can retire and will live off your Social Security while fishing or doing a little gardening. Yosiwo George, in this issue, explains how the Micronesian Social Security system works. Read it carefully. You never know, maybe you are eligible to collect if not now, then sometime in the future.

KING OF TONGA

How often does a king take time out to visit a place like Micronesia? Well, very rarely if indeed at all. But recently his Majesty King Tuafa'ahau Tupou IV and his wife, Queen Haleavalu Mata'aho, from the kingdom of Tonga which is located more than three thousand miles South and below the equator, visited most of the districts in Micronesia. The King and his royal party spent three days in Palau, made stopovers on Yap and Truk, spent a night on Ponape, and flew to the Marshalls, then on to his royal Kingdom of Tonga, King Tupou's visit to Micronesia should rekindle the awareness toward that receding flame of Micronesian heritage which is sailing into the twilight zone of "believe it or not."

THE PAST REVISITED

The Micronesian Reporter had some interesting adventures recently, and one of them was to reconfirm the existence of the British Vice Consulate insignia which was brought to Yap island some 80 years ago. Interesting? You bet your bottom dollar. That royal emblem was brought to Yap by a British diplomat who later married His Majesty "Emperor" O'Keefe's daughter. It is still safe and sound in Yap in the possession of Raphael Yoror in Fanif municipality. Go see it if you can.

TAGA

It takes a creative and imaginative mind to narrate a good, appealing story. Although the legend of Taga has been told and retold by more people than you can imagine, Mrs. Sue Speed Hall relates it in a vivid and colorful way. You have to read it to understand her own artistic style.

And now a little poetry to read during your leisure time... Val shares with you another of his poems, *The Watcher*.

Who's Who

... in this issue of the Reporter

Masa-Aki N. Emesiochl, a Palauan, holds the position of T.T. Language/Bilingual Programs Coordinator at the T.T. Deaprtment of Education. He received his BA degree in Anthropology from the University of Guam in 1967. He also went to the University of Hawaii where he received his Masters in linguistics. Emesiochl was instrumental in the development and completion of a Palauan Reference Grammar book and a Palauan-English Dictionary published by the University of Hawaii.

James T. Hiyane is from Hawaii and is now the District Agriculturist for Ponape. Hiyane first arrived in the TT in 1963 as agriculturist in the Marshalls. He moved on to Truk and Saipan prior to his present assignment in Ponape.

Leo Migvar is chief of the Agriculture Extension Service in the Trust Territory Agriculture, Resources and Development Department. He taught vocational agriculture both in the U.S. and Micronesia prior to his present position.

Yosiwo P. George is a native of the new district of Kosrae. He is the T.T. Social Security Administrator. He attended the College of Guam and the University of Hawaii. He joined the Social Security Office 1969 as an intern. In 1970 George became Assistant Social Security Administrator, and the following year he was promoted to his present position. In 1972 to 1973, he did postgraduate work in Actuarial Science at Ball State University, Muncie, Indiana.

Mrs. Sue Speed K. Hall is the wife of former Press Secretary for the High Commissioner, James V. Hall. She is an English teacher at Kaimuki High School in Honolulu, Hawaii. Mrs. Hall spent her sabbatical leave (1976) in Micronesia studying local legends. She holds a BA degree in English from the University of North Carolina, and a Masters, also in English, from the University of Hawaii.

GEORGE R. MILNER

George R. Milner, Deputy Director for the Office of Territorial Affairs, Department of the Interior, recently visited Micronesia on an official tour.

Milner is no stranger to Micronesia, having visited the Trust Territory several times in the past while serving in a similar capacity in the Office of Territorial Affairs during the 1960's. He first visited Micronesia when the Department of the Interior

assumed administrative responsibility over the Trust Territory from the Department of the Navy on July 1, 1951.

In 1969, Milner resigned his position as Assistant Director, Office of Territorial Affairs, after serving twenty years with Interior. His most recent job, prior to his present position, was as Deputy to the Special Assistant to the Secretary for Regional Economic Coordination, U.S. Department of Commerce.

Milner earned a BA degree at the University of Oklahoma in 1947, and received a Masters in international Affairs at Columbia University. Speaking of his return to his "former" position after some eight years of absence, Milner said, "...I did not really realize how much I missed it (Office of Territorial Affairs) until I left to work for another agency of the Federal Government. Coming back to the Office of Territorial Affairs is very much like coming home again."

In the following interview, Deputy DOTA Milner underscores Interior's interest in Micronesian Affairs and emhpasizes that "we in the Office of Territorial Affairs stand ready to assist in any way possible to achieve legitimate, realizable aspirations of the people of Micronesia."





REPORTER: Mr. Milner, you worked before in the Department of the Interior and you were out here as early as 1950. How does if feel to be back in your former job?

MILNER: It really feels great to be back in my former job. I have throughly enjoyed working with the territories, particularly with the Trust Territory, but I did not really realize how much I missed it until I left to work for another agency of the Federal government. Coming back to the Office of the Territorial Affairs is very much like coming home again.

REPORTER: Could you tell us about your first trip out here?

MILNER: Yes, I was a management intern in the office of the Secretary of the Interior, and part of the job of management intern was to get a variety of assignments within the Department. One of mine was with the Office of the Territories, actually was then known as the Division of Territories and Islands Possessions. It was preparing to take over from the Navy the administration of the Trust Territory. A transportation survey team was organized, and I was fortunate enough to be assigned to carry







pencils, take notes, and otherwise be of general assistance to that transportation survey team.

REPORTER: Did you get to go to all the districts?

MILNER: Yes, to all the districts. I even managed to get to Kusaie (Kosrae).

REPORTER: How did you travel in those days?

MILNER It was by flying-boat, the old PBM flying-boat operated by the Navy. This was slightly before the SA-16 operation. The SA-16 turned out to be one of the recommendations which we made as a result of the transportation survey.

REPORTER: I see that your title now is Deputy Director for Policy and Program Development. Does this mean the reorganization of the Office of the Territorial Affairs?

MILNER: Yes, the office is in the process of being reorganized, and we hope this can be accomplished well within the calendar year. If the present plans come to fruition, there would be two deputy directors, one for policy and program, which is the slot that I occupy, and the second will be deputy director for finance and administration.

REPORTER: You work with all the territories, then, which one occupies most of your time?

MILNER: Well, since I have only been back in the office since June 27 I am not sure I have a very reliable estimate.

Each territory has its own set of problems and its own set of demands. I would think that as a rough estimate that American Samoa and the Trust Territory together occupy something over fifty percent of the time; Guam and Virgin Islands together occupy something less than that.

REPORTER: I imagine you have seen a great many changes already in the Trust Territory since you were last out here. Can you comment on any of them?

MILNER: So far I haven't had a chance to travel in the Trust Territory although after I leave Saipan I'll get to each of the districts. Unfortunately except for Kosrae, time does not permit that kind of a trip. There have been a number of changes that I have noticed while I have been here in Saipan, not the least of which is the development of some rather attractive permanent housing. This is characteristic, I think, although in terms of the creature comforts of the traveler, the new hotels are a very marked improvement.

REPORTER: What do you see as some of the priorities out here?

MILNER: I think one of the greatest priorities is economic development in terms of meeting needs of the peope—making use of the resources of Micronesia in such a way that the legitimate needs of the people can be met and the very unique environment of the islands can be kept.

REPORTER: They talk about 1981 as termination of the Trusteeship Agreement. Do you think that the economic development can be such in the Trust Territory that they could carry on after that?

MILNER: This of course is very difficult to say, and the answer is subject to a number of intangibles. At what level would one wish to carry on is one of the major questions. I don't think though, that the change in the status of the Trusteeship Agreement should be dependent on the economic viability of the community alone. It's certainly important, but it should not be a sole criterion. Otherwise, one is never ready.

REPORTER: Do you think there is a greater awareness in the new administration about the Trust Territory?

MILNER: I am not sure I can state a conclusion with respect to these relative values of "more" or "less" since I was not associated with the office during the previous administration. I think though, it is very clear and very definite that the Department of the Interior and the Carter administration are very deeply and carefully concerned with the Trust Territory and other territories of the United States. We are very concerned that the territories have steady economic, political and social progress with people of Micronesia playing a







major role in the way this development takes place. I think we are very fortunate in having as a High Commissioner a man like Adrian Winkel. He is knowledgeable, and I think he is an excellent leader and he will be able to represent the Trust Territory well.

REPORTER: We have a liaison office for Micronesia in Washington; does your office work closely with that office?

MILNER: Yes, it does. We have an excellent working relationship, and it is a pleasure to have them there.

REPORTER: Do you see any duplication of effort between the two offices?

MILNER: Duplication is always possible unless there is good communication. But I think that the communication levels are such that so far duplications have not taken place, and I do not really see any occurring. Neither do I see any competition.

REPORTER: When do you think the Secretary of the Interior will designate a Deputy High Commissioner? It seems that it takes a long time for one to be named.

MILNER: I think the Secretary of the Interior was, and is, reluctant to rush into naming a Deputy High Commissioner until Mr. Winkel has an opportunity thoroughly to assess the needs of the Trust Territory and the governmental organization, and to determine the kind of organization of the government which is best for him to meet these requirements. The last thing we want to do is to appoint a person, or create a position, which is not going to be supportive and-I hate to use the term, but perhaps it is the best available-can be counter-productive. We do need to have somebody who can support and assist the High Commissioner and fulfill a real and useful role.

REPORTER: Would you be involved in any way with the political status negotiations? Some will be coming up very soon.

MILNER: Yes, we will be. As you know there is a Micronesian Status Negotiations office which is separately organized and separately funded. But I look on that much as I look on the Micronesian Liaison office. We do relatively the same thing. We do meet and confer with them. We cannot fulfill our responsibilities without knowing what the negotiating organization is doing. And I do not think they can fulfill theirs without knowing what we are doing. So there will be representation, although they are primarily charged with the status negotiations, and we are primarily charged with administration and development of the Trust Territory.

REPORTER: Would you actually physically attend the meetings as an advisor to the American negotiating team?

MILNER: This is quite possible although, given the state of our current reorganization, I am not quite certain what the Department of the Interior will do. At this moment I cannot promise to return to the next negotiating round.

REPORTER: In closing, Nr. Milner, do you have any general message for the people of Micronesia?

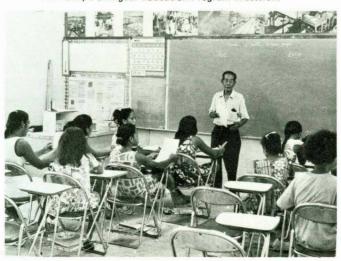
MILNER: In terms of a general message, I think I would say only that Micronesians, I believe, have made a very substantial amount of progress through hard work, and by keeping their eyes on the wider horizons much more progress can be made. The High Commissioner, we—the Office of the Territorial Affairs, the Department of the Interior —stand ready to assist in any way possible to achieve legitimate realizable aspirations of the people of Micronesia.

REPORTER: Thank you very much, Mr. Milner.

BILINGUAL EDUCATION IN THE TRUST TERRITORY

by Masa-Aki N. Emesiochl

The Ponape Bilingual Education Program in session.



Trust Territory bilingual education program is an instructional program for students in grades one through twelve. Funded by Title VII of the Elementary and Secondary Education Act and the Emergency School Aid Act, the program is designed to provide bilingual instruction in language arts and content areas in grades one through five, and in bilingual language arts and cultural knowledge in grades six through twelve. The program is designed to meet the special educational needs of children who have limited English-speaking ability, who come from environments where the dominant language is one other than English. It is intended that children participating in this program will develop greater competence in English, become more proficient in their dominant language and knowledge of their cultural traditions, and profit from increased educational opportunity.

The program has two general goals; (1) children will become more effective in communicating via the medium of the dominant languages (Micronesian) in order that they might effectively benefit from instruction using this medium, and, through this increased ability, learn more about their traditional culture, heritage and history, and (2) children will learn English communication skills in a manner which will not impede their cognitive development and, at the same time, acquire an awareness, understanding and appreciation of the culture of their "second language."

The program consists of pilot projects developing language arts curriculum in eleven languages of Micronesia (Marshallese, Ponapean, Kosraean, Trukese, Nukuoran, Palauan, Yapese, Ulithian, Woleaian, Chamorro and Carolinean (the last two in the Northern Marianas).

Each project is engaged with the development of four major components: curriculum development, materials development, staff development (inservice training), and parent and community involvement. The program is attempting to develop suitable and relevant curricular materials, primarily in the language arts and social studies (curricular materials for other content areas will either be adopted or developed, depending on the availability of the materials); encourageing parental involvement in decision-making processes; promoting awareness of native culture; training project staff, teacher, and aides; and disseminating information about the program.

At present, the program serves 3,095 students throughout Micronesia. The number increases each year as new grade levels are added to the program. Eventually, more and more schools will participate as the program proves itself successfully. TRAINING PROGRAM (Bilingual Education Training Program for Micronesia).

In addition to the eleven basic projects, the Trust Territory, in cooperation with the University of Hawaii, initiated a joint bilingual training effort to train Micronesian educators in the fundamental concepts of bilingual education. The program was designed to accomplish these two goals: (1) to advance the Trust Territory's capabilities in bilingual education in order to provide a meaningful education for the children of Micronesia, and (2) to affirm among a group of Micronesians a sense of pride and confidence in their roles as educators and in their languages as media of instruction.

In its first year, 1974, twenty-eight Micronesian educators enrolled as regular students at the University of Hawaii; these included 7 trainees from Truk, 6 from Ponape, 5 from Palau, 4 from the Marshallese, 3 from Yap, and 3 from the Marianas. Since then, 40 more trainees have gone to attend the program.

The course of study during the first semester includes an overview of bilingual education programs in various parts of the world, a survey of theories on the teaching of reading, and paired courses in the structure of English and the structure of their respective native language (of which there were seven spoken by this first group). The course, focused on the native language, is conducted in very small groups, almost on a tutorial level, and the goals are to learn general linguistic concepts with particular reference to the student's own language and English.

During the summer and fall semesters the students, and their graduate assistant counterparts, move into courses that relate to the development and use of new materials designed for use at various grade levels in Micronesian schools. The materials range from primary readers to school grammars which will include activities designed to impart grammatical concepts about Micronesian languages to the students of various grade levels.

The program allows for elective courses, and the students are encouraged to study in related areas such as testing, curriculum development, anthropology, geography and economics of Pacific islands. The elective courses are the only ones in the program that are not especially designed for the participants.

There is an additional one-hour seminar which is reserved for open topics. Once a week the entire group of staff and students will meet to discuss a wide range of topics all relating to the question of the goals of education in Micronesia and possible alternative systems of education in Micronesia. Like many other Pacific Islanders, Micronesians are facing some very serious questions regarding their own future. Will they try to join the Western world through closer political and economic ties? Will they try to become a quasi-independent political unit in close association with a metropolitan country? Or will they try to dissolve the current political structure and form new alliances with other Pacific island communities? Such questions, although unresolved, cannot be ignored when considering the concept of an alternative system of education.

The future of Micronesia is going to be influenced to a large extent by the education system that is finally adopted. The system that has been followed since 1947 is largely an alien system. If Micronesians want continued westernization of their islands (which is coming more and more into question), then their efforts should probably be directed towards strengthening the education system they now have. On the other hand, if Micronesians are considering some alternative future for their islands, then an alternative system of education based in a large part on traditional customs and values, should be considered. These are the types of questions that are being considered throughout the duration of the training program through the weekly seminar.

While this training program shares some of the features of other bilingual education training programs being conducted elsewhere in the world, it is unique in that it was designed by Micronesians to meet their own needs as they see them. It is also distinct in that it is based directly on the four preceding years of research, much of it conducted by Micronesians, on Micronesian languages.

Since the beginning of the program, seventy Micronesian educators (curriculum writers, teachers, and project directors) have participated in it. Three have received Master Degrees, one a Baccalaureate Degree. At the end of Spring 1978, three more participants will receive their Baccalaureate Degrees. The remaining are either in their junior or senior year.

By districts, the percentage of teachers and staff members who have received bilingual training are as follows: Marianas, 18%; Marshalls, 7%; Palau, 15%; Ponape, 11% Truk, 7%; Yap, 15%; and Kosrae, 2%. Bilingualism in the simplest dictionary use of the term means the constant oral use of two languages. An even simpler common use of the term means the ability to communicate in some fashion in two languages. In this sense of the word, bilingualism has had a fairly long history in the Trust Territory. From the German era beginning in 1898, it became desirable to be able to communicate in the language of the Western world and its representatives in the islands, in this case, of course, German. With the advent to huge numbers of Japanese into the Trust Territory after the Germans lost World War I and its Pacific territory, it became increasingly important for Micronesians to be able to speak Japanese as well as their own language.

Bilingualism in a specific sense began during this period though it was incidental rather than the reflection of a statement of policy. The children learned about their own culture and daily activities in the language of their parents at home and in the community. They were required to learn Japanese during the compulsory three-year elementary school period. Students became bilingual in the sense that they constantly used their own language within their own cultural group; they constantly used Japanese during the school period of the day.

After the Japanese lost the Pacific territory at the end of World War II, Micronesians continued to need to be bilingual. This time, the second language became English, the language of the third set of foreigners to impose outside control on the islands. English became necessary to understand the political and economic systems which were being imposed in all good will (but nevertheless imposed) on the peoples of the islands.

The American administration encouraged American ideas of universal education. Initially, however, much of the actual education was left to the communities. They often built their own schools, chose their own teachers, and paid the salaries of the teachers. All early administration was in the hands of the Navy Department. Its education policy was based on that of the United Nations Charter. The Navy policy contained the following sections:

Section 2: Schools shall foster and encourage:

- a) The native language, history, arts, and crafts.
- b) Instruction in the English Language to inhabitants of all ages.

Section 8: Elementary Schools shall provide instruction in:

- a) English
- b) Native language, history, arts, and crafts.

The Supplement to the Interim Regulations, March 1951, made the following statements:

Section 3.01: Language

Instruction in the English Language for all pupils is a prime necessity. The emphasis on English shall not discourage instruction in the several indigenous languages and dialects.

3.011: Vernacular

The vernacular shall be taught and used as the medium of instruction during the first two years in the elementary schools. Teachers and pupils shall be encouraged to respect and revere their indigenous languages.

3.012: English

The English language will gradually become the medium of instruction. English will now be introduced during the first school year of the elementary schools. Correct and constant use of the English language shall be encouraged so that it may become the 'lingua franca' of the Trust Territory in the shortest possible time.

The Interim Regulations also said that "The educational program shall be maintained to benefit the many and to assure a progressive development of each community within the local cultural pattern. . . "

When education became the responsibility of the civilian government in 1951, the Director of Education, Robert E. Gibson, set up a committee which made recommendations about educational policy. These were reflected in the Department of Education Manual for 1955 which said that it intended to "... preserve and develop what is good in the traditional beliefs and customs of the people . . . " It further said that "American teachers in Micronesia need continually to be reminding themselves that they are not to impose an American curriculum or pattern of education upon their students. . . The curriculum is always, in every society, a reflection of a people's culture, that is, the way they think, feel, believe, behave, do ... A culture constructed in one culture and reflecting that culture cannot have meaning in another culture."

The position on the use of the vernacular languages and English in the schools was that "Two Languages shall be used in the schools of the Trust Territory—the vernacular or island language and

English. Teachers and pupils should be encouraged to respect and revere their island languages... Children in the elementary schools shall learn to read and write their own language. It is important for elementary children to learn first to read and write their own language before they learn to read and write English... Teaching aids, texts, and other literature in all island languages shall be prepared... English shall be encouraged as the second language for the peoples of the Trust Territory whenever and wherever the following conditions are fulfilled:

- a problem in communication is recognized by the people;
- a knowledge of English is found to be a solution to that problem;
- pupils have learned how to read and write in the mother tongue;
- 4) teachers who can teach English are available.

... More stress should be placed upon the teaching of English as a second language in the intermediate schools. Even here it shall not be emphasized at the expense of the native language. .. In the first four years of elementary school, all reading materials shall be in the vernacular.

It is interesting to note that many of the tenets of bilingual education which we are promulgating now as important, new, revolutionary ideas are not at all new to the Trust Territory. Twenty years ago, educators said that the vernacular should have an important, basic place in the educational process. Students should have a respect for and pride in their own language and culture. They should learn to read and write first in their first language. English language instruction should begin early in oral form. English is important to the education of the students, but it should not be stressed at the expense of the children's native language. Other sections of the 1955 Manual (Department of Education Manual of the Trust Territory of the Pacific Islands, March 1955) indicated that parents should be actively involved in the education process.

If all of these policies had been actualized, then there would be no need now to try to emphasize teaching the vernacular in the beginning grades, organize relevant curriculum in the vernacular in other content areas, ask parents to contribute to what goes on in the school, train teachers in methods of teaching effectively in the vernacular and in English. What happened?

Most likely what happened was connected with item number 4 of the conditions which should be met in order for English to be encouraged as the second language, namely: when "teachers who can teach English are available." The feeling was that teachers who did not know very much English or whose English was ungrammatical were doing more harm than good by trying to teach English to their students. Only native speakers of English or Micronesians whose English ability was very good were encouraged to teach English. As a result, some Micronesian students learned English, but many did not. Parents began to think that their children were deliberately not being taught English in order to keep them uninformed about what was happening. Micronesians themselves began to express a desire for English to be taught to all children so that it could become the medium of instruction. This resulted in a policy change in 1962.

The revised policy for teaching English was that "English shall be used as the medium of instruction after it has been taught using the oral approach, and when both pupils and teachers are ready to profit from this method." This revision took form in the Trust Territory of the Pacific Islands, 16th Annual Report to the United Nations in the following way: "In 1962 the policy concerning use of English was completely revised. Former policy held that all instruction at the elementary school level should be in the vernacular. The new policy establishes English as the official medium of all instruction."

Group of Palauan boys proudly shows-off a just completed fish trap. Their elderly instructor looks on.



The crucial difference between the 1962 policy statement and the policy statement reported in the 16th report is the exclusion of the qualifying phrase: "When both pupils and teachers are ready to profit from this method."

An obvious result of this new policy was the building of contract houses for expatriates, the hiring of contract teachers to teach English, and the institution of the TESL program in Micronesia. With

the advent of the Peace Corps in 1966, there was a native speaker of English in practically every elementary school in the Trust Territory. With the implementation of the Tate Oral English syllabus in 1967, there was a uniform ESL program throughout Micronesia. For the following five years, large amounts of effort and money were expended to make all school children in the Trust Territory fluent speakers of English.

Despite these efforts, however, the major portion of the students' school day remained the same. Increasing numbers of Micronesians were trained in techniques of teaching oral English until an American ELS teacher was an exception rather than a rule. However, the general pattern of instruction in other areas was to continue with on-the-spot translation of English textbooks in the local languages.

Both teachers and students had become more proficient in speaking English, but not necessarily in reading it, and the ability to read English textbooks with good comprehension (which presumably had been a subsequent goal to the introduction of the oral English program) was still far beyond most Micronesian elementary students.

Utilizing local materials for learning, Bilingual Instructors and their students pose in the front of their classroom in Palau.



Bilingual education in its simplistic sense continued to exist. Two languages were still being used to instruct the children, even though the new policy statement did not explicitly pronounce the encouragement of using the vernacular. With bilingualism on an unofficial level, attempt was made to develop reading material in the vernaculars, reading programs were developed, and culturally relevant material was developed for inclusion in the curriculum, though was minimal.

Parents and educators who had wanted their children to learn more English than they had formerly began to think that perhaps learning Englksh was not enough, especially if this meant using American textbooks to get education. Students were sometimes learning English, but they were barely becoming educated. The information that they did get concerned topics relevant to an American child in an American setting and a middle-class white American child at that. Compulsory education resulted in a major portion of the child's day being spent inside the confines of the classroom (although not necessarily in an "education."). With more time spent in an alien institution, children had less time to spend with their parents, family, and community to learn about more immediately relevant matters related to Micronesian culture and values. Parents began to be concerned that their children were not developing an even knowledge of their own culture. This concern was also expressed by the Congress of Micronesia in a Resolution of 1967 calling for Micronesian language dictionaries and reference grammar development and again a Resolution in 1970 requesting the Director of the Department of Education to insure inclusion in the curricula of the elementary and secondary schools of the Trust Territory formal courses in the cultures and traditions of Micronesia.

This meant that the Mironesian languages had to be developed. In 1970 the Trust Territory Government went into a contract for a project in Micronesian linguistic research with the University of Hawaii. With their personnel and expertise the University of Hawaii agreed to:

- Make recommendations to District Orthography Committees for standardized orthographies. (Each language group form a committee to decide on a standardized orthography to adopt).
- 2. Produce a bilingual dictionary for each of the languages under study.
- 3. Produce a reference grammar for each of the languages under study.

The University of Hawaii further agreed to train the language informants represented from each of the languages under study in linguistics so that they would become "resident linguists" when they went back. The Trust Territory Government, on the other hand, agreed to finance the project including salaries, publication costs, travel and related expenses.

By June of 1973, the contract was ended. The University of Hawaii then began the publication of bilingual dictionaries, and reference grammars, one for

each of the Micronesian languages under study. Such an accomplishment will find its use in the development of curricular activities and other literary works in Micronesia.

Meanwhile in the Trust Territory, two districts began projects in 1971 which were designed to meet the concern over cultural irrelevance and to teach reading in the vernacular in hopes that learning to read English later would be easier. The project, begun in Palau with Federal Funds, concentrated mainly on developing language arts materials. In its proposal, it auoted from the Stanford Research Institute report. Planning for Education and Manpower in Micronesia that efforts should be made "to develop instructional content in the major vernacular languages for grades 1 to 3... (Such materials) should be (1) comprehensive ... (2) detailed ... (3) relevant ...i.e., be focused on Micronesian conditions and culture." It further stated that the Palau Legislature requested the District Director of Education"...to institute a program of curriculum development in both the elementary and secondary schools which puts major emphasis on all aspects of Palauan culture, and that such a program be developed with the full involvement of the Palauan teachers." In response, the District Department of Education set three priorities for their program:

- 1. the development of bilingual language skills, leading to literacy in English and Palauan;
- the review and revision, or development of materials to insure relevance to the students' experiental background;
- the review and revision, or development of materials to reinforce Palauan cultural values.

The Rota Bilingual Learning Project had more comprehensive goals. It intended to . . . " . . . provide a complete first-grade bilingual education . . . to train teachers to perform competently in bilingual teaching situations, and to involve parents and other members of the community in the educational process. . . It . . . hopes to find ways of reaching parents and involving them fully in the education of their children, and it attempts to both continue to build a strong second-language and to rekindle pride in the indigenous language and the cultural heritage."

Other content areas were to be developed or adapted. The Micronesian Math program, the SCIS science program, social studies, and all other areas were to be translated from English into Chamorro in hopes that differing conceptual areas could be identified and treated systematically. A complete bilingual curriculum

for the first five elementary grades was an ultimate goal.

The Rota Project proposal became the model for subsequent projects. The Palau and Ponape projects which received Title VII funding in 1972 are similar in basic goals. The Ponape proposal has more emphasis on the content areas of the bilingual curriculum, but the major emphasis in all of them remains the development of language arts materials in the Micronesian languages.

Other districts also expressed a great deal of interest in developing bilingual programs of their own. Yap applied for and was granted Title III money for a projected three-year period commencing in 1973. Truk and the Marshalls Districts were interested and applied for and were granted Title VII funds to begin projects of their own in July of 1974.

The renewed recognition throughout the Trust Territory of the need for a complete curriculum in the native language of the child is a step away from the 1963 view that seemed to say that the only practical way to educate Micronesian children was to teach them as quickly as they could learn it so they could then be taught other content areas using English textbooks.

There are, however, several limitations on our present ability in the T.T. to carry out the goals of the bilingual education projects as they are presently defined. These limitations probably existed in the 1947-61 period, and they may be one of the reasons that the heavy emphasis on English resulted. It was easier for the American mentality to mount a massive English offensive than to work in small ways in separate districts with different languages for the benefit of small numbers of children. We need to recognize these limitations in order to take steps to correct them.

The ideal of the bilingual programs is to produce bilingual/bicultural individuals who are able to function effectively in either their own language or in English; who are able to function effectively either in their own cultural setting or in the American one. To produce these individuals, the bilingual program hopes to develop a well-integrated curriculum which allow the children to learn content areas in their own languages while they are learning English. When they know enough English to profitably learn through it as a medium of instruction, the curriculum should allow for a well-planned change-over to a true bilingual program — one in which both teachers and students can function efficiently and effectively in whichever language is appropriate.

When the T.T. Education Department talks about bilingual education today, they very often don't mean a total bilingual curriculum. They most often mean vernacular reading programs — not even language arts programs, but only developing reading materials in the vernacular. Since that small part of a bilingual/bicultural curriculum gets the most consideration, the limitations concerning this area will be enlarged upon.

First of all, American educators are in various states of disagreement about what the best way is to teach American children to read. The many studies that have been done are not very helpful in defining the best way of teaching reading. They seem generally to indicate only that many children can be taught to read by many different methods. Also, probably no one method will ever work for an entire class of children. So, reading teachers need to understand what people mean when they talk about things like "reading readiness", "experience charts", "basal readers", "phonics programs", "sight vocabulary", etc. Then they need to know how to incorporate these things into an integrated reading program. They also need to be able to apply appropriate methods of teaching at appropriate times to enable individual children to learn to read by whatever methods work best for them.

Our initial problem is that no one really knows about how Micronesian children learn to read. Perhaps they learn in the same way American children learn. Perhaps not. A further problem is that there are presently very few educators in Micronesia who have a good grasp of all of the elements that comprise a reading program or of the different methods commonly used in the States to teach reading. The few that I know about are American expatriates.

In all the district bilingual project, for example, no one on the bilingual staff knows very much about

Children participating in the Chamorro Bilingual Reading Program, Northern Marianas.



organizing language arts programs. As a result, the language arts program is being developed piecemeal and result at the end of the year is likely to be a lot of pieces that don't fit together coherently. The fault is not theirs. They work very hard, but they need more information about what it is they're trying to do and much more training in how to evaluate what they've done. An American who knows a great deal about teaching reading to American children, in many cases, is unsure of himself whether he could teach Micronesian children just as well. From an American point of view, it is an integrated program. There is no information yet with which to formulate what a Ponapean point of view might be about a good Ponapean reading program. Again, the bilingual staff has little understanding about the theory behind the material to be able to evaluate it in any meaningful way. Ponape may eventually have a first through eighth grades reading program, but when the American leaves, then what? Ponapeans should be trained as soon as possible to be able to continue the program.

In the Marianas the Chamorro, like reading programs in other distircts, is being developed by an American. I'm sure that she, not being a reading specialist or even an elementary school teacher with extensive experience in teaching reading, would feel more comfortable about what she's doing if there were expert help around to help her objectively evaluate the materials being developed. And again, what happens when she leaves?

The point of all this is that we should make provisions for giving people adequate training and follow-up support before entrusting them with the difficult task of developing vernacular reading programs. Perhaps members of the South Pacific Commission could give us some help in locating people who have had experience in developing language arts programs for languages which have no written material to use as a base, who have had experience in working with speakers of the languages involved to train them to be able to further development themselves.

Just the development of language arts programs requires so much time that we haven't even begun to realize the problems that may exist in the rest of the curriculum. The bilingual projects are supposed to recognize conceptual differences between Micronesian languages and English in the math and science programs. We haven't even begun to do much of that. It would probably be better for us to concentrate our energy on developing a language arts program first and work on an integrated curriculum later rather than

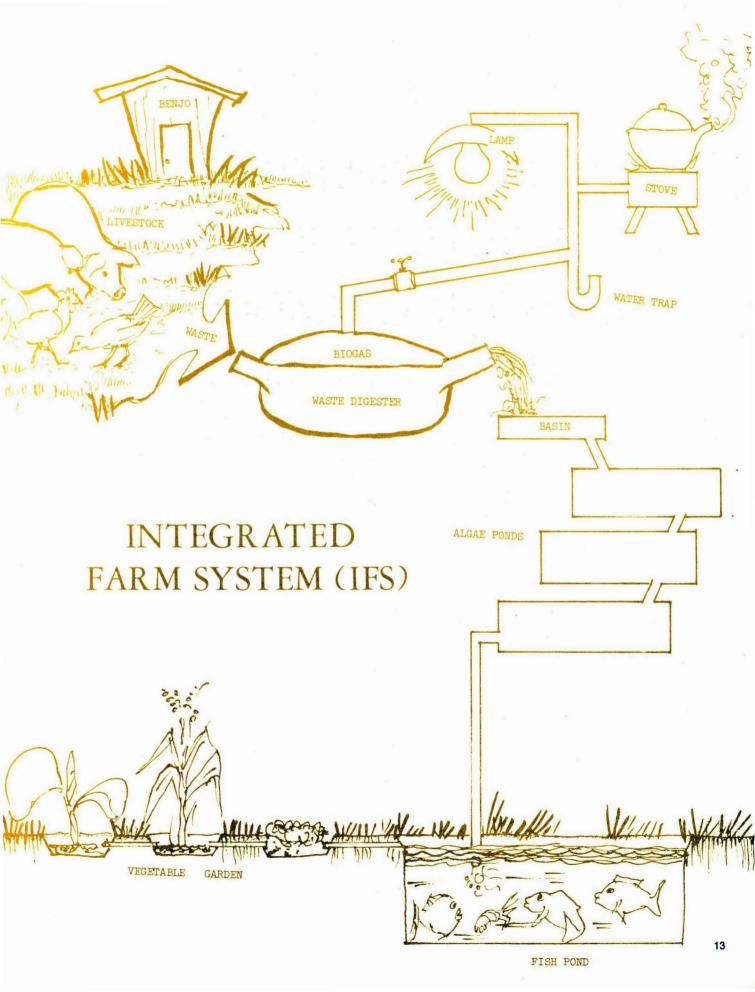
scattering as much energy as we presently tend to be doing.

Another problem which hasn't received much consideration is the integration of the English program into the total language arts program in the elementary schools. Present methods of teaching reading in English may need modification when reading is effectively taught in the vernacular. New problems may arise in transferring reading skills from one language to another. It's possible that progress may be made more quickly with English reading. No one really knows what will happen. We can only make educated guesses. But of course we have to begin thinking about the problems now and watching carefully the results of our language arts programs, or we won't have any clues later on as to what the cause of the problem might have been, let alone any motivated plan for correcting the problem.

All of the foregoing points must be considered before we can make any definite plans for the development of a real bilingual-bicultural program. A program will not be a bilingual one in the true sense of the word until all of the students are functioning effectively in school in two languages. How will this be achieved? At what point do we think it might happen? Are we developing vernacular reading programs only as a bridge to get to a total English curriculum? Do we intend to develop a dual system offering children the option of being educated either through English or through their own language, if it happens that they never become proficient enough in English to function well in that language? Do we intend to have an elementary curriculum that offers a balance between instruction in English and instruction in the vernacular throughout? There are many alternatives. We are only beginning to consider some of them now.

It was incorrectly reported in the 2nd quarter issue that High Commissioner Adrian P. Winkel is 63. His actual age is 62. He was born on April 19, 1915.

In the last issue of the **Micronesian Reporter**, an article was published indicating that the Progressive Income Tax, Public Law 7-32, would become effective January 1, 1978. However, during the Special Session of the Congress of Micronesia held in August, the income tax law was further amended, and it is scheduled to become effective January 1, 1979.



THE MANIFOLD BENEFITS OF BIOGAS AND OTHER ALTERNATE ENERGY SOURCES

by James T. Hiyane

The search for agricultural technology adaptive to island conditions for greater self-sufficiency has long been the underlying pre-occupation of the development strategy of the Trust Territory. Without the blessing of natural resources as found in other island nations, Micronesia relies heavily on imports of basic necessities. Trade deficits, with the value of imports ten times that of exports, place these islands precariously dependent on the United States for maintenance of present life-styles.

Heavy imports of petroleum oil and the complete reliance on fossil fuel energy that continue to rise in cost as direct result of the rapid depletion of world supplies will create insurmountable problems for the Trust Territory within the next decade. Unless immediate steps are taken to address these problems and to alleviate the situation, Micronesia is threatened by a vast array of economic ills in the near future.

While much research is centered on nuclear power plants, solar energy, ocean thermal energy conversion, geothermal energy, tidal energy and ocean wave energy, the Trust Territory Agriculture Division has recently embarked on a search for alternate energy

resources relative to island conditions. Methane production from animal wastes, charcoal manufacture from coconut logs and mangrove, wind generators, wind pumps, solar crop dryers, solar water heaters and distillers, and other devices are being adopted to teach farmers and rural families the practical applications of these alternative energy sources.

Local production of methane from animal waste and sewage provides an interesting opportunity to substitute for imported fuels. Dependence on government-operated power plants by present subscribers can be reduced with biogas or charcoal for cooking, lighting, and operating small refrigeration units and generators. Rural families not serviced by power utilities and who now rely on kerosene and propane will exact significant savings through the use of cheap alternate energy resources. Bottled biogas from animal waste and producer gas from charcoal are readily adaptable to replace gasoline in automobile and other gasoline-driven equipment. As gasoline prices soar to prohibitive levels as predicated, these two forms of fuel will play a greater role as substitutes for petroleum fuels.

History and Background of Biogas

Methane production under natural conditions is one of Nature's oldest ways in decomposition of organic waste. This chemical decomposition occurs under an aerobic condition (without oxygen) in swamps, deep ponds and animal digestive tract by various types of bacteria that break down wastes into methane and other gases. Long ago, Louis Pasteur recognized the generation of methane from farmyard manure. As early as the 1900's attempts were made in India to produce methane from waste of the sacred cows which literally deposited hundreds of tons of manure in their wake on city streets and country sides. Shortage of petroleum fuel in Germany during World War II prompted farmers to utilize methane to power tractors and other machinery. Farmers throughout China, Japan, Korea, Europe, and other countries have long used this process to generate biogas for cooking, lighting, and operating small machinery. At present many countries have adopted plans to increase the use of digesters as reflected by numerous projects to promote these digesters in rural areas. A five-year program in India to construct 100,000 waste digesters is a case in point. In the Republic of Korea, where

Agriculture Extension agents undergoing training in utilization of bag digesters at Ponape Agriculture Station.

29,000 units of 1,300 to 1,500 gallon capacities have been built; a target to triple the number has been projected for the coming years. Pacific islands from the far reaches of French Polynesia to the western corner of Melanesia have taken initial steps to utilize this technology and reap the many benefits of the system through the assistance of the South Pacific Commission and the Economic and Social Commission for Asia and the Pacific (ESCAP). Algae production, fish culture, sludge and waste waters used for fertilizing crops, along with biogas generation are not mere hypothetical schemes but an accomplished fact now in use in many countries.

The Biological Process

In the absence of oxygen, raw organic wastes undergo a series of reactions by several types of anaerobic bacteria. The initial process involves acid-producing bacteria which digest complex organic compounds such as proteins, fats, and carbohydrates into simpler volatile acids, the most important of these being acetic acid (more commonly known in a diluted form as table vinegar). Methane-producing bacteria then convert the volatile acids into methane, carbon dioxide, nitrogen, carbon monoxide, orygen, hydrogen sulfide, and other gases.



TABLE I COMPOSITION OF BIO—GAS PRODUCED FROM ANIMAL WASTE

Methane CH	55% - 70%
Carbon Dioxide CO2	25% - 45%
Nitrogen N2	0.5% - 3%
Carbon Monoxide CO	0.1%
Oxygen 02	0.1%
Hydrogen Sulfide	Trace

Biogas is highly flammable; its fuel value is rated at 700 BTU per cubic foot (one BTU or British Thermal Unit is the amount of heat required to raise one pint of water by 1 degree Fahrenheit). By comparison, natural gas which is widely used in the U.S. for household heating and cooking, is rated at 1050 to 2000 BTU per cubic foot.

TABLE II FUEL VALUES OF ORGANIC GASES

Coal gas	450 - 500 BTU per cu. ft.
Biogas	540 - 700 BTU per cu. ft.
Natural gas	1050 - 2200 BTU per cu. ft.
Propane	2250 - 2600 BTU per cu. ft.
Butane	2900 - 3400 BTU per cu. ft.

Production of gas depends on several factors such as the nature of the raw material, temperature, acidity/alkalinity (PH) of the digester, viscosity, dillution and ammonia toxicity. The volume of gas generated from raw materials of various sources is extremely variable. The physical characteristic of the material, its total solid and volatile solid content, along with its digestibility contribute to the productivity of gas. It is generally known that vegetable wastes produce significantly more gas than animal wastes, with poultry droppings ranking highest among the livestock manures followed by swine, goat, and cattle. Methanogenic bacteria thrive best between 90 and 95 degrees fahrenheit. Consequently, tropical areas are well suited for biogas production. In temperate regions the digesters must be insulated or heated with part of the gas produced to maintain optimum temperatures; otherwise the output of gas is greatly reduced.

Types of Digesters

The design and size of the digester depend on (1) available construction material and cost, (2) amount of raw material (i.e. number of animal units and amounts of manure available for loading in the digester), (3) the loading rate and retention time, and (4) minimum gas



Familiarization of algae ponds in the 1FS as conducted by Ponape Agriculture Station personnel.

requirements. Various types of digesters have been designed in all parts of the world. Single stage, double stage, and batch-fed digesters have been tested using concrete, clay, wood, metal and synthetic rubber. In the past concrete holding tanks with metal lids, elaborate multi-chambered brick tanks, steel drums and various other types have been tried. On a small scale any air-tight container provided with inlet and outlet for water movement and a tap for the gas will work. The author successfully obtained methane from a one-pig digester fashioned from an inner-tube of a jeep with the inlet and outlet strategically placed so that the air stem was well above the water level. Daily washing of a wooden crate housing one small piglet provided sufficient raw material to produce methane in about 2 weeks after installation. A burner connected to the air stem was able to burn several minutes each day.

The Integrated Farm System

The Integrated Farm System (IFS) of which methane production is an essential part, presents a great deal of promise in decreasing the heavy reliance on petroleum fuel as well as reducing imports of livestock feeds and commercial fertilizers, and relieving the local demand for fresh fish. Of further importance, the decomposition of animal waste products including human sewage through the system alleviates the dangers of polluting drinking water, streams, lagoons, and beach fronts much to the delight of environmentalists. The IFS includes a waste digester. algae pond, fish pond, and crop production area. The prototype methane digesters installed at the Ponape Agriculture Station utilize pig manure from its swine breeding unit to produce methane. As the daily washings of the pens deliver manure into the neoprene gas bags the methane is piped to home-made burners fashioned from galvanized pipe to cook swine feed and thus eliminate the need to gather firewood as was the practice in the past. The two 1,300 gallon digesters generate ample gas to cook locally grown feeds such as cassava, sweet potato, breadfruit, and banana for the entire herd.

TABLE III
APPROXIMATE VOLUME OF GAS PRODUCTION

Source	Volatile	Daily Gas
	Solids/day	Production
Swine (160 lbs)	1.3 lbs.	6.5 cu. ft.
Poultry (100 layers)	6.0 lbs.	30.0 cu. ft.
Cattle (1000 lbs)	8.0 lbs.	29.0 cu. ft.
Human (150 lbs)	0.25 lbs.	1.25 cu. ft.

The effluent from the waste digester is directed into a pond where one-celled algae, *Chlorella*, thrive on the remaining nutrients in the undigested portion of the pig waste. The algae are harvested and added to the pig feed to increase thriftiness and performance. In addition to large quantities of vitamins and minerals, *Chlorella* is approximately 50% protein by dry weight and considered of high nutritive value as feed supplement. The high protein content of this algae will enable farmers to utilize more local crops for livestock feed and in turn reduce the reliance on imported feeds.

Efforts are being made to install a 164,000 gallon fish pond to take advantage of the remaining nutrients in the effluent to rear fresh water carp or shrimps as are being cultivated in many Southeast Asian countries. Harvests of the pond will not only provide fish for human consumption, but also provide an additional source of protein in the fish meal for animal feeds.

An overflow from the fish pond will direct the excess water which is rich in nitrogen, phosphorus, and potassium, three of the major plant nutrients required by plants, to an irrigation system for vegetable and root crop production. The remaining sludge in the digester which also contains plant nutrients will be used for fertilizing and composting crops, and thus minimize the purchase of commercial fertilizer.

The total cost of the waste digester which was imported from Taiwan is approximately \$280. The entire system including piping, burner, and lamps to utilize the gas from the existing pig pen cost slightly in excess of \$300. Assembling the neoprene bags locally by the Agriculture Department will cut the cost substantially.

The cost of utilizing animal waste for biogas generation is not expensive nor prohibitive. With an imvestment of a few hundred dollars and a few pigs or few hundred chickens a farmers could take advantage of his livestock for gas production and thereby eliminate the purchase of kerosene or propane, or the gathering of firewood. A herd of 10 to 12 full grown pigs is sufficient to provide a family with adequate gas for daily cooking and lighting.

TABLE IV USE OF METHANE GAS IN APPLIANCES

Gas lamp
Cooking (2"-4" burner)

Refrigerator (10 cu. ft.)

Gasoline Engine

2.5 cu ft. mantle per hour.

8 to 16 cu. ft. per hour.

12 cu. ft. per hour.

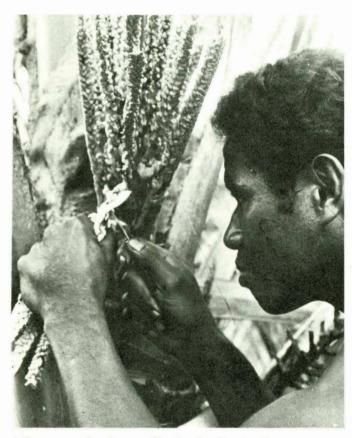
It is by no means an impossible feat for farmers and rural households to become self-sufficient in fuels, livestock feeds and fertilizers with the adoption of the IFS. The entire system of recycling animal wastes may be to a large degree an answer to provide basic amenities to the populace without aggravating the balance of trade nor arousing the wrath of ecologists. Also, the ubiquitous coconut for fuel; the wind for mechanical and electrical energy, minihydro power plants, and the ever-present sun are free forms of energy sufficiently available to provide a vast amount of the fuel that can further reduce the dependence on fossil fuels. Thus with the reduction of each barrel of imported oil by maximizing local resources, the economy of the islands can be soundly improved.

COCO-NOTES SEX LIFE OF THE COCONUT PALM

by Leo Miguar

Micronesia has two distinct types or kinds of coconut palm, the tall and the dwarf and thus two different kinds of reproductive processes occur. In simple terms the tall coconut is cross pollinated, meaning that the female flower of a palm is pollinated by the pollen from a male flower which is growing on entirely different tall coconut palm. The dwarf coconut palm, on the other hand, is self pollinated, meaning that the female flower of a dwarf palm is pollinated by the male flower of the same dwarf palm. However, if dwarf and tall palms are interplanted, pollination can occur between the various palms without regard to whether they are tall or dwarf as long as the female flower is receptive to receive the pollen.

In flowering plants, such as the coconut, sexual reproduction is carried out in the flower. In the coconut palm these flowers are grouped together to form an inflorescence, enclosed in a spathe, which appears in the axil or base of every leaf. Spathes open exposing the inflorescence at about one month intervals in succession, the older ones first and the younger ones later. Thus every year about twelve inflorescences open. Each inflorescence carries both male and female flowers on spikelets. The male flowers are at the upper end of each spikelet and the female at the base (see drawing). The number of female flowers per fruiting branch (spikelet) varies from a few to three hundred, the average being about thirty. Normally, only about 20% of these flowers develop into nuts and the remainder drop off. The change from the vegetative to the reproductive state (begin to flower) of the tall coconuts takes 6 to 7 years from planting, whereas the dwarf flowers are 3½ to 4½ years old. The tall remains productive up to 70 years and the dwarf not more than 30 years.



Inflorescence of a Coconut Shortly after Bursting From the spathe.

In the tall palm, the male flowers open soon after the bursting of the spathe, but in the dwarf the male flower opens several days to a week after the opening of the spathe. Open male flowers do not remain on an inflorescence for more than one day. Generally, they open in the early hours of the day and are shed by the same evening. The male phase, that isis when pollen is available, is the period from opening of the first male flower until the last flower is open in that inflorescence. This male phase in the coconut lasts from 20-24 days.

The essential part of a female flower, the ovary, which generally develops into a nut is enclosed within six lobes at an early state of the reproductive process.

As the flower matures, the ovary emerges through those lobes, and later a juice is excreted through three white protrusions, called stigmas. It is at this state that the female flower is prepared to receive pollen from the male flowers. With the completion of this stage or phase, the color of the stigmas change from whitish to brownish and the juices stop flowing. Approximately eleven to twelve months later a nut is ready to be picked. Therefore, from opening of the spathe to the time the coconut matures is about twelve months.

The female flowers of the inflorescence of the tall coconut are receptive to pollen for five to seven days. This stage is called the female phase. The dwarf coconut palm is receptive to receive pollen from eight to twelve days. In the dwarf palm, the female flowers become receptive from the date of the bursting of the spathe, whereas in the tall palm the receptivity of female flowers occurs nearly 21 days after opening of the spathe.

The period of time that the female and male flowers are able to receive pollen or produce pollen is very important in the quality of the progeny. In the tall palm, as mentioned earlier, the male phase lasts about 20 days but the female phase begins only about 23 days after opening of the spathe. In other words, by the time the female flowers on an inflorescence are receptive to receive pollen, the male flowers have been completely shed and no pollen is available for their pollination from the same inflorescence.

The next spathe with the inflorescence generally opens a few days later, by which time the female flowers of the previous inflorescence have passed their receptive stage. The female flowers thus have to look to another palm for pollen or male parentage. Pollen is carried by the air and insects and would stick to the wet stigma of the female flowers. This means that all the female flowers on one inflorescence do not receive pollen from a single palm but possibly from many palms in the vicinity. Hence, the nuts are of mixed origin and resultant seedlings vary considerably from

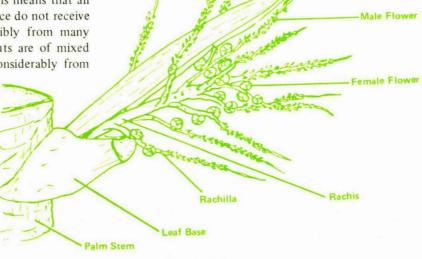
one another. The selecting of an excellent palm (mother palm) with many nuts per bunch and big nuts will not result in seedlings developing into a good bearing coconut palm.

The dwarf coconuts are quite different. The male and the female phase occur at the same time. The female flowers become receptive soon after the opening of the spathe when pollen is available from the male flowers of the same *inflorescence*. The male phase is completed only after all the female flowers have passed receptivity. Thus both male and female parentage are from the same palm and the progeny would be more true to the appearance and production of that particular palm. This is self pollination.

However, one cannot guarantee that self pollination always occurs in the dwarf palm. It is possible that the receptive female flower may be pollinated and fertilized with pollen, either insect or air borne, derived from any palm in the neighborhood. The cross pollination of the tall and dwarf palm results in healthier palms which is called hybrid vigor. The technology for producing a large number of hybrid coconuts for planting is being developed in the Philippines and the Ivory Coast of Africa. The hybrids have been known to produce four to six times more copra than the ordinary tall under good management.

Hybrid Program

In the long term, Micronesia needs to go into hybrid coconut planting in order to increase copra production to help supply the two copra processing plants now established, one in Koror and the other in



Inflorescence of coconut.

the Marshalls. However, over the short term copra production could be doubled by thinning, bushing, harvesting, improved field trip service and marketing of the present copra. Nearly all crops of any consequence are being hybridized to increase quality and quantity of production. The coconut is no exception. In the hybrid coconut, the improvement is nearly all in the quantity of copra produced per unit of land. This is accomplished by producing more nuts per palm by increasing the ratio of endosperm to husk, fiber, water and shell of the individual nut. However, like nearly all hybrid plants and animals the coconut hybrid palm must be properly managed to achieve the four to six time greater yield than the present Micronesia coconut palm. This management includes planting on volcanic base soils, application of the right amount and kinds of fertilizers, clean bushing under the palm and disease and insect control. The calcareous soils of the atolls of Micronesia, where the majority of the copra is now produced, do not provide the proper ecological conditions for the hybrid coconut. This is mainly due to the lack of response to fertilizer applications on the high calcium carbonate soils. There is an increase of production from hybrids on atoll soils, but it is not the

Individual Male and Female Flower of a Coconut Palm in the Receptive Phase

four to six times that one will get in ideal volcanic soils under good management.

The Micronesian Coconut Processing Authority recently acquired the services of Mr. Yann L. Fremond, Director of the Coconut Department of the Institute De Recherches of France as a Consultant to travel to Micronesia and make recommendations for a coconut hybrid planting program. He recommended a three-phased approach:

- 1. Planting of a seed garden in Ponape and Palau, of about 15 to 30 acres to produce the hybrid coconut seed which would be planted by the coconut farmers. The seed garden would be planted with dwarf mother palms which are castrated at flowering time and pollinated by selectively planted tall palms. The planting design would be one row of tall palms of three different types then two rows of dwarf mother palms.
- 2. Fertilizer experiment in both Ponape and Palau savannah soils, to determine the exact nature and quantity of mineral fertilizers which should be given to the palms. The coconut palms used in this experiment would be imported West African hybrids.
- 3. A hybrid behavioral test would be carried out at Ponape to ascertain which hybrid is best adapted to environmental conditions in Micronesia. This would involve at least three combinations of tall dwarf crosses.

The Agriculture Division is planning to implement Mr. Fremond's recommendations and has requested funds beginning in FY 1978. Funding for the program as outlined in the proposal would be about \$200,000 per annum for the next five years. It is anticipated that U.S. grant and Congress of Micronesia funds would be the ideal way to finance the coconut hybrid replanting scheme.

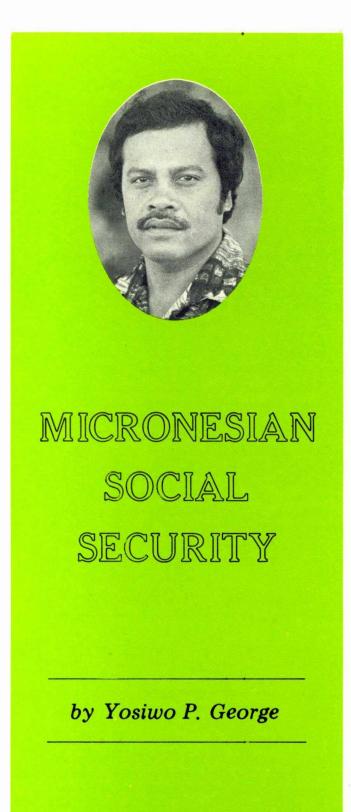
If funds, interest and motivation are all available in the proper amount, this hybrid replanting program will take anywhere from twenty to thirty years to complete.

If all the areas that are now planted to coconut and with about a 50% increase in planting of new areas of the big islands of Palau, Ponape and Kosrae, Micronesia could have 115,000 acres in coconut groves. This acreage in hybrid palms could produce over 200,000 tons of copra annually. Present production is only about 25,000 tons, half of this being consumed locally.

From this, one can see a tremendous potential for the hybrid coconut. The only thing that is needed is the will and motivation of the Micronesian land owners to implement the program. It will cost money, but doing the actual planting and managing the new hybrid coconut groves will be the most difficult task.

^{1.} Male Flower —a. bract, b. sepal, c. petal, d. stamen, e. sterile ovary.

^{2.} Female Flower — (Button Nuts) — f. bract, g. sepal, h. petals, i. stigma.



As Micronesia is undergoing a change in the island economy toward a cash economy, traditions have slowly given way to new values and conveniences. More and more paying jobs which have recently become available provide for the staple needs of many Micronesian families. Earnings from these respective jobs play a significant role in the day to day living. This is more obvious in places where government and private jobs are available. When earnings stop or are reduced, however, the workers and their families usually face financial difficulty as the source of income is no longer available. A more formal and systematic approach to insure financial assistance to workers and their families should earnings be interrupted became inevitable.

The Congress of Micronesia enacted Social Security legislation on October 13, 1967 which became Public Law No. 3-40, as subsequently amended, establishing for the first time a formal system to provide some sort of financial protection to workers and their families when earnings are no longer available as a result of retirement, or death. The amendment also took into account disablement of the wage earner. The system which realizes tradition and customary practices in handling problems of a similar nature attempts to create and supplement approaches in view of economic pressures resulting from recent changing economic situations.

At the inception of the program in July of 1968, Social Security coverage was limited only to citizens with regular employment in the Trust Territory. Since then, however, coverage has been modified and expanded to include self-employed individuals and others who were initially excluded. Recently, this privilege was extended to include non-citizens working for Trust Territory employers who are not required to report and pay into their own country's Social Security system.

The system has been well received throughout Micronesia and has experienced a steady increase in enrollment which now totals over 40,000 individuals registered. The number of employees reported for Social Security, however, fluctuates from quarter to quarter. During the recent quarter, there were over 14,000 people reported as working and earning wages from 586 employers including domestic employers. The Trust Territory Government with the highest number of employees, reported a little over 7,000 employees and approximately the same number were reported from all employers in the private sector. The reports which are filed and paid at the end of each quarter include names, Social Security numbers and wages earned for each employee. Social Security

credits based on wages earned and reported are subsequently entered into various accounts which are kept separately by the Social Security number assigned to each employee. It is, therefore, important to use the correct Social Security number to ensure appropriate credits. Every employee must have one and only one number and should retain it for life, even though they might change their names through marriage, legal action, or otherwise. Credits which are earned and posted under each of the Social Security numbers will determine the amount of benefit which may be due when the requirements for benefit are met.

The Social Security tax rate and the maximum taxable wages per quarter were increased on July 1, 1976 from 1% to 11/2% and \$900 to 1,200, respectively. Today, each employee is therefore required to pay 1½% Social Security tax on the first \$1,200 earnings each quarter. The employers are required to contribute an equal amount. The maximum each employee and employer must pay during each quarter is \$18.00. Employees working and reporting from more than one employer during each quarter who have paid over \$18.00 will be refunded automatically provided that combined Social Security taxes in excess of \$18.00 each quarter over the four-quarter period from September 30th through June 30th each year totals \$1.00 or over. A Social Security tax adjustment is necessary from time to time to enable the system to generate adequate revenues to meet current and future obligations. Social Security revenues which are derived from employers and employees contributions, penalty fees and interest on account of contribution, and interest and earnings from investment of the funds have steadily been increased. The increase in revenues is attributed to the expansion of economic activities plus increases in wages and salaries throughout Micronesia during recent years. Other factors which also contribute to the steady increase of Social Security revenues are the changes in the Social Security tax rate and taxable wages, the expansion of coverage, and of course excellent reporting compliance on the part of employers. Social Security collected over \$1,300,000 during the fiscal year just ended compared to \$267,000 collected during the first year of operation. Revenues are expected to increase as economic activities in Micronesia continue to increase.

Of the total revenue collected now about 28% pays for current benefits due and another 10% pays for the administration of the program. The unused balance is placed in a trust fund, Trust Territory Social Security Retirement Fund established by Law, which has grown over the past nine years and now surpasses the 4 million dollar mark. These funds have been

invested in various securities in accordance with the investment provisions of the Social Security Law. Because of the nature of the Social Security program it is essential to build up a healthy reserve at its embryonic stage and to retain the fund solvent at all times. The structuring of benefit levels must then be actuarily determined so as to avoid any unnecessary expenses which may adversely affect the intergrity of the fund.

For this reason, the current benefit level has been structured to provide for financial assistance within the capability of the fund as actuarily determined. Social Security benefits went through several changes attempting to adjust the level from time to time, considering the increases experienced in the cost of living and the changes in the wages and salary structures affecting people throughout the Trust Territory. The recent change which went into effect in July 1976, increased the benefit level significantly and established the minimum to \$26.40 per month. This change plus additional new claims were reflected in the substantial increase in the total benefit outgo over the twelve-month period ended June 1977 which totalled over \$372,000 as compared to \$203,000 paid over the same period a year before. The system hopes to eventually improve the benefits to a level deemed adequate to provide for basic necessities for the participants and their families.

There are 647 families currently receiving benefits throughout the six districts. And the total benefit paid out of the Trust Territory Retirement fund from the program's is inception through June 1977 is over \$983,000.

Financing of programs like Social Security is different from many forms of expenditures in that the cost incidence is by no means uniform from year to year. As expected, the benefit outgo was very small in the early years of operation and rises steadily over the years. Cost is expected to increase at an accelerated rate as more and more participants become eligible for benefits.

In computing basic benefit due each eligible worker or his family, total cumulative covered wages must be considered. Monthly benefits then can be estimated by following the steps and the chart below:

- 1) determine the number of years you worked under the Social Security since July 1968 in the first column
- determine your average annual salary for those years

EXAMPLE OF ESTIMATED MONTHLY RETIREMENT BENEFITS

If you work under Social Security:

And your average annual salary was: \$1,000 \$2,000 \$3,000 and above \$4 800 or over (July 1 - June 30) Your monthly benefit will be about: 2 years 26.40* 33.00 49.50 66.00 3 years 26.40* 49.50 74.25 85.25 4 years 33.00 66.00 85.25 90.75 96.25 5 years 41.25 82.50 89.38 49.50 85.25 93.50 101.75 6 years 57.75 97.62 107.25 7 years 88.00 66.00 101.75 112.75 8 years 90.75 9 years 74.25 93.50 105.87 118.25

Currently, there are four types of Social Security benefits which are provided by the Law; retirement, survivors, disability and lump-sum. In order for the workers or their families to become eligible for each benefit, the wage earner must work and report for Social Security for at least two years along with other criteria required for each type of benefit.

For retirement benefit, one must be at least 60 years old, file application for benefit, and terminate from employment.

Survivor's benefit is divided into two portions; the surviving spouse and surviving children benefits. For the surviving spouse benefit, marriage must be binding at the time of death and the surviving spouse must stop working. For surviving children benefit, the children's deceased parent must either have worked and reported for Social Security for a total of 1½ years during the 3¼ years period immediately before death occurred or have worked at least two years under the program, children must be under 18 years old or if attending school, age 22, unmarried, and must be dependent of the deceased worker at the time of death.

For disability benefit, one must also work for a total of 1½ years during the 3¼ years period immediately before the disability. The disablement should be such that it prevents engagement in any gainful employment, lasted for 5 months and will be expected to last at least 12 months or result in death.

Anyone receiving monthly retirement or survivor's benefits may return to employment, however, the benefit will be reduced or stopped, should the wages earned exceed \$200 per quarter. If less, however, the full benefit will continue to be paid. This will permit an individual receiving periodical benefits to engage in employment after benefit payment commences in order to have extra earnings and at the same time retain part or whole of the benefits due.

Once entitlement for benefit is established, payment continues until certain conditions occur at which time it is either reduced or discontinued completely. In all cases, the amount of benefits one draws go beyond and above the Social Security tax contribution paid during the working years.

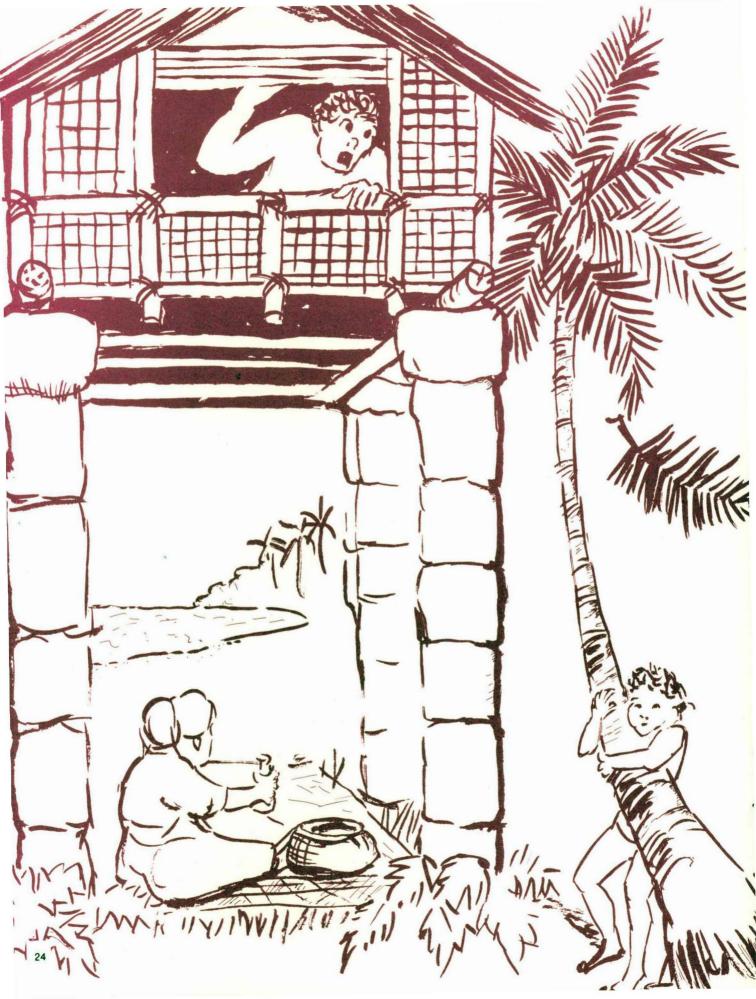
Retirement benefits are paid for as long as the retiree lives. Surviving spouse's benefits terminate upon remarriage or death. Surviving children's benefits terminate upon marriage, death or attainment of age 18, however, if attending school at age 22; disabled children eligible for children's benefits continue to receive benefits for as long as the disability lasts provided the disablement occurred before becoming 18 years of age. Disability benefit for disabled workers continues for as long as the disability prevents engagement in gainful employment.

Lump-sum benefit is paid when no periodical benefit is payable. In other words, if one does not meet the requirements as set forth for monthly benefits, a lump-sum benefit which is four times the contribution made by the participant is due. It is paid only when all other alternatives which may enable an individual to receive monthly benefit payments are exhausted. This is a one-time payment provided to insure that participants or the family receive at least four times what the employee paid into the program.

Administration of this program is the responsibility of a five-member Board appointed by the High Commissioner. The Board in turn delegates the duties and responsibilities to its employees as feasible and desirable to effectively implement the provision of the law. It then establishes a Social Security Administration which consists of a central office at Headquarters Saipan, and field offices in each of the six districts plus a sub-office in Ebeye, to administer the program within its established guidelines. Currently there are 19 employees hired to man these offices.

Twenty-five percent of the administrative costs of the program for this current year is funded by the Congress of Micronesia and the remaining seventy-five percent is funded by the Trust Territory Retirement Fund. Beginning next fiscal year, the Trust Territory Social Security Board will fund the entire operational cost from the retirement fund as provided by the law. Social Security will then be among the few programs to become self-supporting.

^{* (}Minimum benefit per month)





by Mrs. K. Hall



One hot and muggy Guamanian day maybe 500 years ago, a dramatic and amazing story was about to unfold. The events so caught the imagination of the people that the story became a legend which is told to this day and, as with all old tales which come down by word of mouth, perhaps all the details are not exactly true but then maybe they are. You judge for yourself.

On that particular sultry day the acrid scent of fermenting breadfruit made the flies hum and soar in ecstasy. They buzzed about in a frenzy of joy resting briefly on the sweating people who swatted vainly at the pests. The more stoic of the villagers tried to ignore the teasing tickles and to save their energy for tasks. In the shade of a leafy banana tree a light brown woman lazily finished patting red clay into a bowl shape and began to mark the rim with her fingernail. The bowl would be useful for catching rain water. She would fire the pottery later but right now the day was too hot to think about fire so she continued to make a little design looking up every now and then to see that her adventurous three year old son stayed safely in view.

A few yards away in the flickering shadow of towering palms Mata'pang, the woman's husband, gouged at the long trunk of a felled breadfruit tree. He was a canoe maker and the chief of Guam, a powerful Chamorro respected and feared by all the people who knew that this man had single handedly and with pure brute strength defeated five village chiefs to gain ascendancy over the island. Chief Mata'pang was annoyed by the rivulets of sweat stinging his eyes and the flies dancing on his glistening body. He straighthened from his labor, wiped his forearm across his wet face and looked towards the sounds of his babbling child. The boy was enormous even for children of that huge ancient race. The chief was a proud and vain man. He thought it fitting that his son be the largest and most robust child of his age group, but the father also felt a twinge of jealousy. Mata'pang doubted

that he himself had possessed such promise at a similarly early age. Ah well, there isn't a person on Guam who is stronger than I, thought the chief. My little Taga will not challenge my position for many more years, by then maybe I won't mind letting him become leader, mused the powerful man.

The naked child sat happily in the dust, rolling a coconut around, unmindful of the sun and flies. Suddenly he spotted an unwary coconut crab emerge from the nearby grass and begin to make its way across the clearing. Gleefully the boy stood up and scampered after the hairy legged creature. Sensing danger, the crab crawled rapidly away from the toddling child who whooped with delight and lunged for the fleeing prey. It was a lucky day for the crab who scurried beyond a coconut tree just as the child lunged. As the boy began to topple he grabbed onto the tree for support but his strength was so great that the tree was pulled loose from its roots. The boy and tree came crashing down onto the dirt and the crab scuttled into the safety of high grasses. The boy's troubles were just beginning.

The mother emitted an anxious giggle and jumped up to see if her son had been hurt by his curious accident. Villagers stopped their tasks to stare incredulously at the strength of a mere toddler. The father who had found some amusement in the crab chase was now consumed with envy. Perhaps it was the earlier irritation with the flies that made his mind so ready to think angry thoughts. Mata'pang saw that his son's remarkable power was no longer a secret in the village. Soon the baby would put his father to shame and the people would call the child Taga in earnest. In a fury the father picked up his largest and sharpest stone adz. Weapon in hand, the chief stalked towards his son.

Not only was child Taga exceedingly strong, he was also quick witted well beyond his three years. He

saw the murderous glint in his father's eyes. Up he jumped and raced towards the shore with the father in hot pursuit. By the time the child had reached Tuman his speed was so great that with one incredible flying leap the boy made a broad jump clear to the island of Rota. To this day on the point of Rota you can see a footprint caused by the pressure of the child's landing upon the rocks.

At this period the legend becomes dim so that we do not know how the boy spent the rest of his childhood as an orphan on Rota. Surely so strong and smart a lad found no trouble in making a place for himself amongst the friendly people of Rota. It is undoubtedly they who taught the amazing boy techniques of fishing and all the useful skills acquired by those males of the chiefly matua class. Perhaps it was a sense of gratitude which restrained the boy for he did not challenge to become high chief of Rota although the people did call him Taga. When the young man decided to give up his stick of bachelorhood and take a pretty Rotanese girl to wife, he did not even finish the home he had begun for her but instead went off to the island of Tinian where he vied for rightful title to his name Taga, chief over all the island. It was his success on Tinian and the palatial house he built there that has given this super strong man the name of Taga for all time.

When our hero landed on the beach at Tinian he immediately sought out the island's chief and said, "This land appeals to me. I need a place for my wife and our future family. Will you share some of your island with me, honorable chief?"

The chief of Tinian was dumbfounded at the stranger's brash request. No one gave land away. The thought was absurd. The land was allotted to the clans on the island and in return they gave tribute to the chief. He would not give away that which was his and his people's. What an idiot this stranger was to make such a foolish

request! Luckily the upstart had not presented shell money with his petition or the chief would have had to say yes and then defeat the newcomer in battle to win back the gift of land. "Such an ignorant young man," thought the chief who answered, "Stranger, you do not know our ways. Although the land is mine, it is not mine to give to an outsider. So too is the surrounding sea preserved for me and my people. There is nothing here for foreigners such as yourself; therefore, I will supply you with provisions but you must sail from here and seek a home elsewhere." To tell the truth, the chief of Tinian was a bit worried because the stranger was the largest man he had ever seen but the young giant seemed pleasant and maybe he would understand and leave the island peacefully.

Taga must have felt a surge of his inherited sense of superiority and competition. He had not allowed these emotions in his adopted home on Rota but suddenly he felt he must prove himself to be best and to wrest control of the island from this Tinian chief. Taga's wife and future children would know that the orphan from Guam had the power of the gods and the blood of chiefs in his veins.

"So, honorable chief, it is unfortunate that your customs leave no room for strangers who seek your aid. Surely your customs acknowledge the right of contest. I challenge you to compete with me. If I can beat you in three tests of strength then you will have to relinquish your lands and authority to me. If you defeat me in any contest then I will sail away and not bother you again, however, you had better start hoping that I am more generous than you or you will soon find yourself without land to till or sea to fish and you will be at the mercy of the ocean currents which you have wished upon me."

"So be it," responded the chief of Tinian. "I shall name the first contest and my men shall be witness to your defeat." The chief noted that his challenger lacked sharp fishhooks and gorges and carried no skull of an ancestor who might aid his luck in fishing. Also the chief felt confident that even if the newcomer were agile in catching fish with his hands as most men were, this stranger would not know the good fishing areas in the waters off Tinian; therefore assured of victory, the chief declared, "The winner of our first contest will be the man who brings the greatest number of fish to my earth oven by the set of sun today." The sun was already beginning its descent so it would be a short contest.

"Agreed," said our hero who tarried by his beached canoe while the chief paddled out in his boat carrying many coconut fiber cords, hooks and sinkers. Taga was not worried. Evidently the people of Tinian had not discovered the net and Taga had rolled up in his canoe the largest net ever made by man. You would think that one man would not be able to toss such a vast net and handle it alone but don't forget our hero was a super man half as tall as a coconut tree. Taga lay his net across his arms and waded out into the ocean. Holding onto one edge of the net, Taga swung his arms to establish a rhythm and then gracefully let the net fly out and land in an enormous circle across the water. The net sank down under the water's surface and shortly hundreds of unsuspecting, doomed fish were swimming over the net which trapped them as Taga pulled in his catch.

The men on shore chattered and shouted in a mazement as Taga approached with his incredible booty. Never had they seen so many fish in one haul and all caught by one man in less time than the sun took to change the late afternoon clouds from pink to orange! And their chief had not returned to shore yet. He would lose great face. The men began to prepare their minds and faces for a new chief and treated Taga with newfound respect as they went forward to help him with his catch and to select their share of the haul. Eventually, as the last red and

orange clouds were turning to dark, the chief of Tinian paddled proudly to shore his canoe half full with shimmering fat reef fish. Ordinarily his load would have been an almost impossible prize for one man to catch in such a short time but this was not a good day for the chief of Tinian. Somewhat pityingly, the chief's men met him at the shore and warned their master that the stranger had earlier brought in five times as many fish as were in the chief's canoe. You can imagine the chief's thoughts. They are not fit to print but, anyway, he made sure to eat plenty of fish that night to strengthen himself for the next day's contest.

In the morning all of Tinian was aflurry with anticipation over the second contest. Even the old people could not recall a time which had held more excitement. This power struggle was far more to their liking than the customary battles in which so many men got hurt by sling stones and barbed spears. What test would the stranger propose? Perhaps it would be a race. The villagers waited patiently for the announcement.

Taga enjoyed his tasty breakfast of rice, fish and breadfruit which he ate with the bachelors in the men's house. The chief strode in and all but Taga crouched low in deference to their ruler. The chief tried to hide his irritation. "What sport have you chosen for us today, young fisherman?" Taga's thirst gave him an idea. He would dearly love some fresh coconut juice to drink.

"Honorable chief, surrounding this house there are ten trees heavy with coconuts. I propose that we each take five trees and see who is quickest in gathering all the nuts from his five trees."

The tension left the chief's face. Ever since he had been able to climb he had been the fastest gatherer of coconuts on Tinian. No one had so sure a foot on the trunks of towering palms. He was glad his challenger was a visitor and unaware of the chief's superior skill.

"You have named a fair contest, stranger, but you will soon regret your choice as there is no man on Tinian who can strip a tree faster than I."

"That is true," affirmed the crouching men who had witnessed many of the chief's harvesting triumphs in previous contests. Word passed to the villagers outside and everyone moved back to keep a safe distance from the cascade of nuts to come.

Taga and the chief each took their positions at the base of a tall palm and awaited the referee's signal to begin. At the snap of the stick, the chief bounded up tree and began to send down a veritable storm of coconuts. Taga had not moved. What was wrong with him? The people were puzzled but they laughed and cheered for their chief who was already climbing his second tree and outdoing all his previous records. Taga yawned, grabbed hold of a tree trunk, gave it a quick shake. All the nuts fell down as if some typhoon had suddenly hit the tree. Taga went to each of the remaining trees and shook them clean of nuts before the chief had descended from his second palm. The pride of Tinian felt lower than the most wretched of the mangatchang whom all despised. The matua looked away in order to let the chief overcome the red shame which blazed in his face.

Taga smiled politely and stooped to select a large ripe nut. He was still thirty. So thirsty in fact that instead of husking the nut or chopping off the top he just gave it a squeeze in his huge hand and wrung out all the juice into his opened mouth.

The chief of Tinian saw Taga's miracle and decided to end the contests. He knew he had no chance of besting the man from Rota. Forcing his mouth to speak the dreaded words, the disgraced chief said, "I concede. You are Taga of Tinian and I am your servant."

Taga wiped the coconut milk from his chin, gave a loud burp and replied, "You are wise not to continue this senseless challenge. No man can defeat me. I accept your island. You are a strong man but the gods and my ancestors have determined that I am the mightiest. Go North, noble man, you will find another island to rule."

And so Taga became the chief of Tinian. He was determined that his bride never sorrow for having married a clanless man. So Taga set about making the largest latte house ever built. He decided his house should extend along the beach and sit in isolated splendor flanked on either side by the village homes. He would make his house so that the floor resting on the capstones would be sixteen feet above the ground - tall enough even for Taga to stand erect when down below. Taga's fierce pride prevented his asking for help in cutting and carrying the latte stones to his chosen site. Even though Taga was a giant, the rocks he carved were taller then he and as wide the distance between his finger tips when his hands were extended out from both sides. The ground seemed to shake and shudder as Taga dragged his twelve enormous burdens from the quarry to their final destination. The distance was like going from one village to another but Taga achieved his goal. He had the most magnificent home any Chamorro ever saw. Even to this day the stones of Taga remain on the beach where he carried them but the shifting sands have toppled all but two.

It is at this point that our story should stop if we like tales that end with a promise that the hero lived happily ever after; however, the tale of Taga is true and everybody knows that in real life many stories do not have the wished for happy endings. This was the case with Taga. He and his wife did live happily for a while in their grand home. they had a daughter and a son, and all seemed well except that Taga had grown somewhat bored and longed to challenge the chief of Saipan whose island was always visible across the channel. The blood of his father ran strong in Taga's veins. Although everyone acknowledged their chief's superiority and the house stood as

lasting proof of power no other man could match, Taga still longed to show that his strength was not lessening in time. He did go over to Saipan once, intent upon conquering the island but his son chose that time to be born therefore Taga, fearful of having lost strength after witnessing the birth, turned back to Tinian and never found a good opportunity to return to Saipan. So he spent his days busy as chiefs always were but still longing for further challenges which never came his way. Even the idea of an unsatisfied hero would be a tolerable ending to a story but Taga's fate had worse in store.

One day when Yonani, Taga's son, was five he was playing with a crab his father had given him for amusement. The crab was tied with an hibiscus cord which the child yanked each time the creature started to escape. Even five hundred years ago boys delighted in proving their budding power by tormenting and teasing small animals. Yonani giggled as once again he tugged the hapless crab back towards a stick

which the crab would grab as if in mortal combat. This time the cord snapped and off scuttled the crab down a hole near the base of a coconut tree. Yonani shrieked and gave chase. He poked his stick down the hole but no response. He stamped up and down over the hole but still the crab did not come out. In a rage he grabbed the trunk of the tree and pushed and pulled until he uprooted the entire palm. In surprise, Yonani stood holding the tree while the crab ran off for shelter out of the clearing. Yonani stuck the tree back in its hole and looked up to see his father watching with a cold, hard and unfamiliar expression upon his face. Yonani apologized for pulling up the tree and his father turned gruffly back to his affairs.

Unfortunately, that was not the end of the episode. Taga began to brood about his son's strength. He did not remember his own past. All he could think about was the idea that Yonani would soon be stronger than Taga who knew the bloom and vigor of youth had

left him. Perhaps Yonani will kill me to become chief, thought Taga. And so in the dark of that evening Taga crept to his son's mat and strangled the boy as he lay sleeping.

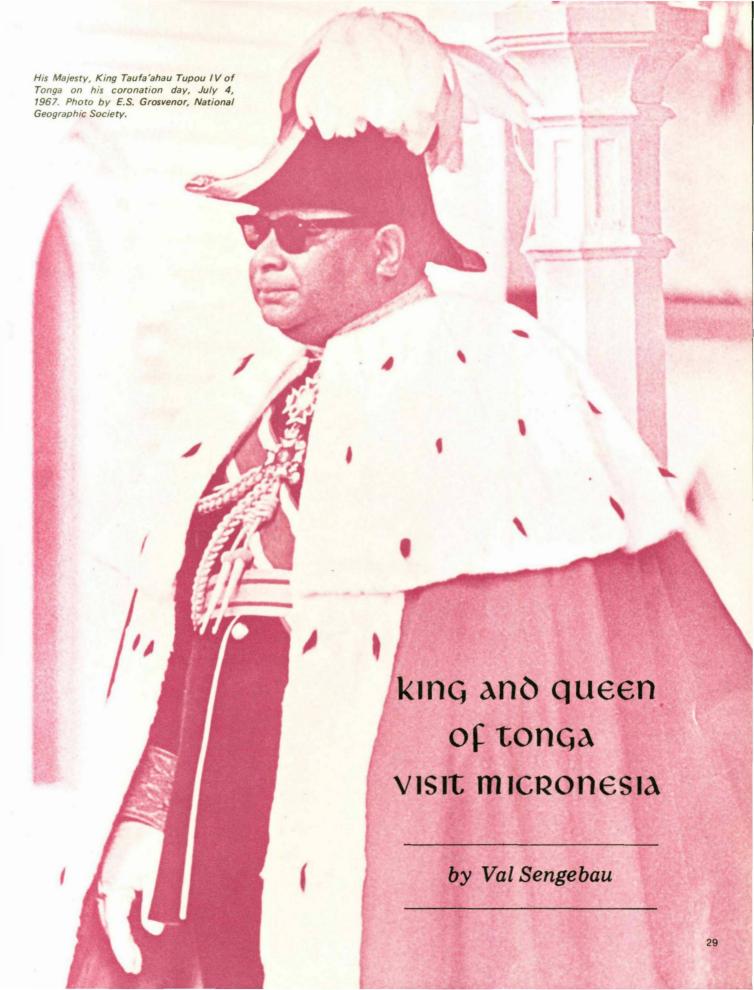
Taga's daughter had awakened in time to see her brother's cruel fate. Dear little Yonani. She had loved him so. Would her father kill her next? The following morning, in grief and fear the girl ran away from home to the mountains. No one knows what became of her. Some say she never died because on still nights and sometimes windy nights people still hear her sorrowful crying for the dead Yonani. For five hundred years she has grieved for her brother and wise men say she will continue to cry until the last stone of the house of Taga falls to earth.

Taga's wife was so bereft without her children that she quit eating and soon died. Thus Taga lived out his lonely life, isolated in his vast house unchallenged and unhappy to the end of his days. Such is the nature of pride and power.

POST SCRIPT:

Ozymandias Percy Bysshe Shelley (1792-1800)

I met a traveler from an antique land Who said: Two vast and trunkless legs of stone Stand in the desert . . . Near them, on the sand, Half sunk, a shattered visage lies, whose frown, And wrinkled lip, and sneer of cold command, Tell that its sculptor well those passions read Which yet survive, stamped on these lifeless things, The hand that mocked them, and the heart that fed: And on the pedestal these words appear: "My name is Ozymandias — King of Kings: Look on my works, ye Mighty, and despair!" Nothing beside remains. Round the decay of that colossal wreck, boundless and bare The lone and level sands stretch far away.



Micronesia has had its share of visiting dignitaries senators, congressmen, ambassadors, admirals, generals, governors and other very important people. And Palau, which is the western-most district in the Micronesian archipelago, has also enjoyed its share of the cake. But the icing on the cake, one might say, is the personal visit of His Majesty King Taufa'ahua Tupou IV, and his wife, Her Majesty Queen Halaevalu Mata'aho of Tonga to Palau Islands which are some 3360 miles northwest of his kingdom and above the equator. Their Majesties were escorted by Dr. Sioeli Tilitili Puloka, personal physician to his majesty; Lt. Siosaia L. Ma'afu, aide-de-camp, Mrs. Elenoa Kaifonuamanu Tupounia, the Queen's lady in waiting, and Mr. William H. Charlock, III, Vice-President of Continental Hotels.

The news of his majesty's trip to Palau had been beamed all over Micronesia, and the people of Yap were anxious to get a glimpse of the king and his group. However, somebody upstairs played a dirty trick on the Yapese who came to the airport. Just before the plane landed, it started pouring, and after it taxied to a stop, his majesty could not get off the plane

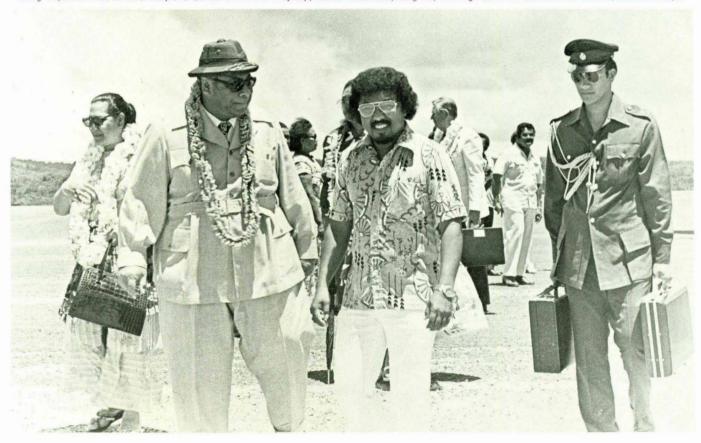
and meet District Administrator Edmund Gilmar, Deputy DistAd Hilary Tacheliol, their wives and the curious crowd.

Oh, what a let down! All the beautiful Yapese girls with colorful leis, and no King to see!

Well, Gilmar was a determined man, and he decided to board Air Mike with his group to pay their respects. That was done. But they could not boast that the King first stepped on Yapese soil, before going to Palau. The Palauan gods won this round.

The Wednesday Air Mike flight 634, cleared Yap airport, and flew southward for Palau. The dark clouds cleared and white cotton clouds appeared. Excellent weather. The Air Mike pilot approached Palau from the north, and then began his story about the battles fought on Palau during the second world war, and how the name Belau originated something like the name came from some red clay on Babeldaob. I never heard that one before. I sure learn new things from outsiders nowadays. But I did not really pay much attention. Down below was the Palau chain. First seen was Ngkesol reef surrounded by indigo blue water, then the island of Ngcheyangel or Kayangel if you

King Tupou arrives at Airai Airport. On his left is Her Majesty, Queen Mata'aho, King Tupou. High Chief Ibedul and Lt. Ma'afu, aide-de-camp.





King Tupou greets Queen Bilung, sister of Ibedul.

must. Slowly the big island of Babeldaob came into view with its green vegetation and red volcanic soil, and scattered villages along the coast. The plane continued on to the famous rock islands laying lazily in the golden tropical sun, teasing us with their sensous caress. Cameras were clicking and people were fighting over the limited window space to take a peek. Then the plane flew over Bloody Nose Ridge, the Orange Beach and various sites of yesterday's battles fought on the island of Peleliu; on it flew to Koror, crowded and nervous town and district center of Palau. Soon we passed over the newly completed Koror-Babelthuap bridge, an architectural beauty and source of great pride, with dirt roads at both ends. The plane touched down on Airai airport. While taxiing to the parking area, the pilot announced over the intercom a request that all passengers remain seated until His Majesty and his royal entourage got off first. Everyone complied, and enjoyed clicking their cameras as the royal party passed by. What a rare treat!

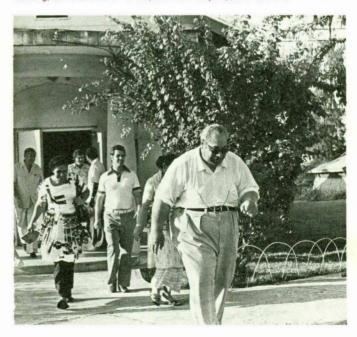
Upon first glance at the welcoming crowd at the airport, one got the funny feeling that something was missing. Then suddenly it dawned on me that the usual police honor guard which meets visiting dignitaries was absent. However, there was something more in the air—something more beatific and pronouncedly dignified. You know, that cultural and traditional heritage of honor and pride. Yes, that was what dominated the atmosphere at the airport. And why not? The two paramount ruling clans of the entire

Palau, Udes clan which rules the Northern Domain, and Ongolakel (Idid) ruler of the Southern half of Palau were at the airport to greet and welcome His Majesty, King Tupou, Her Majesty, the Queen and party. It was highly proper that the royal families of Palau hosted that of Tonga. And so paramount chief Ibedul of Ongolakel (Idid), his sister Queen Bilung (Mrs. Gloria Littler), and three Ongelakel princesses; and Acting paramount chief Reklai, Eusevio Termeteet, and four princesses of Udes were lined up at the receiving line with leis greeting their royal guests as they were descending from the plane.

It was a priceless sight seeing the Palauan royal ladies displaying their largest piece of Bachel, Palauan money, which indicates prestige, wealth, power and respect, and only such a rare occasion like this demanded their presence.

King Tupou, judging from his tour around, seemed to be interested in the economic and educational advancement in Palau District. His Majesty and his royal party spent the rest of Wednesday afternoon visiting the Micronesian Mariculture Development Center, Van Camp Sea Food Company, Micronesian Occupational Center in the heart of Koror. The rest of Wednesday evening was free for the king and his people to rest...except for the police officers who guarded the Continental Hotel twenty four hours a day for the security of His Majesty. Some of the "guards" jokingly

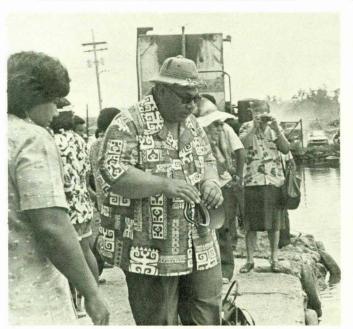
His Majesty visits the Micronesian Occupational Center (MOC). In the background (L-R): Mrs. Tupounia, the Queen's lady in waiting; Mike Littler of MOC, and Her Majesty, the Queen.



said that it was ridiculous to be on duty twenty four hours. Nobody cared when the famous Hollywood actor Lee Marvin was in Palau. Sure, in the beginning everyone wanted to see the famous man, but once their curiosity was satiated they stayed away doing their "thing". Anyway, the "guards" carried off their duty faithfully and with pride for being chosen for that honor.

Thursday morning was bright and sunny. His Majesty and his royal party went on a tour to the Rock Islands. King Tupou, Her Majesty, the Queen, his aide-de-camp, and lady in waiting to her Majesty, the Vice-President of Continental Hotels, High Chief Ibedul, and Bob Owen rode on the MIC boat, Escorting boats were Dave Shay's, District Director of Public Works, and Akiwo Murphy's which carried the Deputy Sheriff and other Police Officers. The tour took His Majesty to the island of Ulong where the British Captain Wilson's ship, the Antelope, was wrecked on August 10, 1783; and proceeded on to the Ngerukuwid, the seventy islands set aside by the Palau Legislature for the preservation and protection of wild life and fish. Toward noon it began to rain and the boats sought shelter in one of the natural caves in the rock islands. His Majesty and the rest of the people had their lunch provided by the manager of the Continental Hotel in the cave. After resting for about an hour, the entire expedition returned to Koror.

At the Koror Dock for a boat ride to the Rock Islands.

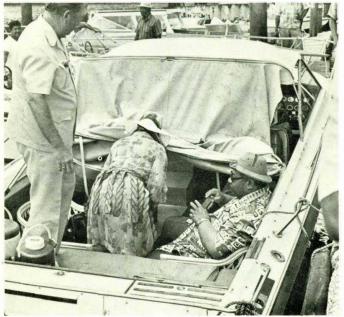


The highlights of the King's visit to Palau bloomed during the evening of September 29. A "Mur", or Palauan feast, was given by Ibedul, Reklai, all the chiefs of Palau and the people of Koror in honor of their royal guests. It was an occasion that would be talked about for days to come. Before the Mur began, the Master of the Ceremony, Yoich Rengill, announced that Kloteraol of Idid clan, a member of Ibedul's council, Ngarameketii, would dedicate a Palauan chant to His Majesty, King of Tonga. The chant related the story of a handsome young Palauan man who was blessed with good looks, wealth, and from a royal family . . . a much admired person about whom young ladies dreamt in their sleep, and people sought after his counsel and wealth. He left his memories lingering in every village he visited.

His Majesty, in turn, thanked the people of Palau for their hospitality, and pointed out that all the Pacific islands are members of one family, a cultural trait that could be boasted of and traced to one origin and common heritage. Food of various quality and quantity was served, followed by Maris Stella School students charming the honored guests and audience alike with their Palauan dances and chants. It was a night to be remembered and cherished by many people.

The following day was Friday. His Majesty, King Tupou and his royal entourage bade farewell to the people of Palau. Ibedul, Reklai and their people saw the royal party off at the airport.

Their Majesties getting comfortable on the MIC boat while William Charlock, III, Vice-President of Continental Hotels looks on.



If it had not rained in Yap, I'm sure His Majesty would have met those who were waiting at the Airport. This is wishful thinking on my part, knowing that they too would have been honored to see him.

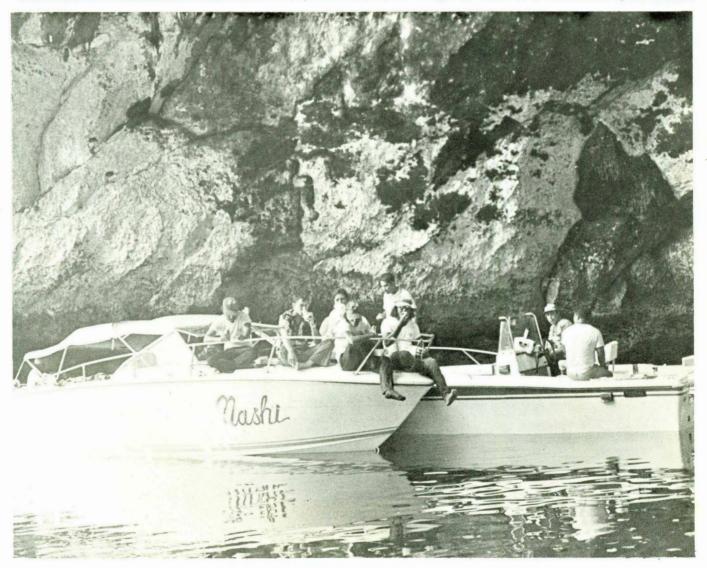
Before his Majesty left Palau, he said he would be traveling through the eastern districts. And indeed he did. According to Dechuo Jain, assistant manager of the Truk Broadcasting Station, the people of that district were jubilant when the King made his brief stop-over on Truk before continuing his flight to Ponape and the Marshalls and on to his Kingdom of Tonga.

Jain said that "...in a brief reception at the airport which was organized by Moen traditional

leaders and Truk Continental Hotel people, the royal party was received in a Trukese traditional ceremony. Trukese traditional chants were sung as a large wooden bowl full of coconut juice was served to the royal guests, a symbolic gesture of friendship and hospitality. Various kinds of gifts were presented to their majesties which included devil masks, a Trukese woven mat, and books and pamphlets of general information about the people of Truk and the district.

"Mortlokese dancers performed a stick dance while refreshments were served. And to highlight the occasion, His Majesty received some of his subjects, a group of merchant seamen from Tonga who happened to be on Truk at that time."

A natural cave at the Rock Islands offers shelter from an unexpected downpour, and the royal tour finds time for relaxation during a lunch break.





THE PAST REVISITED



Henry Muthan of the WSZA staff with the insignia in front of Raphael Yoror's house where it is presently kept.

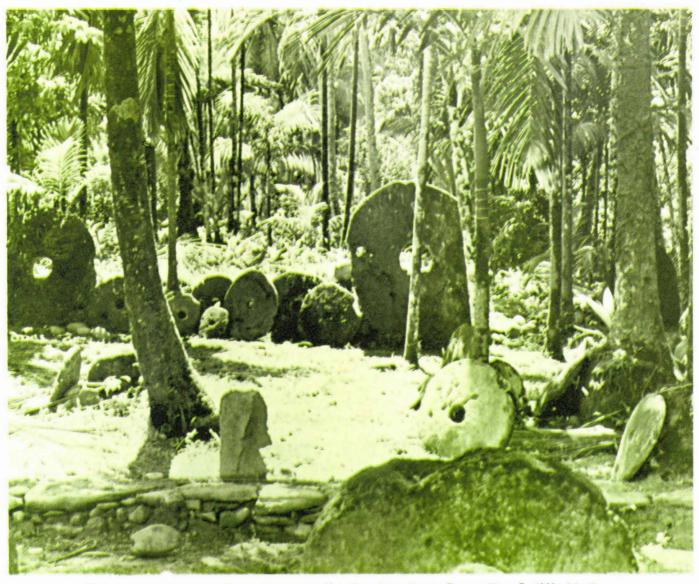
The Marshalls has its Enewetak and Bikini test sites, Ponape has the mysterious Nan Madol and Micronesia's version of Hawaii's Diamond Head—the Rock of Sokehs. Truk has the largest lagoon in the world with an entire Japanese fleet resting on its bottom—a mecca for skin-diving enthusiasts. Saipan has the Suicide and Banzai cliffs. Palau is known for its flotilla of rock islands and a multi-million dollar bridge.

And Yap? Ah, maidens in grass skirts. Stone money. And a legendary Irish-American better known as "His Majesty O'Keefe". But that is not all. His Majesty also had a son-in-law, Alfred Scott, a British diplomat whose legacy of the now defunct British Empire is still in Yap. The legacy? A British Vice Consulate Insignia now in the possession of a man called Yoror.

It is difficult, if not impossible, to write about Scott and his insignia without touching on the life of His Majesty O'Keefe. So let's turn the pages of history and pay our respects to the King before proceeding to more mundane matters, such as the British attempt to establish a foothold on Yap near the turn of the century.

"Captain David Dean O'Keefe, King of Yap, Monarch of Mapia and Sovereign of Sonsorol" was a giant of a man. He was about six foot four, with a full red beard and an impediment that is now described as beer-belly. He hailed from Savannah, Georgia, but nothing further is known about his early life other than fact that he had a wife there.

He first arrived in Yap in December 1871. One of his first acts which dramatized and endeared him to the Yapese was his overthrow of the notorious marauder of the Pacific, Bully Hayes, a fellow brigand in those free-wheeling days. This episode took place in May 1874.



Yapese stone money arranged in neat rows nearby Yoror's traditional hut in Rumuu village, Fanif Municipality.

Although Captain O'Keefe already had a wife in Georgia, that legal point did not deter him from marrying a young woman from Nauru with whom he had two sons and three daughters. One, Eugenie, was to become the bride of the young British diplomat Alfred Scott.

For years, the Yapese had been sailing their canoes to quarry stone money in Palau, some 290 miles southwest of Yap, and transporting the heavy stones back home. A herculean

effort requiring delicate navigation skills. However, the size of their canoes and the vast distance limited the amount brought to Yap. O'Keefe saw his opportunity for mass-production in stone money venture. He seized the opportunity. In return, he asked the people for copra and trepang for payment. He also asked the chiefs of Yap for the island of Tarang, in Tamil harbor, for headquarters. He got it.

His success in the copra and trepang trading businesses spread far and wide, and heightened the interest of trade-minded Spain and Germany, as well as England.

Thus, in 1897, a young English diplomat by the name of Alfred Scott was commissioned by the British Government to Yap, from Singapore, to strengthen Britain's economic interests in Micronesia. Scott arrived in Yap armed with the usual diplomatic paraphernalia and, to give a visible sign of the British presence on Yap, he brought with him a Vice Consulate

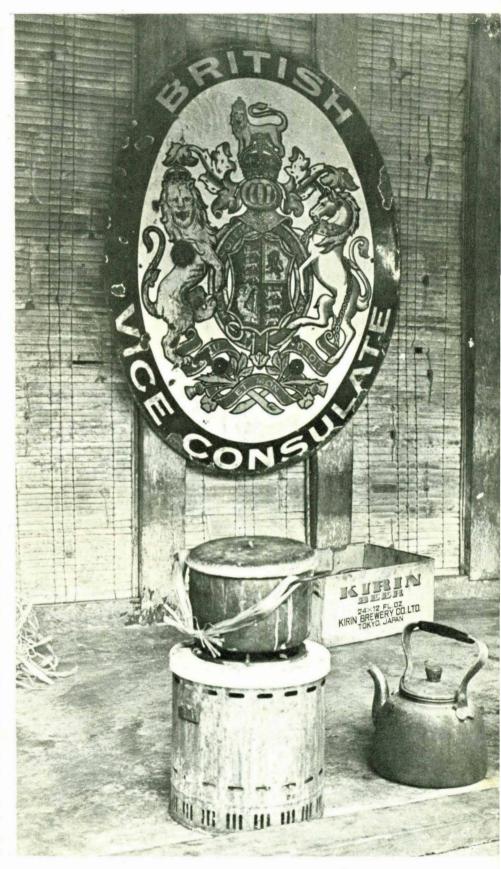
Raphael Yoror's father, who was the original guadian of the emblem, used to keep the insignia at his home.

emblem. He and Captain O'Keefe not only became fast friends, but also in-laws. Scott married O'Keefe's oldest daughter, Eugenie, and O'Keefe's Kingdom thus merged with the British Crown, so to speak.

Let us turn our attention to the emblem. It is oval in shape, about four feet in height, and cast in iron. The front face is painted with a special enamel paint that has protected it from corrosion. Big bold letters are inscribed which read "British Vice Consulate" encircling the emblem. At the center of the sign is the coat of arms of Great Britain, the traditional British lion flanking the shield of England on one side, and the unicorn of Scotland supporting it from the other side. At the top of the shield is the royal crown. with the lion of courage protecting it. And below, in capital letters, are outlined the words in French, Dieu Et Mon Droit, "God and My Right" ... the motto which Queen Victoria adopted for the royal arms of Britain in 1837 in memory of King Richard I, who had used it as a password for his army in a victorious battle some six hundred years earlier.

The very same insignia is still in Yap today, maybe a little faded and rusty on the backside with several dark spots where the paint has chipped off, but otherwise it is still intact and safe. The proud guardian of the emblem is Raphael Yoror, son of the first Yoror who found and protected the insignia. The elder Yoror passed away several years ago. A very sad case since Yoror knew so much about O'Keefe and Scott during those interesting days at the turn of the century.

The year 1898 had marked the end of Spain as a Pacific power. Germany bought all the Carolines and Marianas, except Guam, for about 4.5 million



dollars. O'Keefe was unhappy and distraught at the turn of events, and one night he took off secretly with his two sons and crew. This was on May 10, 1901. That was the last time anybody saw or heard of them. All were believed to have perished in a typhoon at sea.

Scott remained in Yap throughout World War I, but when he became ill at the end of the war he went to Japan for medical treatment. He was believed to have died in Japan.

After Scott left Yap, the Consulate sign remained in the custody of his family. However, when Mrs. Scott learned of her husband's death, she departed for the island of Mapia where her father had owned properties. Mrs. Scott asked a "Fritz" Henry Fleming to keep the sign. Fleming kept it for years

but when the Second World War started the Japanese soldiers came in and confiscated the sign. Fleming left for Tinian and he asked his friend, Yoror, to try and find the memento. In the late fifties, Yoror found the sign on the island of Tarang. He took it home and protected it until his death.

Now that the elder Yoror is gone, Raphael Yoror, his son, has taken over as guardian of the British Vice Consulate emblem. It is kept at a second house on a hill top overlooking his traditional Yapese hut. The hut is nestled among coconut and betelnut trees. In front is a stone platform and row upon row of stone money. One has to cross a short bridge over a small lazy stream to go to the house. This settlement is located in the village of

Rumuu, Fanif Municipality. It is about five miles or so from Colonia, the district center of Yap, and it is accessable by car.

It was here in the sleepy village of Rumuu, that the *Micronesian Reporter* found the royal insignia. It is a rare foreign artifact. Perhaps the Yap Legislature should request Raphael Yoror to donate or lend it to the Yap Museum.

If you are a history buff we suggest that when you go to Yap you should talk to Samuel Falanruw, Special Assistant to the District Administrator about this and other items of cultural and historical interest. He directed the Reporter to the location of the "British Vice Consulate" emblem.

The MICRONESIAN REPORTER and its predecessor, the MICRONESIAN MONTHLY (first published in 1951), are available on Microfiche at \$65.00 for all issues from 1951 through 1975. Separate issues are available at 40¢ per Fiche copy. Order from the Publications Division, Trust Territory Government, Saipan, Mariana Islands 96950. All orders pre-paid. Checks should be made payable to the TREASURER, TRUST TERRITORY

MAJOR APPOINTMENTS

Mamoru Nakamura was sworn-in by T.T. Chief Justice Harold W. Burnett on October 27 as Associate Justice, and High Commissioner Adrian P. Winkel announced the appointment of Juan A. Sablan by the Secretary of the Interior as Deputy High Commissioner of the Trust Territory of the Pacific Islands on November 3.



High Commissioner Winkel said Juan Sablan's appointment as Deputy High Commissioner was received with "enthusiasm" by Interior Department.. Sablan's executive capabilities are perhaps best summed by the Congress of Micronesia Joint Committee on Administrative Appointments when it confirmed his appointment as Executive Officer in 1974. The committee pointed out that "the nominee is qualified for virtually any position in the Trust Territory Government. Although he lacks a formal higher education, his administrative skills and experience are considerable, and we believe that the latter qualification is of much greater important than the former regarding the proposed position."

Prior to his appointment as Executive Officer, Juan Sablan served as District Administrator for Truk from 1970 to 1974. He was first assigned to Truk in 1969 as Assistant DistAd, and when he became that district's top executive officer, he became the first, and to date, the only Micronesian to have served as district administrator outside of his own district.

Judge Nakamura received his oath of office at the Palau Legislature Chamber. Speaking during the ceremony, Chief Justice Burnett said the people of Micronesia have attained an even greater role in their government.

"For the first time", the Chief Justice pointed out, "a Micronesian will assume the highest office in the judicial branch of our government. And that Micronesian is a Palauan."

Judge Nakamura has served as Deputy Attorney General since 1972. He also served as Acting Legislative Counsel for the Congress of Micronesia from July 1971 to August 1972.

Nakamura, 37, obtained his BA degree in Political Science from the University of Hawaii in 1965. In the same year he was awarded a John Hay Whitney fellowship to study law at Willamette University in Oregon, where he received his LLB in 1969. Nakamura passed the North Dakota State Bar Examination in July 1969, and was admitted to the T.T. Bar in September the same year. In November 1975, he was allowed to practice before the U.S. Supreme Court. Nakamura is a member of the American Bar Association.

THE WATCHER

by Val Sengebau

I've watched that boy With intense interest And attentive affection Since he was an urchin. He caught my fancy When he began exploring Around the house And the yard on four's And then on two's Like an investigating scientist. The parents called him, Ngak. Ngak mimicked everyone Around and about Without any fence. He was everyone's pet. He grew up happy and strong Loved by everyone And returned their love. When Ngak left for school Way beyond the horizon Everyone cried Including his dog, Bilis His pig, Babii And his rooster, Malk. Many new and full moons came and left And the evening star Changed places with the morning star And dry and wet spells Waltzed in and out With occasional typhoon-puffs. Then one typical day Ngak arrived Thin, tall and grown up.

And to everyone's dismay He sported long hair Like the island's girls, And wearing darkies As if repelled By the sight of his his homeland. Ngak kept to himself Reading into the nights Talking to himself in his sleep of girls in mini-skirts of strange canoes called cars of concrete roads call Hi-ways of tall crowded houses of different foods Not taro, breadfruit, and fish. When the next full moon tide Flooded the shore Ngak packed his strange luxuries And left. No one saw him off Nor cried. Some claimed he went to his education But his people gave no attention. Only I, coconut tree, know Because I drifted across the sea To this land And was planted by Ngak's house. I watch and see everything And only speak through nature. I miss Ngak That poor boy. But he may return one day I hope.

