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WHITE HOUSE STAFFING MEMORANDUM

90 OCT 25 PM 5:50

DATE: 10/24/90 ACTION/CONCURRENCE/COMMENT DUE BY: 3:00 p.m., 10/25/90

SUBJECT: PRESIDENTIAL REMARKS: DEP. STATEMENT -- PACIFIC ISLAND SUMMIT, EAST-WEST CENTER, HONOLULU, HAWAII SAT., OCT. 27, 1990, : M

	ACTION	FYI		ACTION	FYI
VICE PRESIDENT	☑	☑	MCCLURE	☑	☐
SUNUNU	☐	☐	NEWMAN	☐	☐
SCOWCROFT	☑	☐	PORTER	☑	☐
DARMAN	☑	☐	ROGICH	☑	☐
CARD	☐	☑	UNTERMEYER	☐	☐
CICCONI	☐	☑	Rogers	☐	☑
DEMAREST	☑	☐	WINSTON	☐	☑
FITZWATER	☐	☑	PINKERTON	☑	☐
GRAY	☐	☐	_____	☐	☐
HAGIN	☐	☐	_____	☐	☐
HOLIDAY	☑	☐	_____	☐	☐

REMARKS:

PLEASE RETURN COMMENTS/SUGGESTIONS DIRECTLY TO CHRISS WINSTON (RM. 122) BY 3:00 P.M., THURSDAY, 10/25/90, WITH A COPY TO MY OFFICE. THANKS.

RESPONSE:

October 25,1990

NSC concurs, subject to changes

William F. Sittmann
Executive Secretary

James W. Cicconi
Assistant to the President
and Deputy to the Chief of Staff
Ext. 2702

cc: Chriss Winston

90 OCT 24 PM 7:12

McNally/Simon
October 22, 1990
Draft One (B:ISLANDS)

PRESIDENTIAL REMARKS: DEP. STATEMENT -- PACIFIC ISLANDS SUMMIT
EAST-WEST CENTER, HONOLULU, HAWAII
SATURDAY, OCT. 27, 1990, _:__ _.M.

Distinguished friends: It has been our great pleasure to greet you here in the Pacific -- here in the United States.

We have just completed an unprecedented new dialogue on a wide range of mutual interests and concerns. In particular, we emphasized that America shares the Islands' vision of the region's future, seeing the Pacific not as a great ocean of small islands and tiny populations -- but rather -- as an aquatic continent, the world's largest, covering a full third of the Earth's surface. **And like a string of pearls spread out across the sea -- each nation is unique, each is precious, and each has something to contribute to the beauty of the whole.**

The Pacific Islands have a special place in the imagination of the American people. And on my own visits, starting almost 50 years ago, I've seen that the reputation for the natural charm of both the Island peoples and their lands is well-deserved.

With Island jurisdictions of our own, we are also proud of America's special place in the Pacific family of nations. We enjoy close relations, linked by many bonds of friendship and family. And today we share this great aquatic continent as partners in peace, bound together in an oceanic community pledged to protect both new democracies and worthy old traditions.

During World War II, Americans such as I ~~like me~~ journeyed to the Pacific Islands to help protect our shared heritage of freedom

of The Natural Resources and Environment

and peace. And today we have returned, this time to help protect our shared heritage of beauty and nature. And that is why, just last month, I signed the ~~Environmental~~ Protection Convention for the of the South Pacific Region -- and promptly sent it to the Senate for ratification. Similarly, we have directed our ambassador in New Zealand to sign the Wellington Convention, a major new step in dealing with the challenge of driftnet fishing.

We also described our plan to host the first round of discussions for a framework Convention on global climatic change, beginning in Washington next February 4th. And this effort is being bolstered by the [world's largest research program] -- our Administration's initiative to commit over $1 billion a year to explore the causes and effects of climate change.

accurate? S.D.I.?

We also shared a valuable discussion on one program of particular concern to the Island nations -- and of particular importance to our global arms control efforts -- the destruction of [chemical weapons on Johnston Island. We emphasized our common interest in ridding the world of these terrible weapons, and asked for their understanding and support in this significant step towards peace and disarmament. We assured the leaders that the safeguards we're employing ensure there will be no environmental damage. And we expressed hope that they would accept our offer for a technical team, sponsored by the South Pacific Forum, to visit Johnston Atoll to independently monitor the operation.

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Today, the United States has rededicated itself to ~~real~~ lasting security in the region. A security which comes not so much from

(found)

we have plans to dispose of only the chemical munitions from the Pacific Theatre currently stored at Johnston Atoll as well as other obsolete chemical munitions in the Pacific Islands, and the relatively small quantity being shipped from Germany, and that

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force of arms -- but through nurturing of free people, free markets, and free economies. And in order to strengthen these economies, we were pleased to announce several ~~new~~ initiatives:

First, we announced our plan to begin negotiations to extend the South Pacific regional Fisheries Treaty.

Second, we proposed establishing a Joint Commercial Commission with the Island nations, to meet each year -- at senior government levels -- to identify and address ~~current~~ trade concerns.

~~And~~ **Third**, we announced that the Overseas Private Investment Corporation would establish an Asian-Pacific Growth Fund, similar to the funds for Eastern Europe and Africa, and fueled by $200 million in new venture capital. In addition, OPIC will lead a 1991 mission of American investors to Pacific Island countries.

My distinguished friends: Like the early navigators, who braved the seas alone so that others could follow, you have come to Hawaii today to help chart a new course for the children of the Pacific -- the children of tomorrow. **Together, we are moving forward. Together, we are racing towards the Century of the Pacifi**

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And **FOURTH**, additional A.I.D. development assistance programs will be implemented to enhance economic growth through private sector development, emphasizing agricultural and marine resources -- in the toatl amount of $28 million over their respective terms .

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McNally/Simon
October 22, 1990
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Thank you, all of you, for your visit. You have shown us friendship, and you have shown leadership in promoting democracy and economic progress. We wish you all the best. And we look forward to working with you as together we face the challenges of the future. Thank you, and Godspeed you on your journeys home.

# # #

DEPARTURE STATEMENT
UNITED STATES/PACIFIC ISLAND NATIONS' SUMMIT

The leaders of the Pacific Island nations and I have just completed a most useful, and unprecedented, dialogue on a wide range of issues of mutual interest.

In addition to reviewing current global events, we focused on our joint future in the Pacific. For our part, we advised that our view of this great ocean is not one of small islands with tiny populations. We share the vision of Ambassador Renagi Lohia that this is an Aquatic Continent, covering a third of the Earth's surface. With Island jurisdictions ourselves, we see the United States as a co-equal member with the Island nations in the Pacific's extended family. We belong and share this great Aquatic Continent with the Island nations, our partners in peace -- bound together with them in this oceanic community of flourishing democracies.

We share the concerns of the Island states about the natural resources of the region, the environment that is our common heritage. In this respect, I was pleased to note that on 25th of September, this year, I signed the South Pacific Regional Environmental Protection Convention, and immediately forwarded it to the Senate for consent to ratification. On driftnet fishing, I advised the leaders that I have directed the U.S. Ambassador to New Zealand to sign the Wellington Convention, a major new step to deal with this problem.

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In conclusion, I am sincerely pleased to have had this special opportunity for a personal dialogue with the Island leaders, and to learn directly of their views, interests and concerns. I wish them a safe journey back to their homes.

THE COMMONWEALTH
OF THE NORTHERN

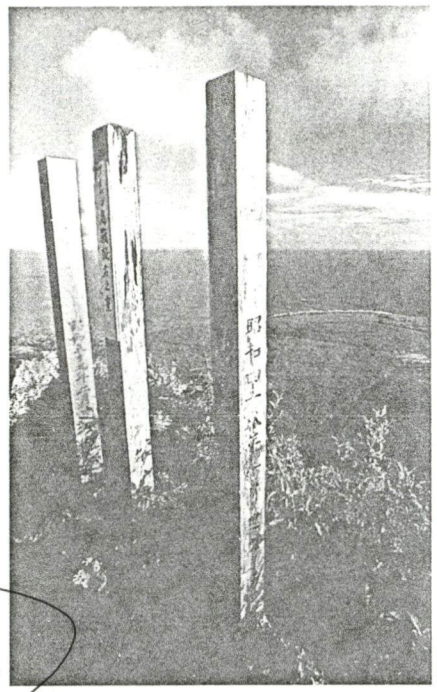
MARIANA ISLANDS

Candidate for addition to the U. S., the Northern Marianas have elected to be a commonwealth, with full U. S. citizenship.

*But economically the Northern Marianas look to Japan to support the chief industry, tourism. On Saipan, Japanese visitors (**facing page**) stand atop seaside Banzai Cliff, where hundreds of Japanese soldiers and civilians leapt to their death rather than be captured by Americans in 1944. Prayers adorn wooden memorials (~~right~~) on nearby Suicide Cliff, where hundreds more died.*

*An American visitor excited attention last year. Flag-waving youngsters (**below**) gather to welcome Vice President George Bush.*

1985??





ALL BY MELINDA BERGE

National Geographic, October 1986



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VOL. 168 NO. 4 OCTOBER 1985

NATIONAL GEOGRAPHIC



IN *BOUNTY'S* WAKE: FINDING THE WRECK OF H.M.S. *PANDORA* 423

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USUMACINTA RIVER—TROUBLES ON A BORDER 514

THE TRIUMPHANT TRUMPETER SWAN 544

OFFICIAL JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D.C.



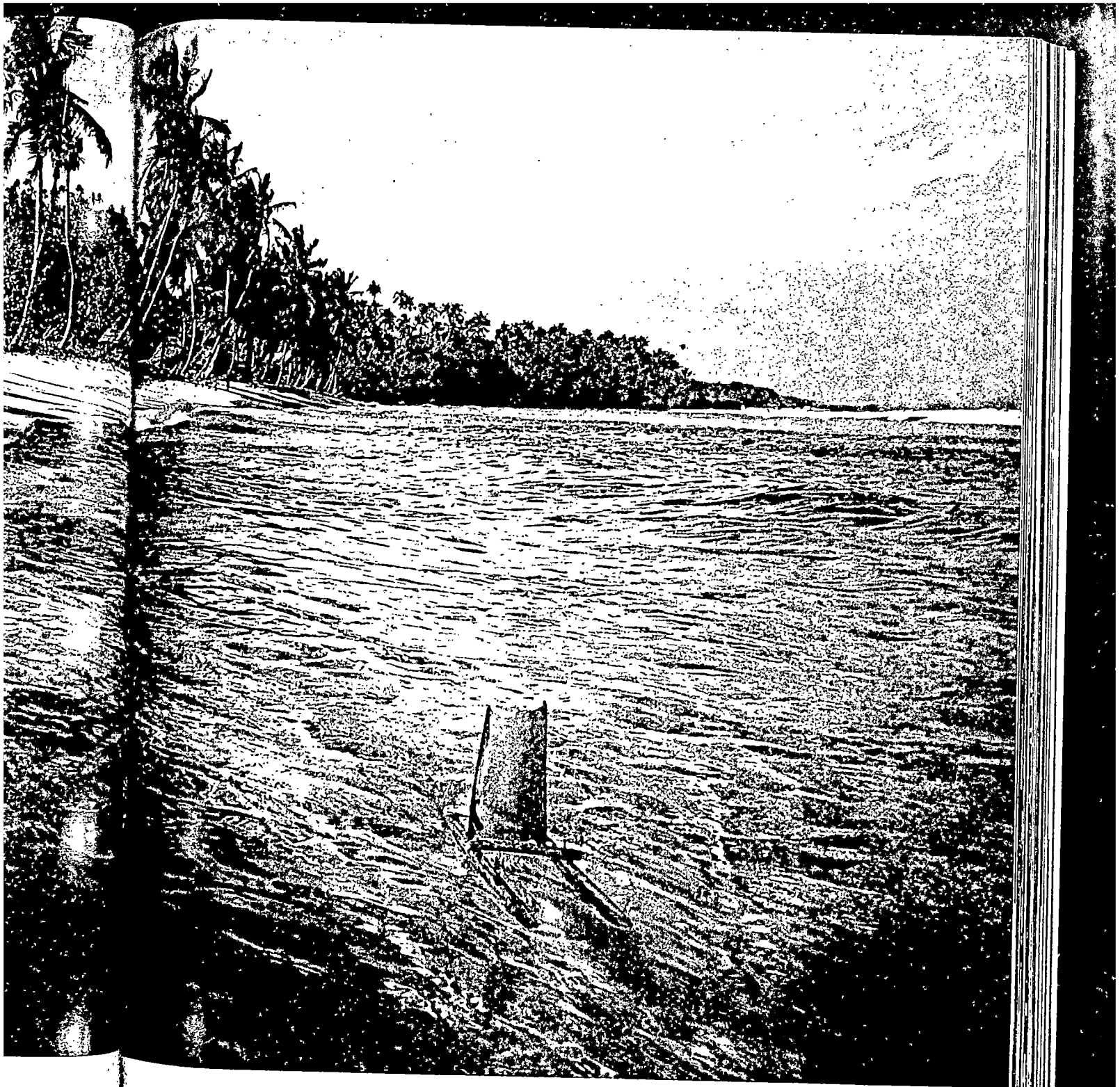
THE TWO SAMOAS

STILL COMING OF AGE

By ROBERT BOOTH NATIONAL GEOGRAPHIC SENIOR STAFF

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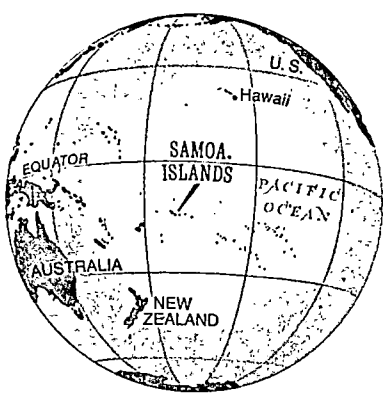
Photographs



AS
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United by culture, *Western Samoa and American Samoa are separated by politics. U. S. aid pampers American Samoa, but the lure of the South Pacific emanates more strongly from Western Samoa's Savai'i, where a boy sails a double-hulled canoe reminiscent of those of his Polynesian ancestors. The H.M.S. Pandora sailed to the islands searching for Bounty mutineers, and here Margaret Mead made her famous observations of adolescents.*

Photographs by MELINDA BERGE



American Samoa

IT WAS ALMOST MIDNIGHT when the moon at last escaped the cloud-capped mountain and turned its full glory on the sand and sea. The disembodied roar of surf became a line of brilliant white, marking the coral reef 200 yards offshore. A warm breeze stirred the coconut palms, their long fronds shadowboxing on the sparkling beach.

I took a deep breath of soft island air. This was Samoa! The earthly paradise proclaimed by author and anthropologist; the cradle of Polynesia, where carefree brown-skinned people laughed and splashed and made love all the day long.

Well, maybe this had been Samoa. And maybe some of it still was. But. . . .

But now the delightful aroma of fish grilling atop coconut-shell embers distracted me. The small red fish, called *malau,* had been minding their own business just minutes before. And the green bananas baking deeper in the coals were hardly older.

My host, High Chief Tauili'ili, handed me a brimming coconut and motioned me toward a banana-leaf platter piled high with fish and fruit. "This beats the microwave," he said.

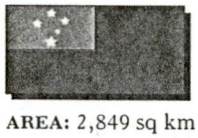
We were on the tiny island of Ofu, one of three that form the Manu'a group, part of American Samoa, a United States territory. The capital, Pago Pago (pronounced PAHNG-o PAHNG-o), lay 60 sea miles to the west on the main island of Tutuila. Farther west still was Western Samoa, which became the South Pacific's first small island nation in 1962 (map, below).

One people, two Samoas, carved up by colonial powers at the turn of the century. Though charting different courses, both Samoas remain jealous of their 2,000-year-old culture, and—in pursuit of progress—both inevitably compromise it.

Not too surprisingly the 20th century, for good or ill, has collided hardest with American Samoa. In the past six years alone, the territory, with a population of 35,000, has received nearly 250 million dollars in federal funds. Most of those megabucks stayed on

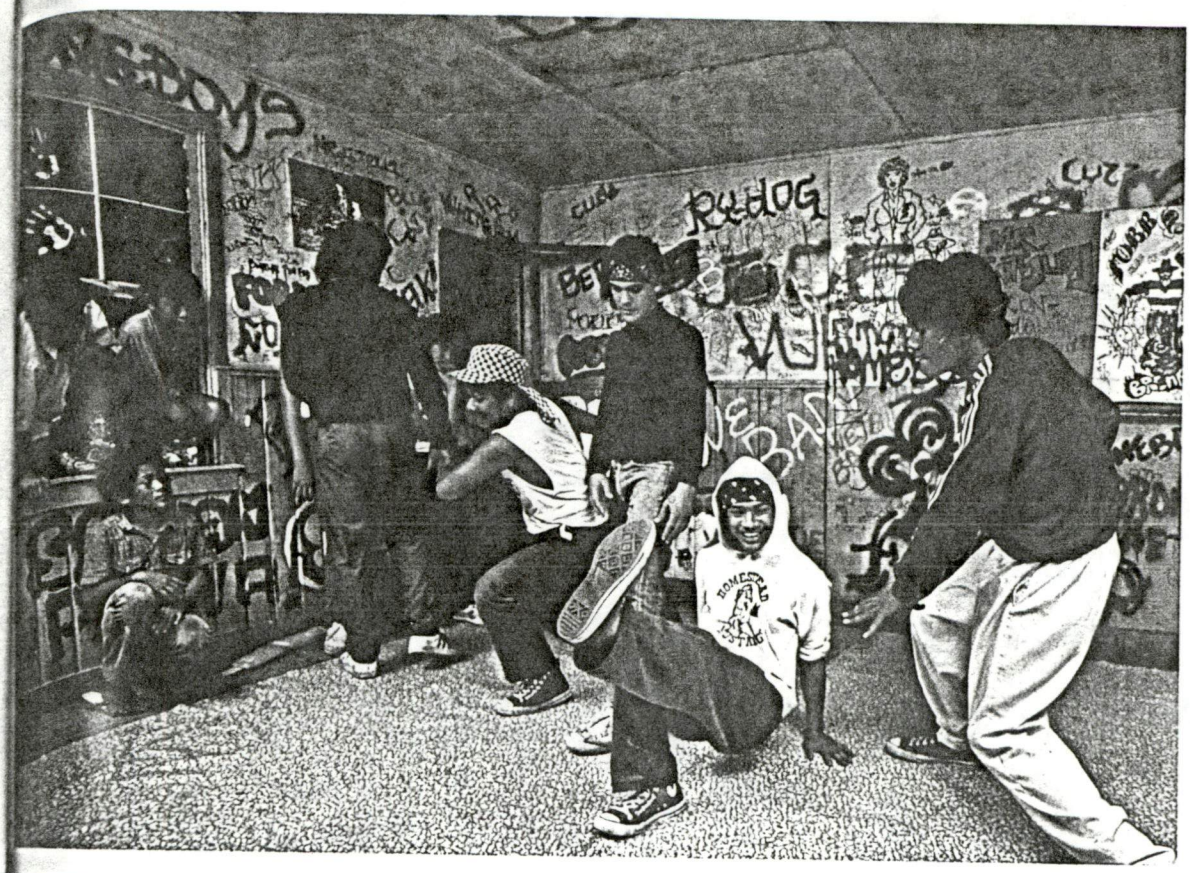
(Oct '85)*





WESTERN SAMOA

AREA: 2,849 sq km (1,100 sq mi). **POPULATION:** 162,000. **CAPITAL:** Apia, pop. 35,000. **RELIGION:** Protestant, Roman Catholic. **LANGUAGE:** Samoan, English. **ECONOMY:** Agriculture: coconuts, cacao, taro.

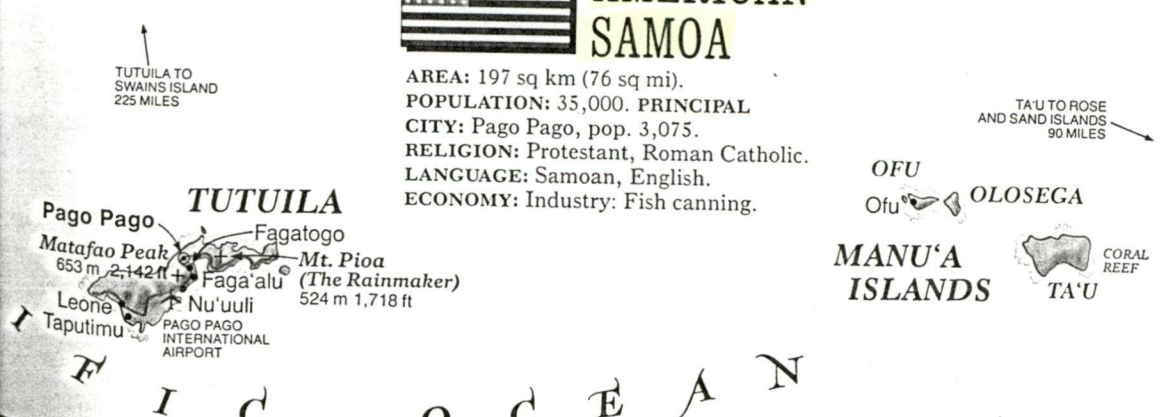


FA'A SAMOA—the Samoan way of thinking and doing—has prescribed the rituals for social conduct for centuries. On American Samoa, the Samoan way collides with fa'a America (**above**) as a group of break dancers called the Famous Original Blood Brothers of Samoa perform in Fagatogo.

The U. S. Navy established a station in Pago Pago in 1900, when American Samoa became a United States possession. Western Samoa, once a German colony and later a mandate of New Zealand, achieved independence in 1962. It is listed by the United Nations as one of the least developed countries in the world.

AMERICAN SAMOA

AREA: 197 sq km (76 sq mi). **POPULATION:** 35,000. **PRINCIPAL CITY:** Pago Pago, pop. 3,075. **RELIGION:** Protestant, Roman Catholic. **LANGUAGE:** Samoan, English. **ECONOMY:** Industry: Fish canning.





Palagi is a form of *papalagi,* which means "sky burster"—the name given to the strange white men whose impossibly tall ships rent the horizon 250 years ago.

The first was Dutch explorer Jacob Roggeveen in 1722, though he passed by without landing. Half a century later the Frenchman Louis-Antoine de Bougainville arrived. According to one account, he found the people "less trusting than the Tahitians; they displayed no eagerness to get iron. But their canoes were skillfully made, with triangular sails, and followed the ships a good distance out to sea, [sailing] round them as easily as if they had been at anchor." De Bougainville was impressed, and named the islands Les Îles des Navigateurs.

But surely the most influential palagi arrival was the Reverend John Williams of the London Missionary Society, who sailed into Samoan life in 1830 and changed it forever. As one contemporary Samoan put it, "The missionaries came here to do a job, and by God they did one!" Today every village has a church, often several. They are always the largest buildings, and pastors nearly always live in the largest homes.

The last bell was still ringing in my ears as Ili and I slid into a pew in Ofu Congregational Church, bright and airy, with beautiful woodwork detailing. As the organ started up, the people swung into effortless four-part harmony. Samoans love to sing, and they sing loud and well.

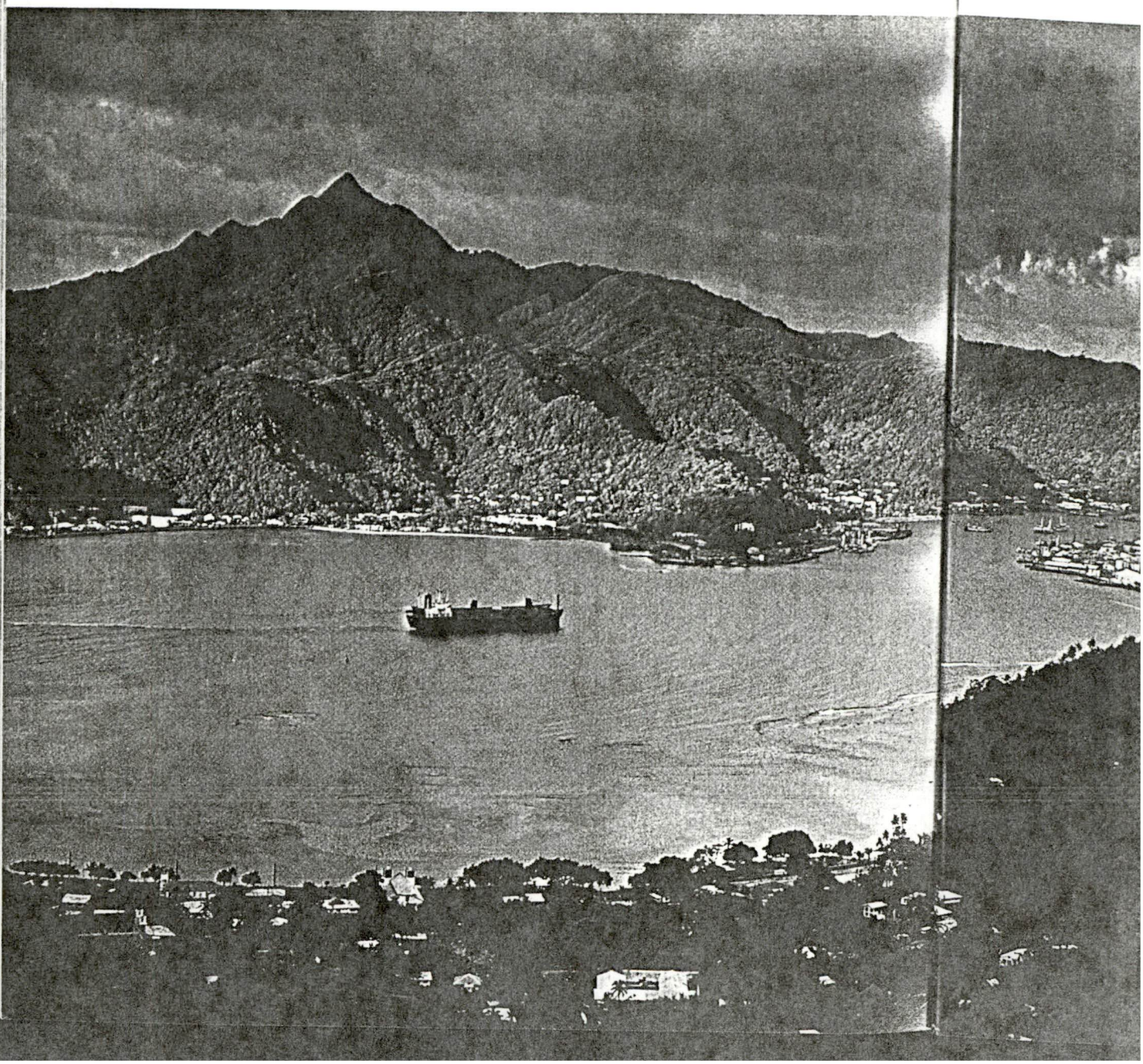
This was the Sunday when a collection was taken for the pastor's monthly salary. Toward the end of the service, as is the custom, a deacon rose and read out the names of the donors and how much each had given. The total came to $3,200. Later Ili told me that the pastor's house and food were provided by the village. "I don't know what he does with the money," he said. "There are people here who have a monthly income of $200 and give the pastor half of that."

I spoke with the Samoan pastor, a Reverend Salatielu, a burly man in his 60s. His father and grandfather had been preachers before him. He liked Ofu. "The people are very generous," he said.

THE NEXT DAY I bade Ili *tofa* and boarded a boat for Tutuila. Seven hours later we nosed into Pago Pago's bay. Most imposing of the islands, Tutuila rises abruptly from the sea like the fabled Bali Hai. It is stunningly green; the bay area averages 200 inches of rain a year.

The bay, which nearly splits Tutuila in two, is actually the caldera from a series of prehistoric eruptions (all the islands are volcanic). The harbor, one of the deepest and best protected in the Pacific, was what originally drew U. S. interest and impelled the Navy to open a coaling depot here around 1900. In 1951 the Navy turned the territory over to the Department of the Interior.

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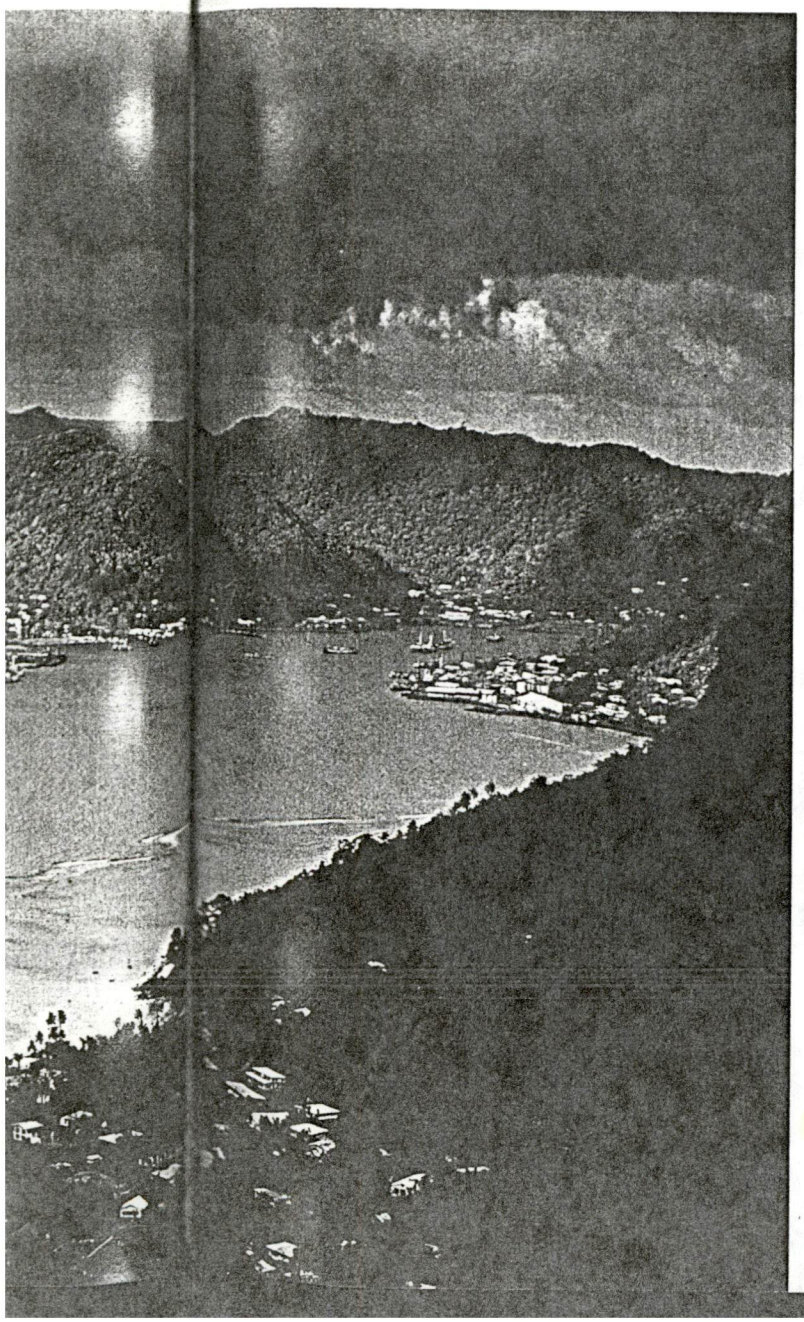
Today the harbor remains central to the economy. The north shore is dominated by two tuna canneries, Starkist and Chicken of the Sea, that are the mainstays of the private sector. They get tax breaks (or they'd have to leave, they say), but they do employ 3,000 people, most of them Western Samoan aliens who will work for the $2.82 minimum wage. This year the canneries will ship 250 million dollars' worth of tuna home to the U. S., one-fifth of all consumed.

On a spit of land near the harbor mouth, the 200-room Rainmaker Hotel sits across from the magnificent hulking mountain for which it is named. The rooms are only adequate, and the kitchen seems never to have heard of local fish or produce, but the view is great and the cheeseburgers aren't bad.

Most food on this island is imported, because most Tutuilans no longer live off the land. And why should they? Nearly half the workers hold well-paying jobs in the local government. They may raise some taro and bananas, but mainly they stop by the supermarket on their way home from the office. Most households have color TVs and VCRs, and many people own cars.

There are some 50 miles of paved road on Tutuila—and *4,000* vehicles. Usually half are trying to get into Pago Pago while the other half try to get out. Gridlock in paradise.

The main road runs right by the hotel, a





Guarded by Matafao, *a peak 2,142 feet high, Pago Pago's deep sheltered harbor* ***(left)*** *lies within an ancient caldera. A Taiwanese long-liner in dry dock* ***(above)*** *takes a respite from pursuing tuna, the island's chief export.*

short walk from the business district. Like most villages, Pago Pago is squeezed between mountain and sea. In fact only 2 percent of bay-area land is level enough to build on. You stroll past the sprawling container dock, stacked three and four high, and realize there's nowhere else to put them. Farther along is a small museum with thatched fale outside, preserved for tourists. Inside, I don't know; the air conditioner was broken, so the museum was closed.

On the landward side of the street a modern two-story mall houses a score of shops and offices. Most of the other downtown buildings are relics from the Navy days. One such is the former boardinghouse in which slatternly Sadie Thompson seduced the self-righteous Reverend Davidson in Somerset Maugham's 1920 short story "Rain."

"Davidson was real, and so was Sadie Thompson," said Joe Theroux. "She lived here and [played] around quite a bit." We were talking over dinner at Soli and Mark's, Pago Pago's best restaurant. Theroux, 33 and stocky, with a thick mustache and a salty tongue, was a Peace Corps volunteer in Western Samoa ten years ago before coming here to teach. Like his (temporarily) better known brother, Paul, Joe is an author.

"The missionaries have gotten a raw deal," he was saying, "because people think of Davidson. I've met some great missionaries, honest to God."

I asked him about rich Samoan pastors. "Samoans have 'samoanized' Christianity," he explained. "The pastor has become a chief—a religious chief. He gets paid because he is a man of rank.

"Look at Samoan cricket," he continued. "It is unrecognizable to a British cricketer. If your team loses, you can buy your way back into the tournament. And don't play checkers with Samoans. They can jump backward when they're not kinged. They can jump over the whole *board*. You say, 'I've never played like this.' They say, 'This is Samoan checkers.' They've done the same thing with Christianity."

THEY'VE ALSO DONE the same thing with American-style government. The governor and 21-seat House of Representatives are elected, but the 18 senators are chiefs, selected, following Samoan tradition, by other chiefs. That doesn't sit well with 35-year-old former Representative Letalu Moliga.

"Our traditions should be practiced by the individual, by the family, by the village, but not by the government," he said, "because of the conflict with participatory democracy. I hear our leaders talking about preserving our culture. We need to think about what we are preserving and what we really want to preserve."

One of those leaders is Peter Tali Coleman, the governor who was first appointed in the 1950s and finished serving his second elected term last year. "I disagree that the matai system should stay out of politics," he said. "In my assessment, there is far more wisdom in the Senate than in that free-for-all in the House.

"And certainly, one of the most important challenges we face is the protection of our traditions. Among some of our younger people today there is a restlessness—an impatience with our system. But it has served us well for a long time."

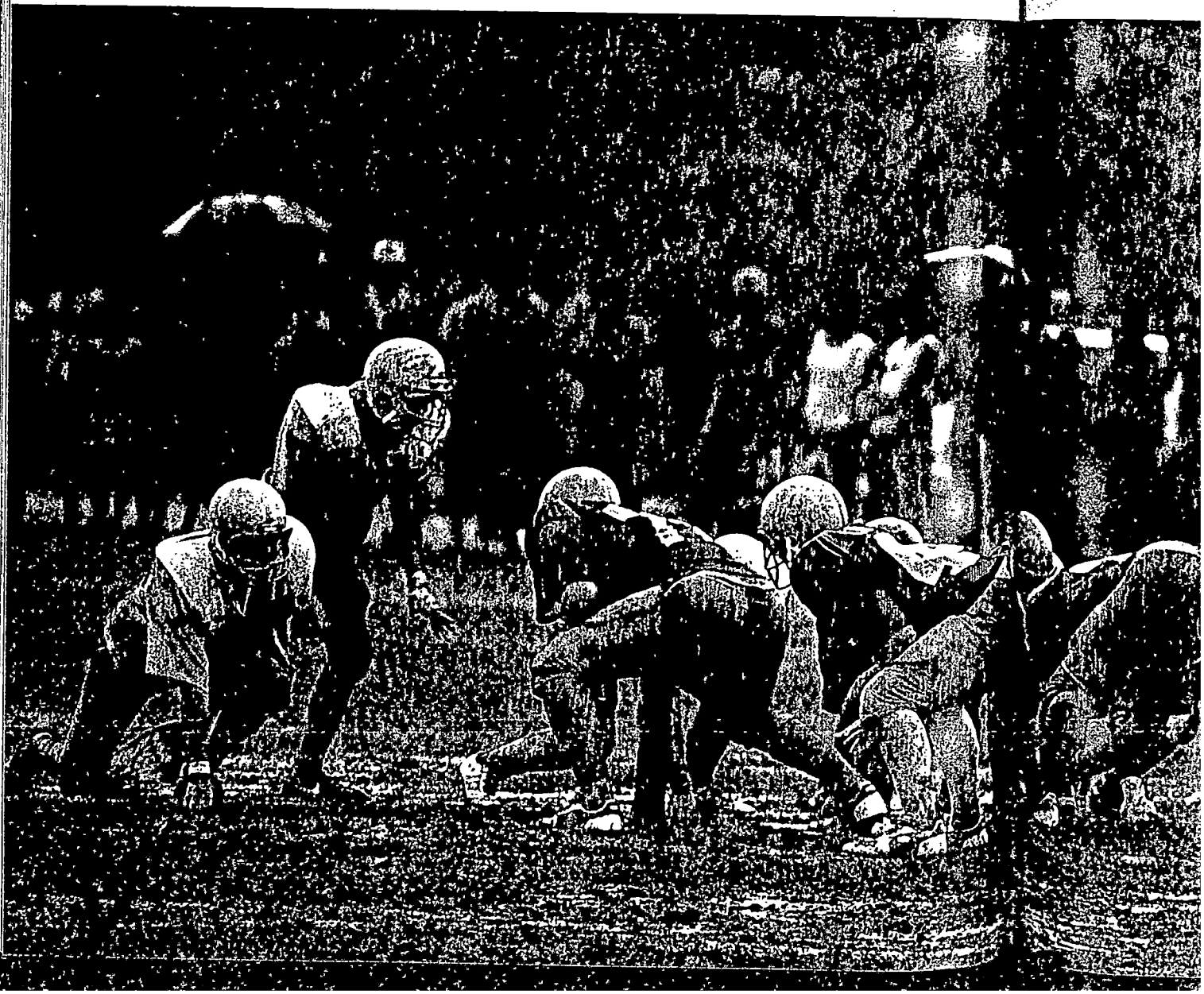
I did hear frequent grumbling during my weeks in American Samoa, though usually affectionate and not exclusively by the younger generation: "We are an unimaginative, self-satisfied bunch of idiots!" exclaimed John Kneubuhl, 65, a retired writer and educator and now the territory's unofficial historian.

To visit with John, I had driven out the main road to the village of Taputimu. Winding along the coast, I passed a group of boys selling octopus, still dripping wet from the sea. Where there were breaks in the reef, big Pacific rollers, heaped up by the stiff trade winds, slammed into the rocky shore, sending spray above the palms. In Nu'uuli I passed the boutique that had sponsored the first island break-dance contest a few days

Bursting into exuberant dance, *cannery workers—one wearing part of a sign as a collar—celebrate a vote against unionizing the Starkist tuna factory in Pago Pago. Most of the workers come from Western Samoa; the $2.82 cannery minimum wage is too low to attract their American Samoan kin.*



***Signing up** for U. S. Army enlistment, Michael Pale Taamilo **(left)** in Pago Pago joins the exodus of young people leaving the islands. Football, with its promise of a scholarship to a stateside school, provides another way out; high-school teams tangle in a downpour in Leone **(below)**. Mosi Tatupu, running back for the New England Patriots, and Jack Thompson, "the Throwin' Samoan," a quarterback for the Tampa Bay Buccaneers, made it big.*



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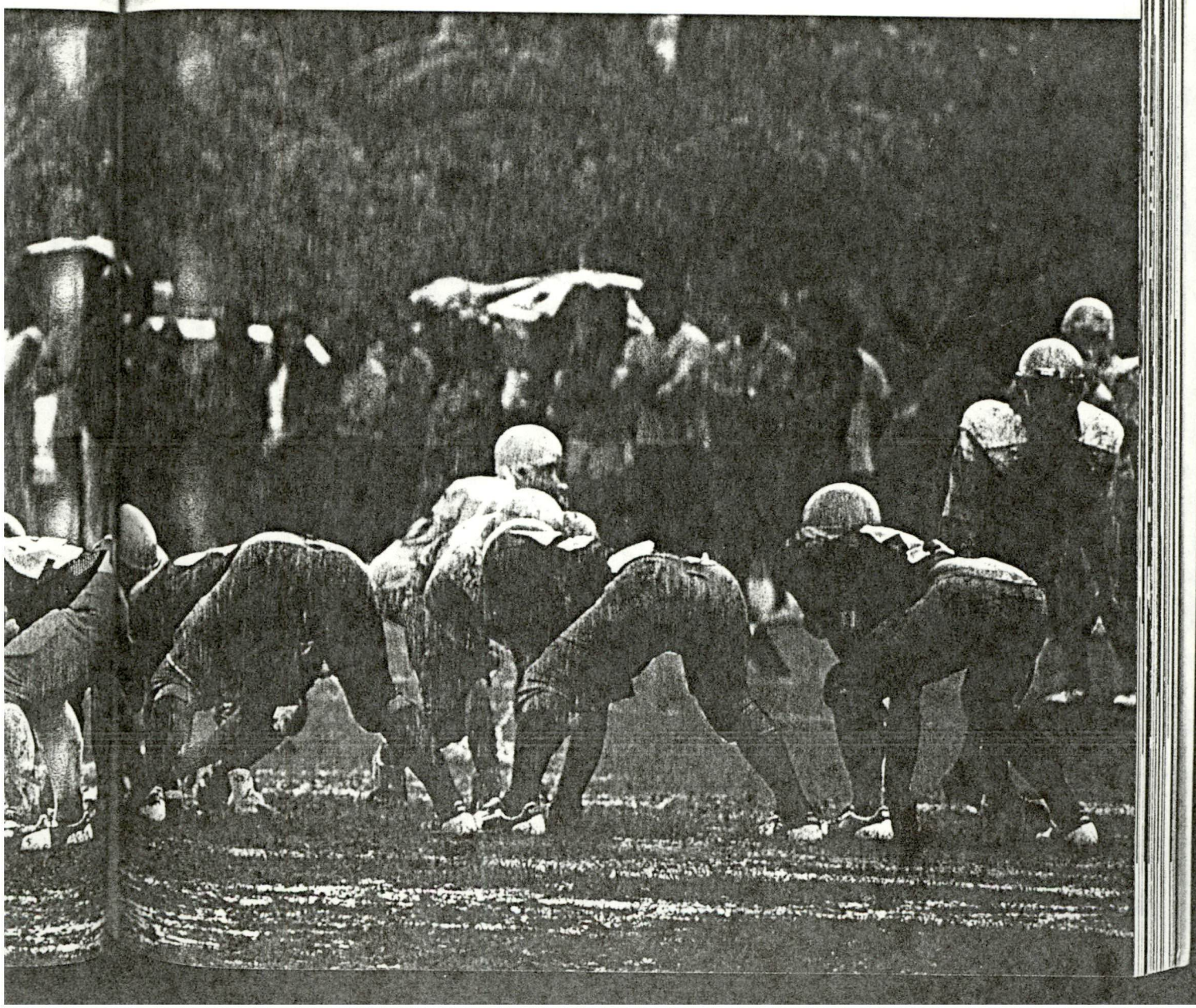
earlier, and across the road, the Matai's Pizza Fale.

"I don't think the matai system is going to last very much longer," said John, after we had made ourselves comfortable in his living room. "For one thing, there are too damn many of them now. That's cheapened the system. And centralized government is killing their power.

"In premissionary days the chiefs' word was final. They could be terribly cruel. Just a few months before John Williams landed, one of the most powerful chiefs in Samoan history took his army from 'Upolu to Savai'i [the main islands of Western Samoa] to attack another important family. The night before the attack they were resting in a village, and he saw a beautiful little girl, eight or ten years old. He said to his men, 'Prepare her for me.' You might think it was sexual. No. She was roasted. He ate her. But his warriors became disgusted and clubbed him to death."

As the afternoon wore on, I asked John about the possibility of the two Samoas becoming one. "We all want reunification, I think," he said, "though it's a great question whether Samoa was ever unified. Tutuila was a subdivision of a district on 'Upolu; it was a place of exile. But Manu'a was never part of a historical Samoa.

"As it stands, American Samoa would have very little to offer. We are a hand-out society; we have no resources. 'Upolu and Savai'i are potentially wealthy islands. Savai'i is huge, and people forget that 'Upolu is nearly the size of Oahu and every bit as blessed in natural fertility."



At dawn I rose to watch the boys prepare the *umu,* or stone oven. After being heated white-hot in a coconut-shell fire, the fist-size stones were mounded together with taro and bananas; breadfruit and leaf-wrapped fish and palusami were placed on top. In an hour all was ready.

Taito and I ate first, as is customary. In Samoan fashion we sat on the floor and ate with our fingers. Fourteen-year-old Tivoli fanned flies from our plates, and another child brought finger bowls.

I ended up staying that day and night with Taito and his family, and set out again the following morning. On the southwest coast, at Fagafau, I passed a notorious lover's leap, still used occasionally, I was told. At the bottom of the vertical cliff it was not uncommon to see sharks slowly patrolling back and forth. At the village of Taga I turned the last major corner and headed for a shower and a hot meal at the Safua Hotel not far from the ferry landing.

The Safua is a charming cluster of ten private fale surrounding a large central sitting and dining area. The nightly buffet rivals Aggie Grey's. The hotel was designed and built by Moelagi Jackson and her late husband. "Now that my husband is gone, I have to widen my shoulders," she said. An articulate, no-nonsense woman, quick to smile, Moelagi holds the high title of Vaasiliifiti. Of 20,000 matai in Western Samoa, she is one of only 100 titled women.

"I am not worried about Savai'i being spoiled by tourism," she said. "If too many palagi lodge in villages, that will tend to hurt. But if we have a few small hotels, the tourists will come and go, and Savai'i will be the same.

"Samoans are a proud people," she said. "Look at what's happened to the Hawaiians and the rest of Polynesia. We still have our system. We have our language. And we have our land. You cannot sell communal land. As long as the land is held by the people, there will not be dramatic changes. They will take a long, long time."

The next day I said farewell to Savai'i and boarded the ferry for 'Upolu. My time in Samoa was growing short, but I had one more appointment to keep.

OF ALL the paradise-starved palagi who ever found their way to these islands, Robert Louis Stevenson is held dearest in Samoan memory. He was already a famous man, author of *Treasure Island* and *Dr. Jekyll and Mr. Hyde,* when he arrived in 1889. He was ill, however, and had come, "only to grow old and die, but . . . it is a fair place for the purpose."

Stevenson built his home on the slopes of Mount Vaea, a few miles outside Apia. And his health improved: "I can walk," he wrote, "I can ride, I am up with the sun." As time passed, he developed a close bond with the Samoans. "I love the land," he told them, "and I love the people." They called him Tusitala—teller of tales.

He died suddenly, on December 3, 1894, at the age of 44. His Samoan friends worked around the clock hacking a path to the summit, where, as he had wished, they buried him.

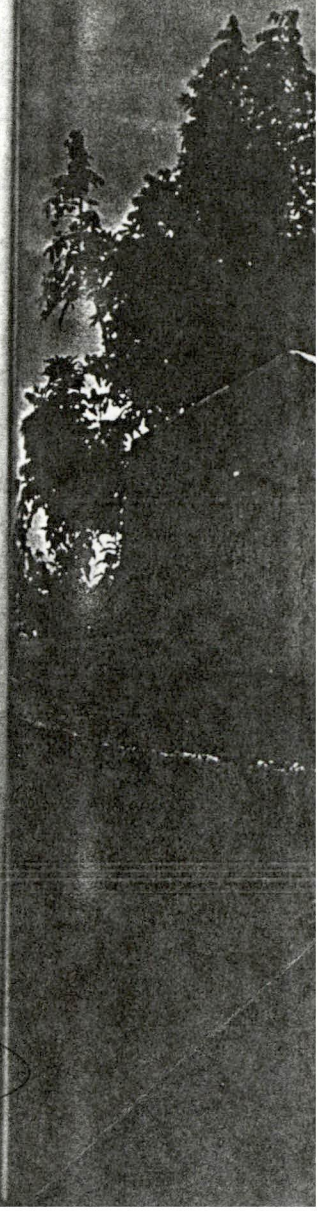
In the cool of the morning I set out to visit his tomb. At first the trail climbed gently, past an occasional coconut palm ("that giraffe of vegetables," wrote Stevenson), but soon it steepened, switchbacking upward through the thick mountain rain forest. Small black lizards scattered from the path.

After about an hour I emerged on the summit. In the center of a clearing lay the simple limestone tomb. Far below, beyond the distant church towers of Apia, beyond the white fringe of reef, two tugboats were standing out from the harbor entrance, waiting to greet a cargo ship just coming into view. It was a marvelous panorama.

I turned to the tomb. Engraved on one face was Stevenson's poignant elegy, which ends with these lines:

Here he lies where he longed to be;
Home is the sailor, home from the sea,
And the hunter home from the hill.

I lingered with the Tusitala for a few minutes more, then started back down the mountain. □



***"The first love,** the first sunrise, the first South Sea Island are memories apart," wrote Robert Louis Stevenson, whose tomb lies atop Mount Vaea on 'Upolu.*

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NATIONAL GEOGRAPHIC



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OFFICIAL JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D.C.

In the Far Pacific

At the Birth of Nations

By CAROLYN BENNETT PATTERSON
FORMER SENIOR ASSISTANT EDITOR

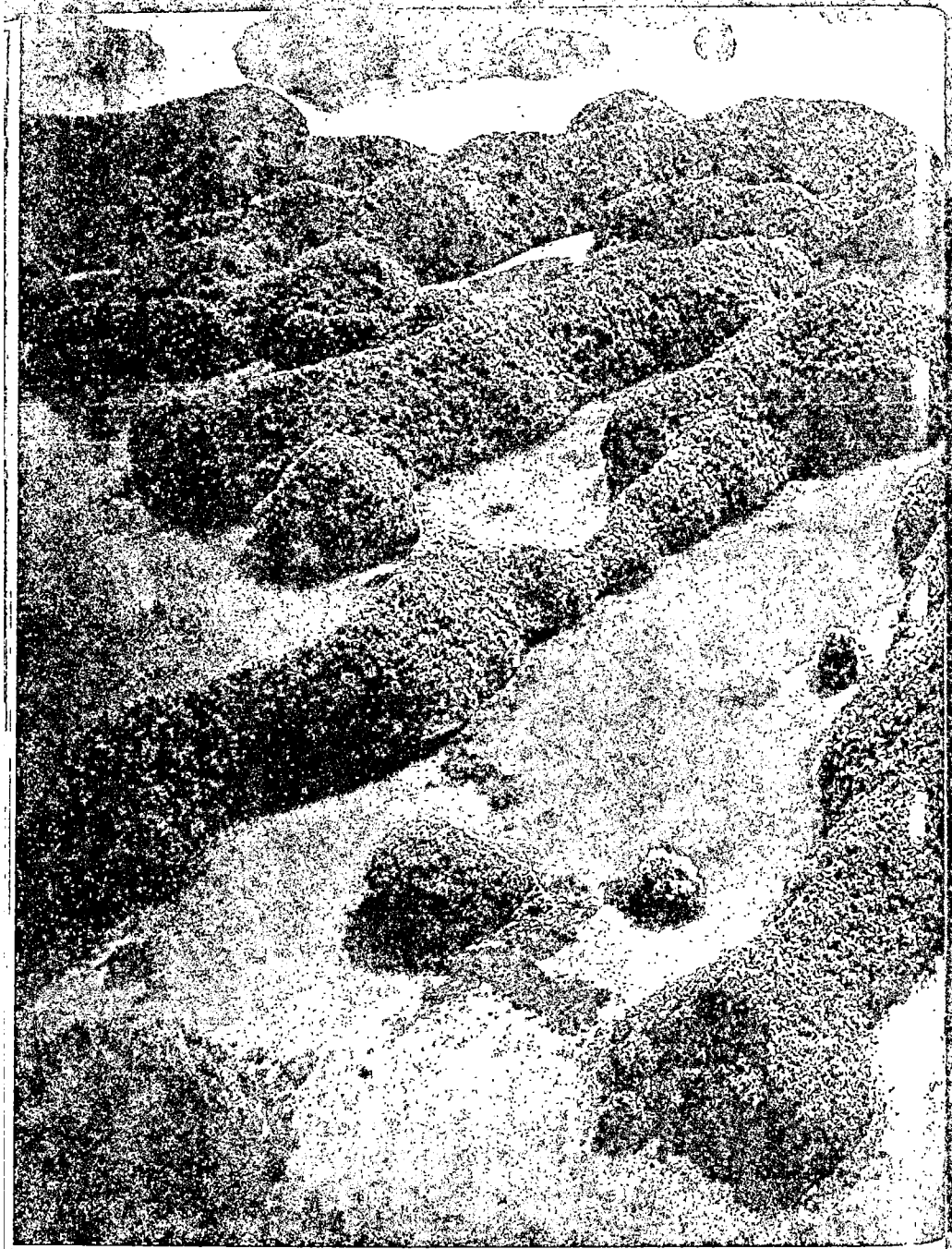
Photographs by DAVID HISER
and MELINDA BERGE

New flags in the Pacific go on proud display (below) at Truk state's Xavier High School, still scarred by World War II shells. Traditions are kept on Yap state's island of Mogmog, where Western dress is discouraged (right). Such are the contrasts among three new nations and a commonwealth, sponsored by the United States of America, that now are about to step onto the world stage.



FLAGS SHOWN CLOCKWISE FROM 12 O'CLOCK: YAP STATE, TRUK STATE, REPUBLIC OF THE MARSHALL ISLANDS, POHNPEI STATE, REPUBLIC OF PALAU, AND THE REPUBLIC OF KIRIBATI, FORMERLY THE GILBERT ISLANDS, WHICH WERE NOT PART OF THE TRUST TERRITORY UNDER THE U. S.

BOTH BY DAVID HISER



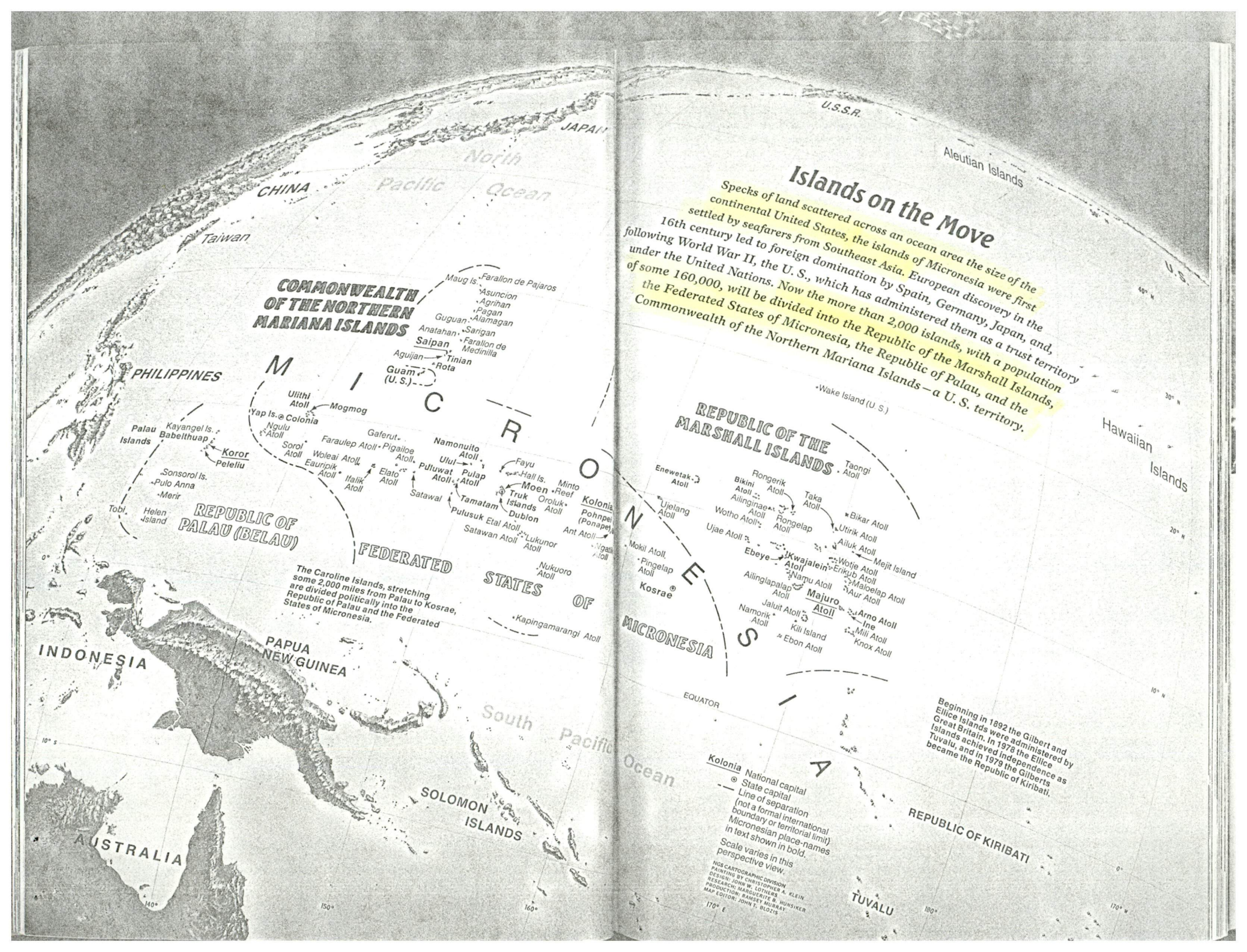
Maze of unsurpassed beauty, the Rock Islands of the Republic of Palau set tropical gardens atop coral ridges.



DAVID HISER

Speedboats carrying tourists, mostly Japanese, carve glass-clear waters filled with a fantasy of sea life.

Tomorrow
when we
follow the
sun


Islands on the Move
Specks of land scattered across an ocean area the size of the continental United States, the islands of Micronesia were first settled by seafarers from Southeast Asia. European discovery in the 16th century led to foreign domination by Spain, Germany, Japan, and, following World War II, the U. S., which has administered them as a trust territory under the United Nations. Now the more than 2,000 islands, with a population of some 160,000, will be divided into the Republic of the Marshall Islands, the Federated States of Micronesia, the Republic of Palau, and the Commonwealth of the Northern Mariana Islands—a U. S. territory.
Beginning in 1892 the Gilbert and Ellice Islands were administered by Great Britain. In 1976 the Ellice Islands achieved independence as Tuvalu, and in 1979 the Gilberts became the Republic of Kiribati.
The Caroline Islands, stretching some 2,000 miles from Palau to Kosrae, are divided politically into the Republic of Palau and the Federated States of Micronesia.
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
Maug Is.
Farallon de Pajaros
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Agrihan
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Alamagan
Guguan
Sarigan
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Farallon de Medinilla
Saipan
Aguijan
Tinian
Rota
Guam (U. S.)
PHILIPPINES
MICRONESIA
Ulithi Atoll
Mogmog
Yap Is.
Colonia
Ngulu Atoll
Sorol Atoll
Faraulep Atoll
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Kayangel Is.
Babelthuap
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REPUBLIC OF PALAU (BELAU)
FEDERATED STATES OF MICRONESIA
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Rongerik Atoll
Bikini Atoll
Taka Atoll
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Knox Atoll
Jaluit Atoll
Namorik Atoll
Kili Island
Ebon Atoll
Mokil Atoll
Pingelap Atoll
Kosrae
EQUATOR
Kolonia National capital
State capital
Line of separation (not a formal international boundary or territorial limit)
Micronesian place-names in text shown in bold.
Scale varies in this perspective view.
NGS CARTOGRAPHIC DIVISION
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REPUBLIC OF KIRIBATI
TUVALU
Aleutian Islands
Hawaiian Islands
U.S.S.R.
JAPAN
CHINA
Taiwan
North Pacific Ocean
South Pacific Ocean
INDONESIA
PAPUA NEW GUINEA
AUSTRALIA
SOLOMON ISLANDS
U.S.
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180°
170° W
40° N
30° N
20° N
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FROM THE SEA Puluwat is everyman's dream of paradise: an island set in the blue depths of the Pacific, ringed by a coral reef that encloses a crystal clear lagoon.

Ashore it looks like a garden, with towering coconut palms lining the broad sandy paths and great old breadfruit trees, their roots clutching the earth like gnarled fists, rising majestically above the green banana and taro patches.

And the people. The men bare to the sun save for their *thus,* a bright swath of cotton stretched tight between the legs and tied around the waist with loose ends swinging. The women in long skirts, their breasts uncovered, bending low in obeisance whenever they meet older males. The youngest children, naked.

It was like this on Puluwat, one of the Caroline Islands, 18 years ago when the people held a feast to bid 21-year-old John Uruo farewell. Related by blood and extended family to most of the islanders, John at his leave-taking drew a large crowd, who brought to the feast homegrown bounty—roast pig, fried fish, boiled breadfruit, taro root and leaf cooked in coconut milk, small sweet bananas, and coconut wine.

After the elders' speeches John rose. "I go to jump over the wall," he said.

The wall John went to leap was figurative, built of conditions that separated him and fellow islanders from today's world—isolation, poor health care and education, and few financial resources. In good health, John had a plan to overcome the others. He would go to college in the United States—the first from his island to do so.

Aided by a scholarship, John succeeded. He graduated from Minnesota's Bemidji State University, married an American girl, and eventually returned to Truk in the Federated States of Micronesia, where I met him. There he serves the governor as a municipal affairs officer, in an area that includes his home island of Puluwat. Having jumped over the wall himself, John Uruo now helps others do the same.

Recently I spent nearly three months among three Pacific island groups known as the Marshalls, the Carolines, and the Northern Marianas, in a part of the world called Micronesia. The islands sprinkle a vast ocean kingdom about the size of the continental United States but with less land area than the state of Rhode Island and a population of only 160,000.



DAVID HISER

***Man of two worlds,** John Uruo, left, pilots an outrigger sailing canoe on a visit to his home island of Puluwat in Truk state. Some 18 years ago he left Puluwat for college in the United States, believing that he was leaping over a wall to the modern world. Today, as a municipal affairs officer for the governor of Truk, he helps such islands as Puluwat in the struggle for a better life. John's American wife and two teenage daughters live mostly in the U. S. because he wants the girls to be educated there.*

Today the islands are emerging into the light of self-government, taking their places on the world stage after nearly 40 years as a trust territory administered by the United States under United Nations auspices. In May the United Nations Trusteeship Council recommended to dissolve this last trusteeship. The dissolution now awaits a Security Council vote, which will formalize the new arrangements.

Under new flags, the Marshalls in the east and Palau, a group of islands in the western Carolines, have voted to be republics, while the other islands in the chain have united as the Federated States of Micronesia—Kosrae, Pohnpei, Truk, and Yap.

Although self-governing, all three nations are to be closely tied to the United States by a compact of free association, an arrangement unprecedented in U. S. constitutional practice. Under the compact the U. S. will apportion among the three a total of 2.7 billion dollars, including adjustment for inflation, over a period of 15 years. (Palau's compact, presently being contested in Palau's Supreme Court, would run for 50 years but after the 15th year would be funded out of a 70-million-dollar investment fund.) In addition the U. S will continue to provide airline and airport-safety services, public health and weather prediction, currency, an international postal service, and disaster relief.

For the Republic of the Marshall Islands, where on Bikini and Enewetak Atolls nuclear devices were tested from 1946 to 1958, the U. S. has agreed to set up a 150-million-dollar trust fund to benefit islanders affected by the tests.*

Finally, the United States assumes all responsibility for the defense of the three states, asking in exchange that they remain closed to the military forces of other nations unless the U. S. agrees otherwise.

The fourth group in the Trust Territory of the Pacific Islands—the Northern Mariana Islands—elected an even closer bond with the U. S., the status of a commonwealth. Its residents receive regular benefits from a wide range of U. S. government agencies, and their territorial government is given financial grants for special needs. Ultimately they will become U. S. citizens.

EVERYWHERE on my travels I looked for such walls as John had leapt and found many still standing. Others are crumbling, and some have disappeared. But I found that I too had to jump over a wall, the wall of my own ignorance about the area.

Pipe-smoking and patient, Sam McPhetres came to my aid. Archivist for the trust territory government, he recounted how the islands were settled in prehistory by intrepid peoples who sailed there from Southeast Asia. After the region's discovery by Europeans—Magellan came through in the 1520s—trouble followed. Spain, claiming everything, lost everything in the Spanish-American War of 1898. The United States took Guam and the Philippines as territories; Spain sold the other islands to Germany, which lost them to Japan in the early days of World War I.

Under a League of Nations mandate, Japan energetically colonized and cultivated the islands until World War II, when the United States got them the hard way, with the lives of its fighting men. In 1947 the U. S. Navy set about administering the islands as a United Nations trust territory; the U. S. Department of the Interior took over the administration in 1951.

"But it was not quite that simple," said Sam. "Having fought our way across the Pacific, island by bloody island, our country wanted to be sure they would never again be used against us. The territory was declared a 'strategic trust,' a status that gave us the right to fortify it with military bases and close off certain areas if necessary.

"In fact," said Sam, "we're sitting in one of those once closed-off areas right now." His office in Saipan, the administrative center of the trust territory and capital of the Northern Marianas, was built in the 1950s by the Navy for the Central Intelligence Agency as part of a supersecret complex for training Chinese Nationalist troops to operate inside the Communist-ruled homeland.

The Kwajalein Missile Range in the Republic of the Marshall Islands is another case in point. With the 600 native people moved out, "Kwaj" harbors 3,000 American civilians in a 900-acre setting that most resembles a golfing condominium complex in, say, the state of Florida (pages 472-3).

But the purpose of the island's development is far from frivolous. Situated at one end of the world's largest atoll, Kwaj is the

*See "Bikini—A Way of Life Lost," by William S. Ellis, in the June 1986 NATIONAL GEOGRAPHIC.

Pacific terminus of a U. S. missile range, where experts measure the splashdown accuracy of ballistic rockets fired from Vandenberg Air Force Base, 4,500 miles away in California. The facility is expected to play an important part should President Reagan's "Star Wars" technology go forward.

For the use of Kwajalein and the other islands in the missile range, the United States pays a rent of more than 10 million dollars a year. The money goes to the Republic of the Marshall Islands, chiefly for transmittal to 5,000 landowners, most of whom live on nearby Ebeye. Many work on Kwajalein, commuting to some 600 jobs there.

"SLUM OF THE PACIFIC," I had heard Ebeye called, but, even so, I was unprepared for its squalor when I arrived at dusk from Kwaj. Along a pocked asphalt lane, houses of sheet metal and cinder block crowded wall-to-wall with no space for grass or trees. Bands of children, some mere toddlers, ranged the street, their only playground on the 78-acre island where 8,000 people live (pages 474-5). Spotting me, the youngsters crowded around, incessantly calling "Hello."

The next day I visited the hospital and met the public health nurse. To the question "How are things?" she answered: "How can I make a progress report to the United Nations when there is no progress? We need help! Today, for example, we have no insulin." A serious matter when at least a third of the adult population on Ebeye, as elsewhere in urban areas of the Marshalls, have diabetes, due to genetics and diet.

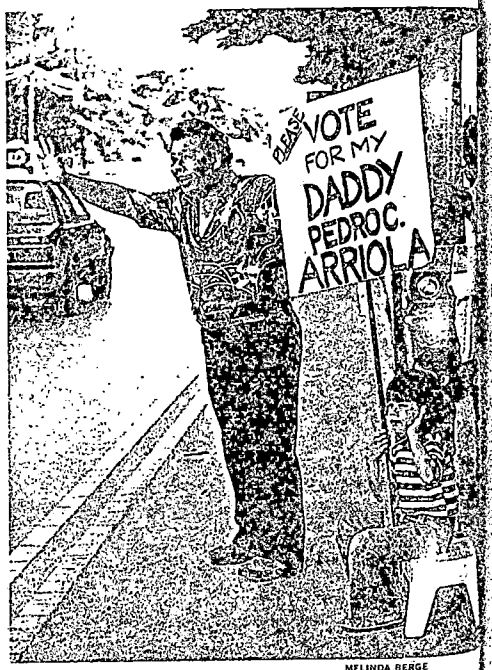
Making the steamy rounds of the several dimly lit, unair-conditioned, and expensive grocery stores, I found Ebeye lacked other things: fresh meat and fish, fresh fruits, fresh vegetables. In the freezer of the largest store there were only a few chickens and two cans of orange juice.

The next day I strolled about neighboring Kwajalein, where the banning of passenger cars gives streets over to the pleasantries of bicycles and foot traffic. The shops were filled with the plenty of their stateside counterparts. And as with U. S. military commissaries worldwide, they were off-limits to the natives who work on the base.

I noted three playing fields on Kwaj, a bowling alley, swimming pool, and golf course. The bulletin board announced the Commodore's Ball up at the Yacht Club, $17.50 a person for cocktails, petit filet mignon, and dancing under the stars.

I was glad my fellow Americans had such a good life on Kwajalein. But I wondered about the stark contrast on Ebeye. So I put some questions to various officials: Why the terrible crowding? It's due, they say, to the traditions of the people and their belief in the extended family. For example, if you are in need and a relative is getting rent money or good wages from Uncle Sam, you move in with the relative.

And why no insulin in the hospital? From Majuro, capital of the Republic of the Marshall Islands, the secretary of health services sends word: "Ebeye never out of insulin."



MELINDA BERGE

Hitching a vote, the daughter of Pedro C. Arriola helps daddy win a seat in the legislature. During a general election last year, American-style politics swept Saipan like a tidal wave, bringing massive rallies with free beer and food, blaring loudspeakers, and posters that papered every vista.

Other officials agreed. Who to believe?

High prices and poor selection of food? It is explained that the merchants on Majuro supply Ebeye's shops and don't appreciate subsidized U. S. competition from Kwaj.

And what about the scant water and electricity? I'm told that new plants will be finished this year.

Shortly after I left the Marshall Islands, the U. S. use agreements on Kwaj expired, and some of the landowners occupied several islands on the missile range, asserting their right to the land and demanding significantly increased rent and direct negotiations with the U. S.

During that uncertain period, the U. S. Congress enacted the Compact of Free Association, which will provide to the Marshall Islands government nearly 400 million dollars over 30 years for payment to the Kwajalein landowners in direct income and for projects. Their development plan calls for a causeway to link Ebeye to six other islands, new roads, elementary schools, a high school, renovated housing, and a new dock.

Hope for Ebeye rises as the walls that enclose it promise to fall.

ALTHOUGH EBEYE is in the worst-case category, its problems are shared to some extent throughout the trust territory. Despite an immense flow of American money, effort, and goodwill, many islands still suffer from a shortage of water and power, poor to nonexistent roads, struggling educational systems, meager public services, few job opportunities, limited natural resources, and, at the top of the list, inadequate health care. Much blame must be laid to the region's geography, especially difficult when it comes to delivering adequate health services.

In the Marshall Islands, as elsewhere, every island is supposed to have a health aide, operating out of a well-equipped dispensary, with access to a radio in the event of an emergency. In a life-or-death situation a patient is picked up by boat or plane, if possible, and taken to the nearest hospital, often hundreds of miles away, or to Hawaii.

The bill can be astronomical. And it is paid for by the government. The Republic of the Marshall Islands is going broke trying to meet the cost of modern medicine. When I was in Majuro, it was reported in the press that the republic's department of health had overspent its budget, and that all other departments would be cut to provide the necessary funds.

I asked President Amata Kabua about the story, and, sadly, he admitted that it was true. "But what are we to do?" he appealed to me. "We are a Christian nation. We can't simply allow people to die when doctors in Honolulu can save their lives."

The Marimed Foundation, established by two altruistic Bostonians, Dr. Lonny Higgins, a gynecologist, and her lawyer husband, David, expects to address this very problem with its specially designed sailing ship, equipped with the latest in medical technology. The Higginses plan to enlist doctors and nurses for limited volunteer service. Sailing among the islands, they will use their diagnostic, surgical, and treatment skills, while teaching preventive medicine.

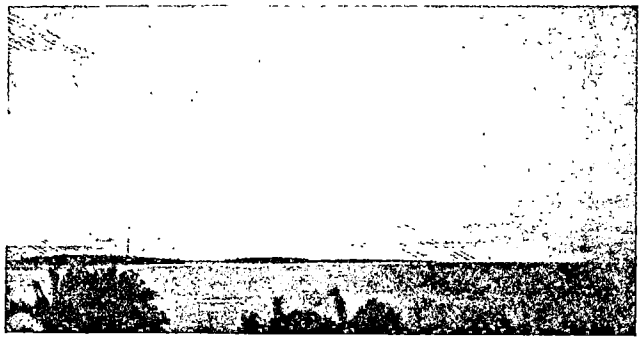
I accompanied the Higginses on a medical excursion to Arno Atoll, a three-hour motorboat trip from Majuro. We arrived at Ine at twilight, but already a huge full moon had risen, creamy white in a gray-blue void. Lonny's supplies went from our motorboat to a rowboat and finally into our arms as we waded ashore through the gentle surf.

A 15-minute stroll down a rutted lane brought us to the dispensary, where we discovered that the health aide was off-island, taking a refresher course in Majuro.

The dispensary was far from clean. The refrigerator didn't function for lack of electric power on the island. The broken toilet was useful only with water supplied by a bucket. The few supplies included a cream for burns, a clamp for an umbilical cord, test tapes for diabetes, vitamins for pregnancy. The single bed even lacked a mattress.

My husband, Pat, and I headed for the beach, where we unrolled our mats and slept under a full moon. Then about 3:30 a.m. we awoke in eerie darkness. Totally unexpected to us, with the impact of a miracle, there was a magnificent full eclipse of the moon.

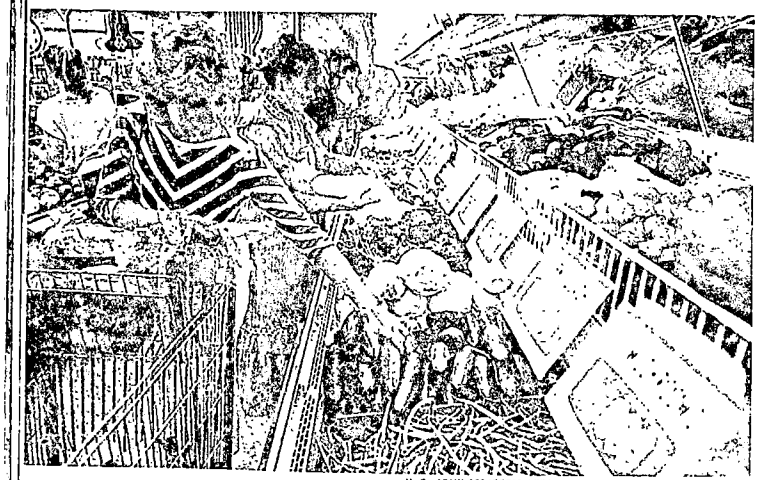
The next day, stripped to the waist in the terrible heat, David Higgins scrubbed down the dispensary walls while Lonny drew simple, colorful pictures of the human reproductive organs as a way of teaching her patients. Then they *(Continued on page 476)*



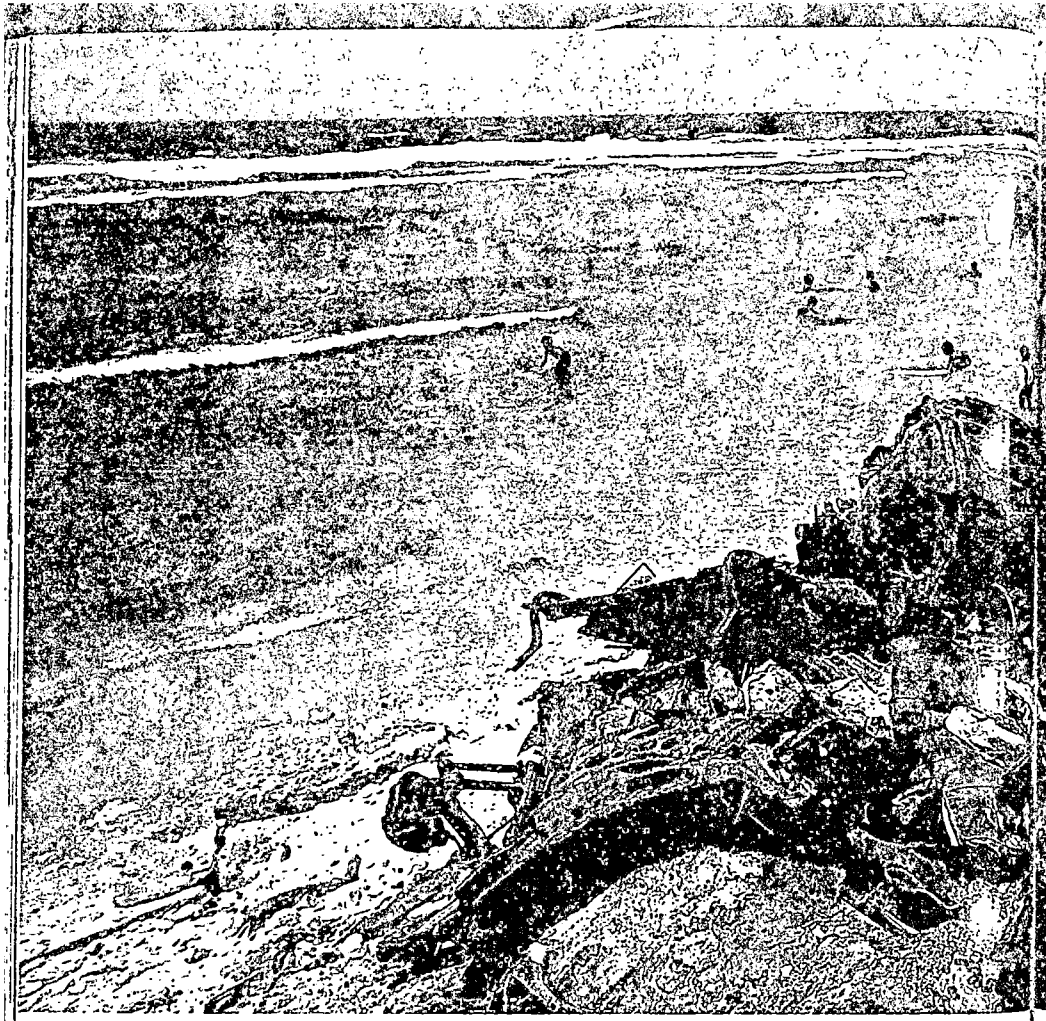
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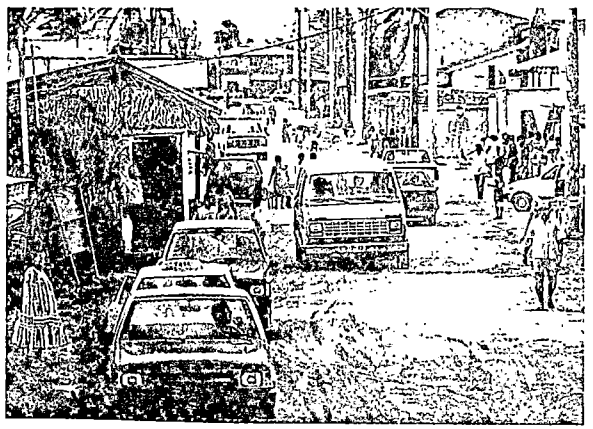
MARSHALL ISLANDS

Oceanic bull's-eye, Kwajalein Atoll is the target for rockets (above) launched 4,500 miles away in California. The 3,000 Americans on the 900-acre island (right)—mostly civilians employed by private contractors to the U. S. Army Strategic Defense Command—enjoy such amenities as the supermarket dubbed "Surfway" (below). Some 8,000 Marshallese, many commuting to jobs on "Kwaj" by boat, occupy 78-acre Ebeye (distant island, right). The U. S. pays more than 10 million dollars a year for use of the Kwajalein land.

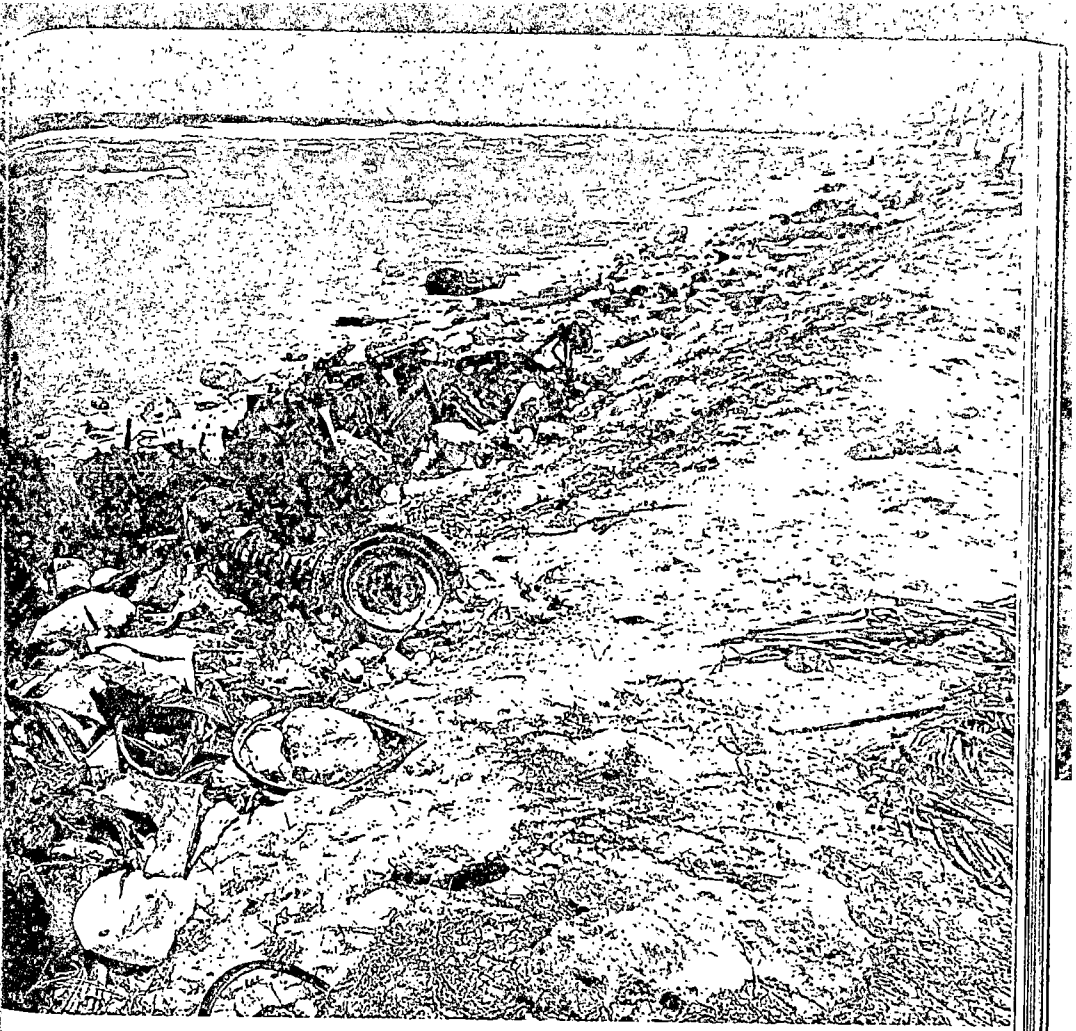


U. S. ARMY STRATEGIC DEFENSE COMMAND (TOP); MELINDA BERGE





Pollution in paradise, junk overwhelms a beach on crowded Ebeye (above). People flock to the island because the Marshallese tradition of extended family obligates an islander with good wages or rent money to care for less fortunate relatives. Ebeye's busy main street (left) contrasts with Kwaj, where private vehicles are forbidden. The U. S. is financing an intensive program to improve living conditions on Ebeye.



Free lunch for senior citizens in Majuro, capital of the Republic of the Marshall Islands, reflects a weakening of the extended family that in earlier times would have provided for its own elderly.

Western-style education, where long hours in the classroom preempt time once spent in traditional pursuits, tends to break down the heritage of island culture. Few young men of Majuro, for example, now know how to sail an outrigger canoe.



ALL BY MELINDA BERGE

(Continued from page 471) began arriving.

That day, assisted by three women who had come with us from Majuro—a public health nurse, a social worker, and Jinnie deBrum, a Marshallese member of the Marimed Board—Dr. Lonny Higgins examined 27 women. She discovered a pelvic mass, a thyroid abnormality, and several bleeding disorders. Of 27 Pap smears taken to Hawaii for testing, six signaled follow-up tests.

And that night another seeming miracle transpired. As darkness fell, we heard singing and saw a procession of lanterns swinging down the road. The island chief and a laughing crowd of women and children had come bearing gifts of bananas, fish, pork, and breadfruit. And time slipped away in dancing, singing, and speeches from a host of grateful hearts.

MOVING EVER WEST, we flew to Kosrae, one of the four Federated States of Micronesia, where in the 19th century diseases brought by traders and American whalers nearly wiped out the native community. Incidentally, I was told that the seagoing visitors of that day so habitually uttered a certain four-letter expletive that islanders gave all white people the name "ohshits."

When the Congregational missionaries arrived, Kosraeans flocked to Christianity. Now the church, clinging to past-century strictness, is Kosrae's most powerful force. Women are modestly clothed—bathing suits are too risqué, even for visitors—and Sundays are strictly for churchgoing.

The American presence today appears beneficial, as we saw upon arrival on Kosrae's enormous new jet runway (pages 478-9), a legacy of the trusteeship and big enough for 727s, although such planes have yet to be scheduled through Kosrae.

We were met by Madison Nena, Kosrae's 34-year-old director of tourism, and Christopher O'Connor, a 25-year-old Peace Corps volunteer assigned to develop tourism. Slender and dark with a neatly trimmed mustache, Chris, a hotelier, came to Kosrae from New York City's Waldorf Astoria, where he worked in guest services.

Aside from the island's beauty the major sight is the Leluh ruins, whose huge stone walls, canals, and kings' tombs speak of a highly developed culture that flourished 500 years ago. Teddy John, Kosrae's historic preservation director, guided us through the jumble of stone, still in private hands and littered with beer cans.

A burly man with black hair and beard, Teddy spoke with deep regret about the condition of the ruins and of his hope that the government could buy the land and stabilize the stone structures. "When I was a boy, water still flowed through the canals, and I could dive off the walls," Teddy told us. "If we could dredge the canals, we could make the place look like the old days."



DAVID HISER

***Tears flow** as a Civic Action Team "Doc" on Yap investigates an injured foot. Composed of men from the United States Army, Navy, and Air Force, Civic Action Teams regularly spend several months on duty in the Federated States of Micronesia, responding to needs identified by the state governments. They build bridges and roads, repair buildings, improve playgrounds, entertain with free movies, and provide medical care.*

When Leluh was at its height, the king and high chiefs owned all the land and lived with their servants in this city of more than a hundred walled compounds. The compounds of royalty were used for burial as well as worship of Kosraean gods.

"Those gods must have been really powerful," Teddy said with a smile, "because Kosraean legend claims that magic moved these stones, since the people had no machines to transport such heavy material."

Teddy invited us to dinner at his two-room, concrete-floored home, where we met his wife, nine children, and a lively group of Americans, mostly government advisers, who like to hang out at Teddy's. Teddy is an admiring listener to the swirling conversation. "I learn so much every night," he told me. He is, in fact, an intellectual but is too innocent and modest to discern it.

Thirteen Americans on the island are in the U. S. Army, part of a Civic Action Team. They live at spick-and-span Camp Wilbur L. Trahan and work on civic projects such as road and bridge construction, government buildings, and school playgrounds. Everybody is invited to their monthly outdoor movies. Hundreds find help from "Doc," their medical corpsman.

The team's Doc, Sgt. Leonard Resler from Boulder City, Nevada, explained: "Each Civic Action Team stays for six months, and we're getting ready to pull out, but I am grateful for this experience. I have the feeling that we have really helped."

THE SAME FEELING prevails at The Village, a hotel in Pohnpei that employs some 50 neighbors to serve guests in but 21 rooms. By employing a large staff only part-time, the innovative American owner-managers, Bob and Patti Arthur, run a first-class hotel while recognizing native habits and traditions.

"The people here value their leisure time," said Patti. "They also need time for their pattern of living. A funeral, for example, takes four days."

The Village demonstrates how tourism might proceed in today's Micronesia. Built on a hillside, the hotel rises in a tropical garden with an open-sided dining, bar, and lobby area. Positioned for privacy, thatch-roofed guest cottages are screened to permit the full sweep of Pacific breezes.

The island's town, Kolonia, is capital of the state of Pohnpei as well as capital of the Federated States of Micronesia. Although a new FSM capitol building is in the planning stage, the seat of government at present is in the remodeled Navy hospital, a one-story frame left from the 1940s. The national congress meets in the old operating room; the president's office was the children's ward.

Calling on President Tosiwo Nakayama, I learned the story of his life—another tale of walls and extraordinary effort to scale them. Nakayama's father was a Japanese businessman sent to Truk before World War II. He married a girl from the island of Ulul in the Namonuito Atoll.

When the Pacific war broke out, the family, now with several children, settled on Dublon in Truk Lagoon, Japanese headquarters. It was from Dublon, at the age of nine, that young Tosiwo heard the "ominous, incessant, ever louder drone" of the U. S. airplanes that sank a Japanese fleet of 60 naval and cargo vessels.*

At the end of the war the United States sent home all the Japanese nationals living in Micronesia, including the elder Nakayama. Deprived of his father, the young Tosiwo took on the responsibility of his family. He went to work and earned enough money to take his mother and sisters back to her relatives on Ulul. Only then, at 16, did Tosiwo voice his ambition: "I want to go to school." He had never spent a day in a classroom up to that time.

Nakayama eventually went to the University of Hawaii on a U. S. government scholarship, where the quality of his mind and personality attracted attention, and he was set on the track of leadership.

What kind of influences shaped the young Nakayama, I wondered. I decided to visit the island of his mother's people, Ulul—a resolve that sent me on the unforgettable voyage of the *Micro Dawn*.

All the outer islands in Micronesia are supposed to be regularly served by such ships, sent by the various governments to deliver supplies (Continued on page 486)

*See "Life Springs From Death in Truk Lagoon," by Sylvia A. Earle, in the May 1976 GEOGRAPHIC.

FEDERATED STATES OF MICRONESIA

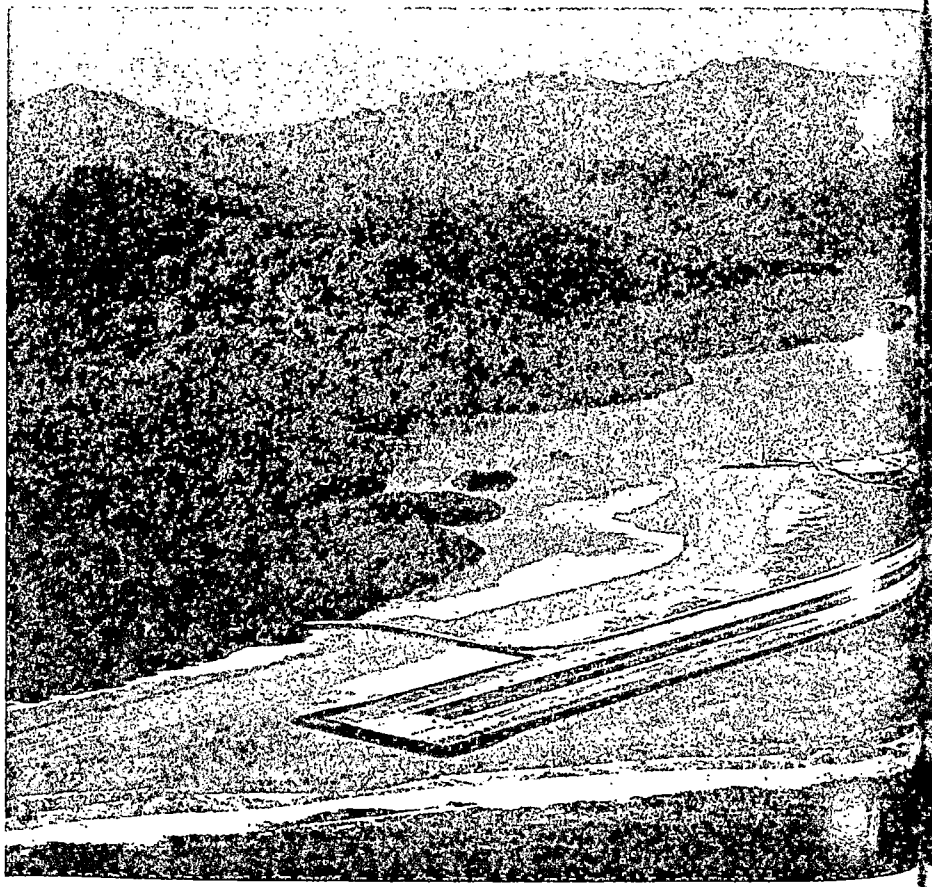
KOSRAE

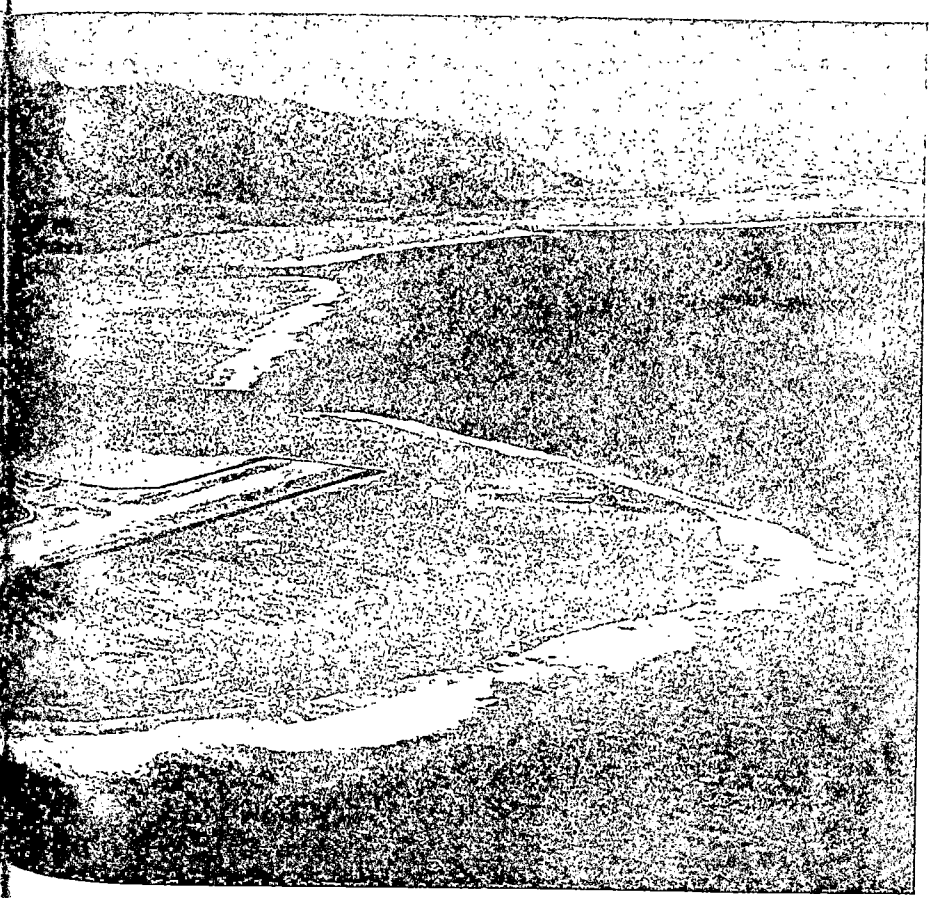
Built with American dollars, a runway (below) long enough for large jets is the gateway to the state of Kosrae, but at present a 16-passenger propeller plane is the biggest aircraft that regularly serves the island, one of the largest in the trust territory. Five hundred years ago the tribes on the island united under a powerful king and built Leluh, a city of more than a hundred basalt-walled compounds threaded by canals. There the king, his servants, and a few nobles lived off the labor of commoners, who farmed and fished.

With the coming of the Europeans, that way of life ended. Diseases brought by whalers and copra traders so ravaged the islanders that at one time only 300 people were counted. Congregational missionaries converted the entire population, and religion is now the chief force ordering social life.

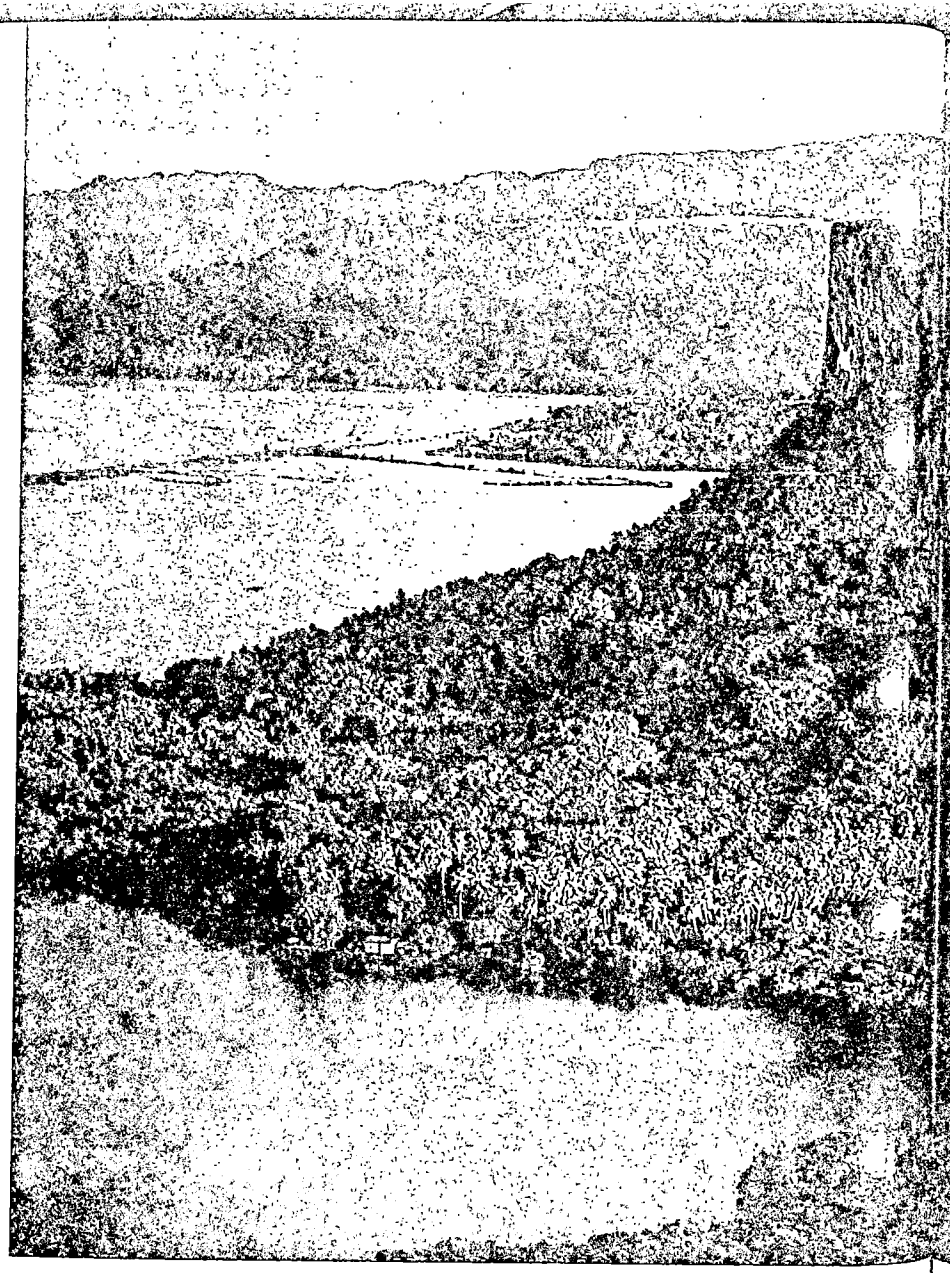
On the economic side Kosrae, noted for its fine tangerines, limes, and oranges, promises to become the vegetable and fruit basket of the Pacific (right). A project is under way to restore giant clams, once plentiful, to the surrounding reef, using juveniles raised in the Micronesian Mariculture Development Center in Palau. And with the ruins of Leluh as an attraction, tourism is viable.

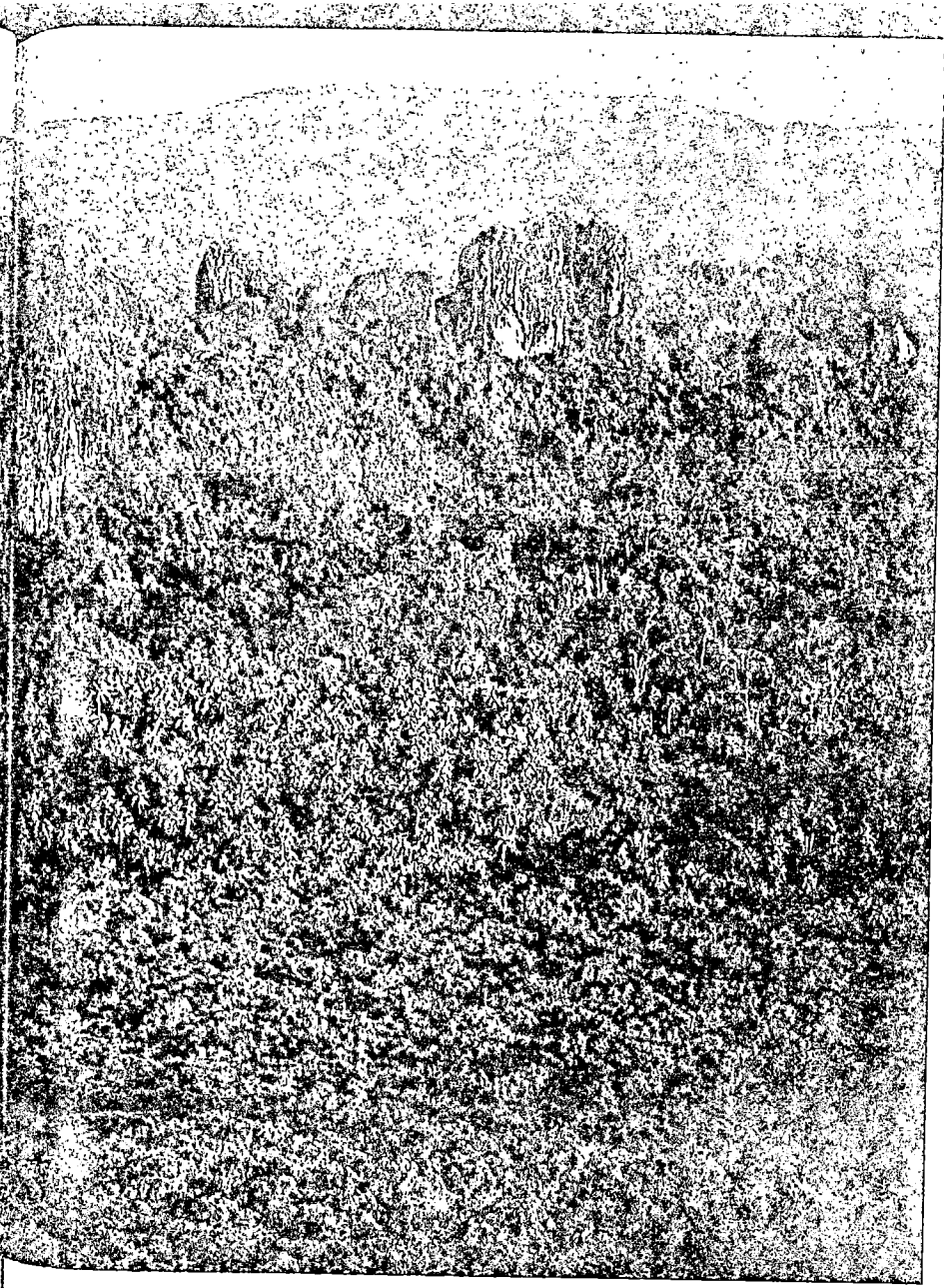






BOTH BY MELINDA BERGE





MELINDA BERGE

FEDERATED STATES OF MICRONESIA

POHNPEI

"Diamond Head of Micronesia," the volcanic plug known as Sokehs Rock helps guide ships to Pohnpei's harbor. The island's tortuous terrain and heavy rainfall contributed to the U. S. military decision to bypass the island during World War II, thus sparing it the ravages of combat. Torrential rains continue to play a beneficent role in the life of Pohnpei, nourishing its lush foliage and floral displays and feeding the countless waterfalls that keep the sound of rushing water often in earshot.

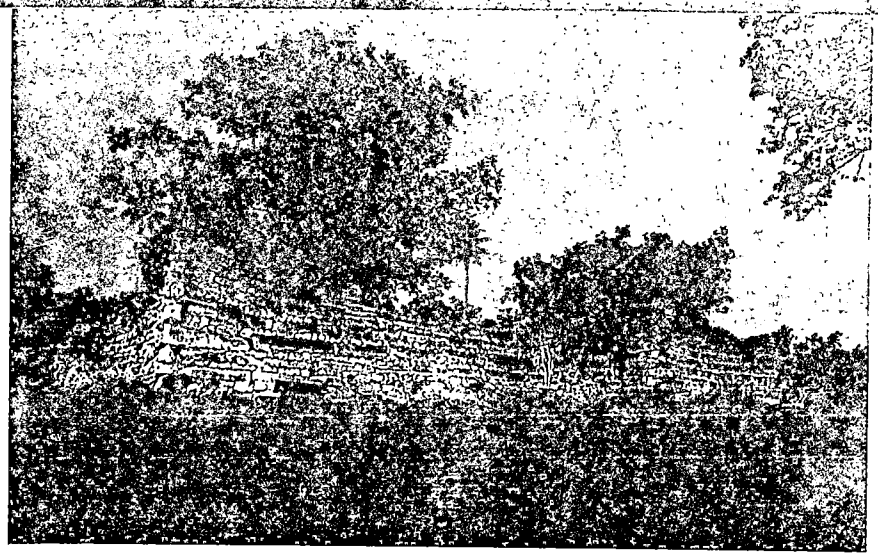
President Tosiwo Nakayama of the Federated States of Micronesia often decries the underdeveloped state of his nation. "Alas," he told the author, "we have no bargaining chips to get more aid for development, because the FSM has nothing the American military wants." But he added, "That's not all bad either."

National Geographic, October 1986

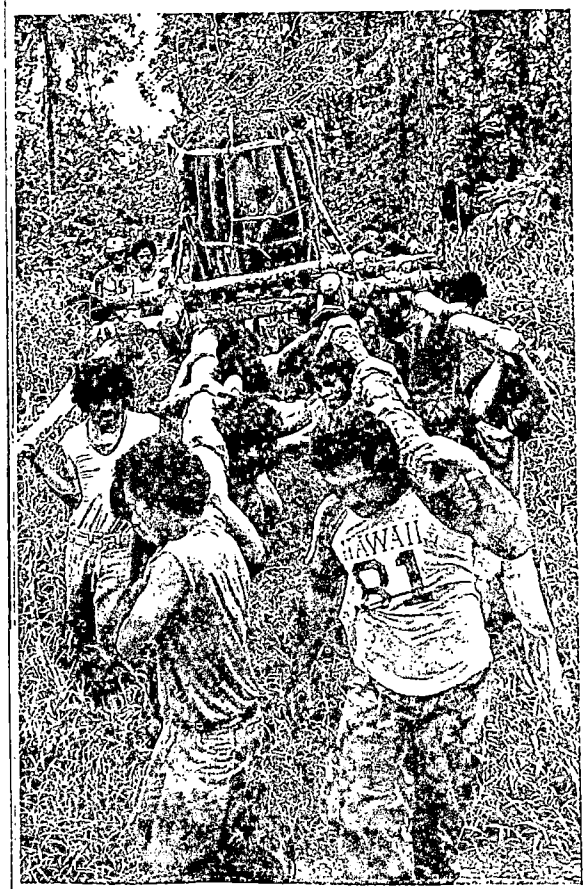
*The way of death on Pohnpei speaks to a way of life steeped in family care, traditional values, and long-revered ceremonies. The body of 80-year-old Tadius Fricht (**below right**) lies in state at his home on Mwahnd Island, a reef just off Pohnpei, as the women of his family keep vigil. Money on his casket is contributed as a token of respect. Although Mr. Fricht will be buried within 24 hours of death because of the island's hot climate, other gifts demonstrating respect will pile up at his home throughout the four-day funeral feast. Most are gifts of food, such as pig, taro, dog—regarded as a delicacy on Pohnpei—and yams.*

*This 1,500-pound yam (**below**), in a cradle borne by 25 men, was grown especially for funeral use. With the feasting, Pohnpeians drink sakau, a slimy, mildly narcotic beverage made from the root of a pepper plant pounded into pulp and strained through hibiscus fiber. After the funeral, in the tradition of sharing, the leftover food is divided and sent home with the mourners.*

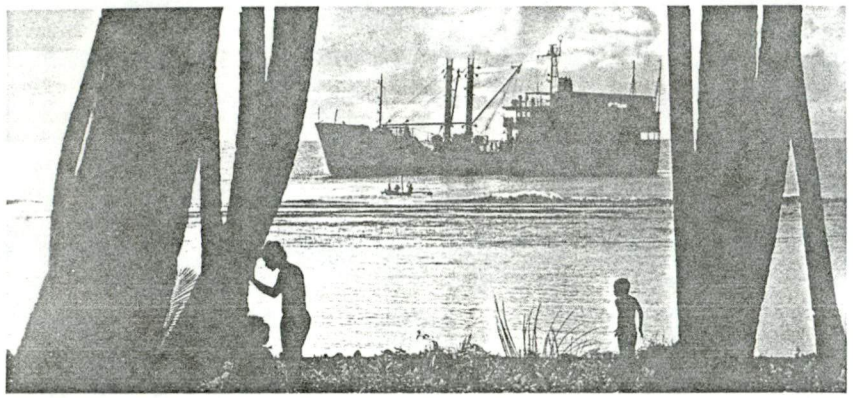
*Although mostly Christians, many of the people of Pohnpei still revere the 700-year-old ruins of Nan Madol (**right**), an immense complex of 93 man-made islets walled by "logs" of basalt, that spread across 150 acres. Its canals still filled with water, this Venice of the Pacific is similar to Leluh on Kosrae but less damaged by time. Nan Madol has been declared a U. S. National Historic Landmark as an aid to its preservation. Here the last light of day lingers on part of the city's outer wall, a shield before a burial vault of Nan Madol's kings.*



ALL BY MELINDA BERGE







FEDERATED STATES OF MICRONESIA

TRUK

*Only link to the outside world, save for radio, the Micro Dawn rides the swells off Pulusuk (**above**). Such government ships irregularly sail from Moen, capital of Truk state, to its various islands, bringing food, supplies, and services. They pick up copra and handicrafts made for sale by the islanders.*

*Outrigger canoes once carried commerce between islands but are now used for lightering cargo, local fishing, or simply for pleasure. Canoe building is still an art on Puluwat (**below**), where Aidnor Bisalen uses an adz to fashion a 14-foot vessel from a breadfruit log. The secrets of canoe building are closely held and passed from father to son.*

*Change exacts a heavy price in Truk state, which has one of the world's highest suicide rates for males from 15 to 24. Authorities cite anger and fear of shaming the family as the major causes. The family of Atarino Pau, a 24-year-old suicide, gathers atop his tomb (**right**) near the family home.*



ALL BY DAVID HISER



(Continued from page 477) and people and pick up island produce—copra, woven mats, handmade rope, and the like. The trips last from one to three weeks, depending on distance.

Sam McPhetres warned me: "*All* field trips are late getting off, *all* take longer than expected, and there is no regular schedule." On a tight schedule myself, I had hoped for a one-week trip out of Moen, the capital of Truk, and was assured that I would have it. Sam volunteered to go along. And the governor of Truk assigned John Uruo to accompany us, my first meeting with the young man from Puluwat. Things looked good.

ON THE SAILING DAY we moved on board the *Micro Dawn* and watched it being loaded. Into the forward cargo hold went the stock for island customers to buy after they had acquired some cash from the sale of their copra. Into the main hold went box after box of canned goods and other foodstuffs from the United States: sweet potatoes, peaches, evaporated milk, soy sauce, mixed vegetables, shortening, green beans, and huge bags of rice, flour, and sugar—much of it destined for the school-lunch program.

Then came the passengers, the men in their *thus* with sleeping mats and lethal-looking machetes; the women with coconut-frond-wrapped parcels of food and bags of coconuts for drinking; the children, racing madly around the ship.

The cabin passengers were a dedicated little band of government people working to bring some services to the islands: two educators testing students, a nutritionist checking on school food programs, a health officer examining needs of the handicapped, and a young American physician, Dr. Don Preston, a graduate of Oregon Health Sciences University serving in the Public Health Service, accompanied by a health aide. They would inoculate the infants and tackle any medical problem that arose.

Another cabin passenger, Father John Fahey, a Jesuit, joined us at railside. He ministers to the people of Pulap, Tamatam, Puluwat, and Pulusuk, an island group in Truk state collectively called the Westerns.

"But isn't the *Micro Dawn* going to Namonuito?" I inquired. "Yes, but *after* the Westerns," replied the priest. And sure enough, that night we sailed for Pulap, home island of the ship's captain.

I tried to see things as philosophically as Father Fahey, who laughingly explained: "Out here we are constantly faced with either a crisis or an emergency. We are often chagrined but not surprised."

We stayed at Pulap four days, living out a pattern that would repeat itself at each stop. Outside the island's encircling reef the *Micro Dawn* launched two deck boats with outboard motors that shuttled back and forth throughout the day.

We all went ashore, leaping from a ladder on the side of the ship into a small boat as it bobbed up and down in the heavy swells, hoping not to fall into the sea and attract the four enormous sharks that hung around the stern feeding on ship's garbage.

On the island the men loaded copra onto the boats while the women barbecued a delicacy, turkey tails, bought frozen from ship's stores. The doctor set up a clinic, and the government people went about their respective assignments.

We sailed for Tamatam, 15 minutes away, and spent another two days—a delay that killed any prospect of reaching the rest of the Westerns, much less Ulul, in the hoped-for span of a week. So, we radioed Moen to send a chartered boat to pick us up at Puluwat, the *Micro Dawn*'s next stop, and were told that a 40-foot fishing boat, *Miss Namonuito*, would come.

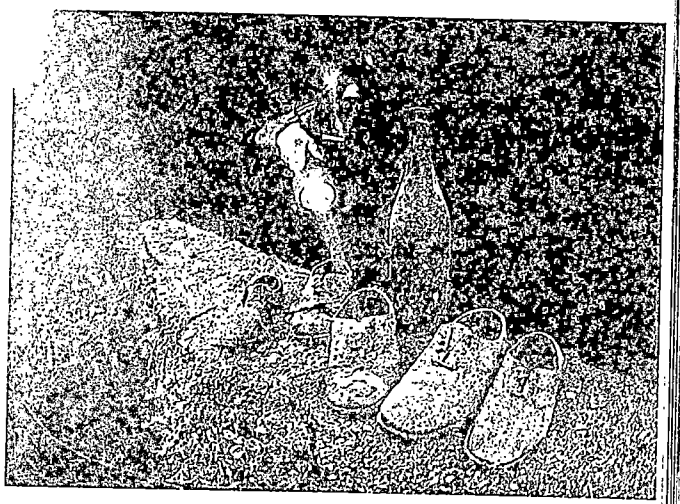
Then on to Puluwat, where John Uruo was clearly a star as the local boy who made good. He introduced me to Eric Sanford, a Peace Corps volunteer, who told me a story. After a 1982 cholera epidemic in Truk, a campaign to provide all the islanders with latrines got under way. Eric himself helped install 60 of them.

"I spoke to each family, emphasizing the importance of toilets to everyone's health," Eric said. "Yet today only 10 percent of the islanders use them." On the other hand, Eric also helped build 29 water catchment tanks and improve seven others, providing healthier drinking water and the frequent showers that everybody loves to take.

And the islanders are ambitious for their children. Although Truk state supports an elementary school on the island, junior and senior high school students once had to go to Ulul for classes. To keep their early teenagers at home, Puluwat built the Puluwat Middle School, a cluster of cottages with thatched roofs, latticed walls, and sand for floors. Puluwat's own college graduates have returned to staff the school.

On our third day at Puluwat, the chartered boat *Miss Namonuito* finally turned up after having been lost. Since the boat's radio didn't function while the motor was running and the 26-year-old first-time captain failed to inspire confidence, we decided to stay with the *Micro Dawn*, despite whatever time it took.

After a stop at Pulusuk the *Micro Dawn* lost an engine as well as its radar and ran low on both food and water. Under the circumstances the captain decided to return directly to Moen to refit and resupply. We sailed into Truk's capital 11 days after leaving it. I never did get to President Nakayama's island of Ulul.



Tragedy of war turns into a windfall. During World War II American aircraft sank a fleet of some 60 Japanese vessels in Truk Lagoon. The sunken ships entombed many of the possessions of the dead, while live coral and tropical fish gradually turned the graveyard into a choice destination for hundreds of scuba divers from around the globe. These shoes and a wine bottle may well have been set out by a guide for a diver to "discover," before being stored away for the next visitors to "find."

DAVID HISER

But a footnote. A report came to me from Moen: "I thought you'd like to hear what you missed by not taking the *Miss Namonuito* back to Moen. Once more the crew got lost, and this time wound up in Ulul. Then they set out from Ulul and got lost again. At last radio report the captain was going to give up sailing. When we stopped by Ulul this trip to drop off the high school students, there was the *Miss Namonuito*, resigned to exile."

WHEN WE LEFT TRUK, we flew, of course, on Air Mike, the nickname for Continental/Air Micronesia, the only jet service linking all the new nations of Micronesia. But Air Mike is more than an airline, it is a lifeline. Dividing planes into cargo and passenger sections, it carries everything, including automobiles.

The airline's "island hopper" is a kind of trolley car of the Pacific, with the down-home flavor of the neighborhood streetcar. Stopping at island after island, the 727 picks up presidents and governors, missionaries and teachers, entrepreneurs and lawyers—all of whom know one another. To travel on Air Mike is like being at a party—daily evidence of how small the vast Pacific truly is.

For Air Mike's arrivals on Yap, the last of the four states of the Federated States of Micronesia that I would cover, the sense of party heightened. A crowd of Yapese, led by Governor John Mangefel, met the plane, to welcome incoming passengers and visit with those on-going, who invariably debark for just such talks during the short layover.

The air terminal is a metal-roofed shed divided by woven bamboo half walls. Its gift shop is a counter where trays of betel nuts are sold; a snack (Continued on page 492)



DAVID HISER

FEDERATED STATES OF MICRONESIA

YAP

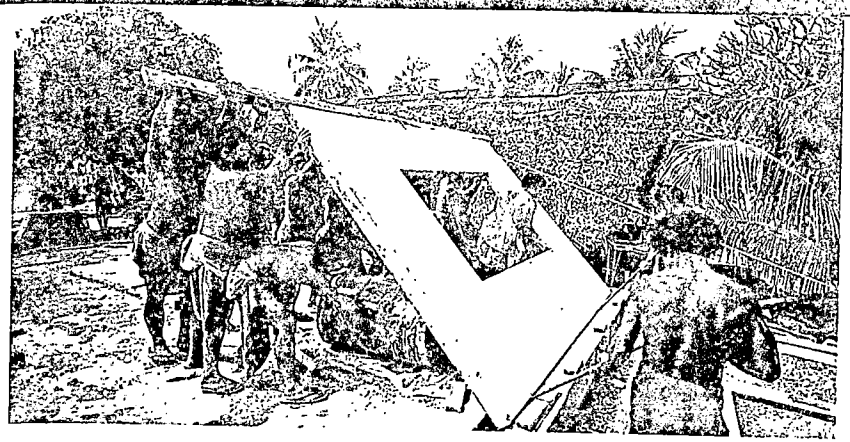
No female eyes may watch these male dancers in the village of Omin on Yap as they dance out the erotic story of the capture of a young woman from another village and her fate in the men's house of her captors. Many people of Yap state, the most traditional of the islands of Micronesia, still cling to their own island dress and abide by old-time taboos that separate villages by caste, with the upper, or "pure," caste expecting menial labor from the lower, "polluted" caste.

Except in the most educated families, women of both castes are regarded as below men, and many live today much as their ancestors did. But change is coming. An American-style high school enrolls both boys and girls, and bright students often have a chance for higher education, regardless of their village background. There is even a troop of Girl Scouts on Yap.

Ruled by custom, women of Mogmog, an island in Ulithi Atoll, while away the day in the ipul, *or women's house, where they must remain during their menstrual period. Most women enjoy this break from their normal labors and spend the time happily talking or weaving on looms, at left and upper right.*

The onset of puberty once called forth a far-reaching set of taboos throughout the islands of Yap. Today only the most remote still require a young girl, at the first sign of her first period, to head immediately for the women's house. As she approaches, the women within begin to chant loud enough for the village to hear: "The menstruating one, ho-o-o!" This triggers hours of erotic dances by both the women in the house and the men of the village. Living in the women's house, the girl may not cook food for the men or eat with others for eight days; after another six days she may leave, but then only to live apart in her own hut.

As these taboos disappear, so too do bamboo and thatch building materials give way to more typhoon-resistant concrete walls. These men (right) raise such a wall for a new house on Mogmog.



BOTH BY DAVID HISER



REPUBLIC OF

PALAU

Second only to fuel oil in import value, beer comes by the containerful to Palau (left). Of more lasting value, the Micronesian Occupational College in Koror, capital of the Republic of Palau, offers practical courses in a part of the world where technical skills are limited, and the arrival of an electrician on an island is welcome news. Young men and women taking the police-science course break tradition by training together. Virginia Ikeye (right) practices defense against an assault.

Putting his talents to work while serving time in the Koror jail, a prisoner carves a Palauan legend in wood to earn income (below). The concept of storyboards was introduced by a Japanese artist during Japan's occupation of Palau and adapted by the islanders to record their traditions.



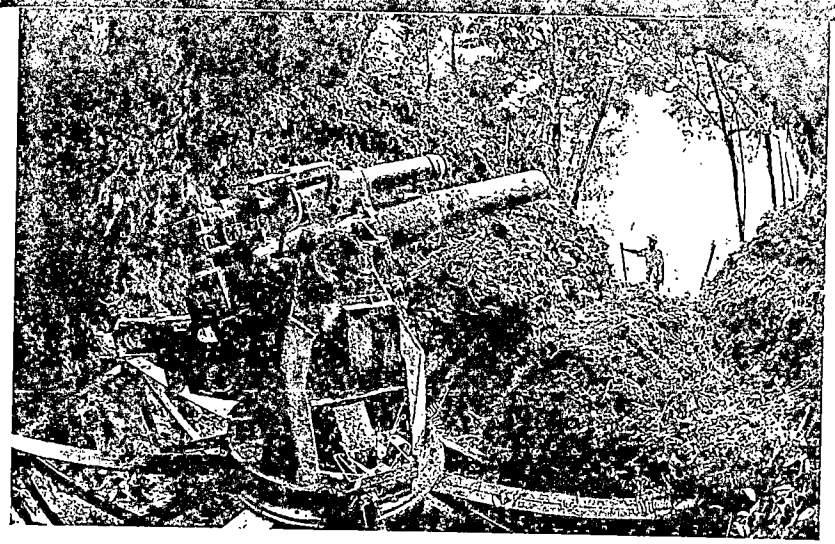


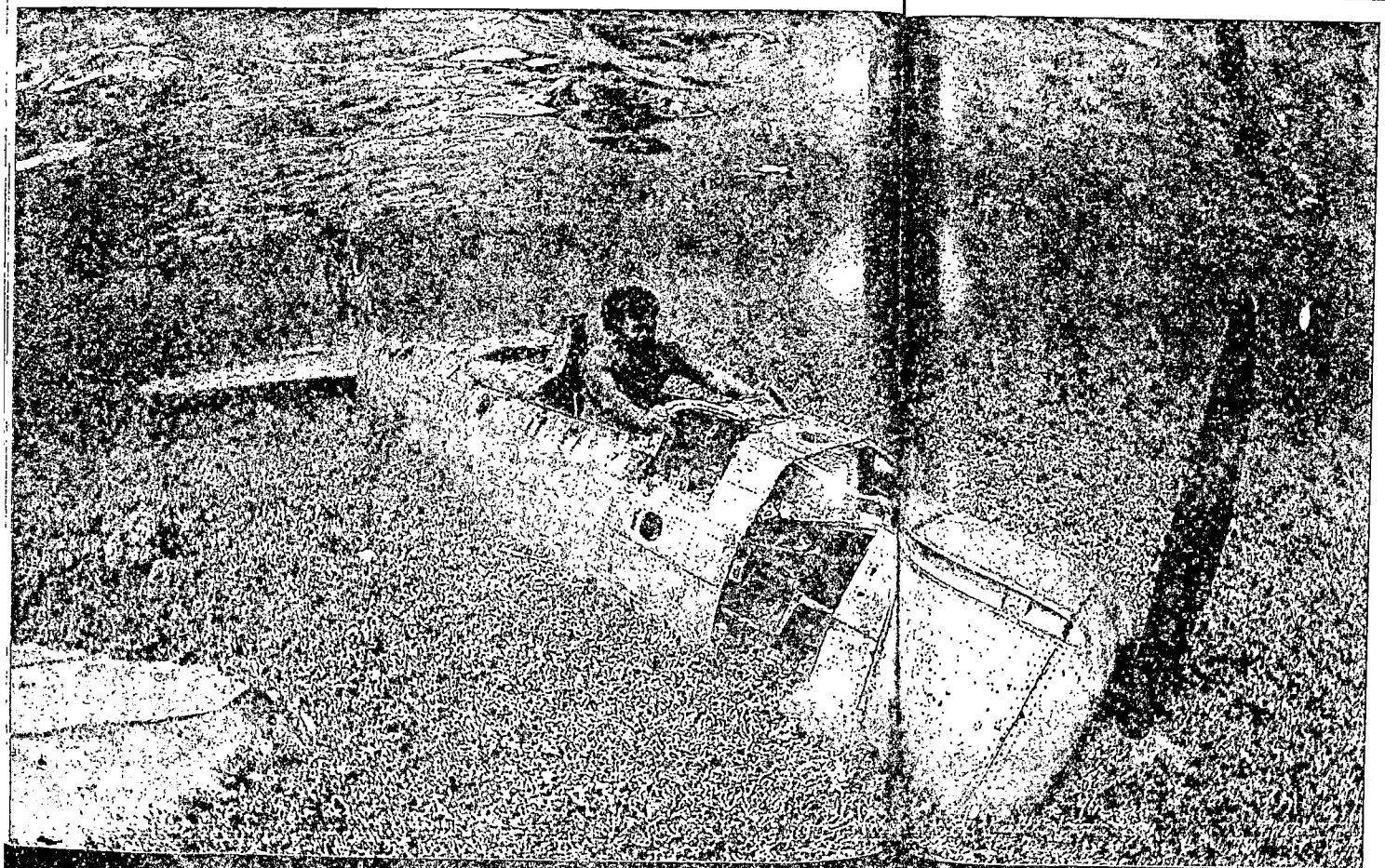
ALL BY DAVID HISER

*Geography added to the carnage in the battle for Peleliu, one of the bloodiest in the Pacific in World War II, costing more than 13,000 Japanese and American lives. From the air, island heights looked like rolling hills, but, bared of foliage by shelling and flamethrowers, they showed up as a horror for attacking Americans—jagged coral in bizarre shapes pocked with caves that the Japanese had fortified (**right**). Now Peleliu is dotted with memorials (**lower right**) to men of both sides, and many survivors return for visits that give the island a steady income. A downed Japanese Zero (**below**), near Koror, lies in waters shallow enough for visitors to drop into the cockpit.*

Another important source of Peleliu income is illegal: the growing of marijuana, usually in 50-gallon oil drums. During one raid in 1983 police identified 16 fields from the air. On the ground, they counted 216 plants in one plot alone. "They were laid out in perfect rows," recalls police officer Bill Stinnett, the leader of the raid. Recently it was estimated that authorities on Peleliu in one raid seized marijuana worth several times the entire annual budget of the state—$120,000.

Government is a third source of island income. When the author visited Peleliu on election day last year, she learned that although only 400 Peleliuans live on the island, five candidates were running for governor, with an undetermined number standing for lieutenant governor and the state legislature—a situation similar to that in Palau's other 15 states. "The most overgoverned place on earth," says Fred Radewagen, publisher of the Washington Pacific Report and a longtime observer of Micronesia.







ALL BY DAVID HISER

(Continued from page 493) one Sunday, showing us, himself, the incredible beauty of his realm. In white shorts and shirt, devil-may-care at the wheel of his own speedboat, President Salii took us darting among the myriad Rock Islands, onetime coral reefs that through time have been lifted above the sea, carved by wave action, and dressed in tropical foliage (pages 462-3).

"There are a thousand private beaches here, just a quick boat ride from our hotels," he said with a smile that transformed his face. "And a million wonders in the water."

Snorkeling, I saw live soft coral waving in a rainbow of hues and tropical fish in a fantasy of sizes, shapes, colors, and markings, representing at least 1,500 types. We paddled over giant clams, some four and a half feet in diameter and weighing 200 pounds, believed to be more than 60 years old. We marveled that these beautiful creatures grow so huge, thanks to symbiosis with tiny but abundant one-celled algae. This natural food production encourages several Micronesian islands to farm the clams for human consumption.

President Salii may be fun-loving on his day off, but he takes his job seriously. After Palau's first president, Haruo Remeliik, was assassinated in June 1985, Salii ran for president, promising to resolve the impasse with the United States that had prevented the negotiation of a compact.

The problem? The Palauans had voted for a constitution that banned nuclear devices. Salii then initialed a compact agreement with the U. S. allowing American ships and planes of all types to operate in Palau. A court ruling held the compact illegal without a 75 percent referendum vote, a constitutional stipulation.

Salii dissented, arguing for a more flexible interpretation of the constitution: "It does not say we cannot allow nuclear-powered ships if they are *in transit*." If an appeal fails, he could ask his countrymen to give him the 75 percent endorsement at the polls. Difficult? Maybe. But the agreement won a 72 percent referendum last February.

The Palau compact also allows the American military the option of using the nation's big island of Babelthuap for bases if the U. S. should lose those in the Philippines.

At the end I returned to Saipan and sought out Governor Pedro P. Tenorio of the new Northern Marianas commonwealth. We lunched together looking out on the gardens of a luxury hotel filled with Japanese honeymooners, as are most hotels in Saipan. Japanese money had built the hotels with foreign labor, because the labor force on Saipan, as elsewhere throughout Micronesia, is meager and largely untrained.

"The Japanese didn't treat us badly before World War II," said Governor "Pete" Tenorio. "Their policy, I believe, was to keep us native Chamorros out of harm's way. Before the Americans invaded Saipan in 1944, the Japanese had us move from our home on the coast to our farm in the hills. We kids never knew about the suicides until later."



DAVID HISER

At gift-giving time at Xavier High School on Truk, Santa Claus, wearing a traditional thu, hands out gaily wrapped practical gifts such as corned beef, toothpaste, and soft drinks. This school, offering a liberal-arts education to some of the best young minds in Micronesia, and the Pohnpei Agriculture and Trade School are run by Jesuits. Both are sorely needed in the Pacific's emerging nations.

Believing surrender dishonorable and fearing that victorious Americans would kill, torture, and rape, hundreds of Japanese settlers and soldiers leapt to their death from cliffs now known as Banzai and Suicide.

I had stood atop Banzai Cliff, rising sheer from the foaming sea, and, in my mind's eye, saw the horror. Whole families came to jump, the children lined up by age with the youngest at cliff's edge. On command, each child pushed off the one in front, until the father pushed the mother and he turned and jumped with his back to the sea, so as not to lose his nerve. And all the while, Americans in small boats offshore broadcast pleas in Japanese for them not to jump and attempted to save those who survived.

The governor grew up to go to high school and college on Guam, working his way. He started his business career on Saipan with a single gas pump that led to a rental agency for jukeboxes and electronic games, then slot machines, and now poker machines, a popular hotel entertainment.

But politics is Governor Tenorio's deepest interest, as I observed firsthand during his run for a second term as governor. The campaign was a corker, with public debates turned wild with accusations, massive rallies fueled by free beer and food, newspaper crusades, and illustrated posters nailed to every tree and post. The political tempest was brewed in the teapot of a mere 7,000 voters, 90 percent on Saipan, virtually all the rest on the islands of Rota and Tinian.

AS AMERICAN as the election was, however, Janet McCoy, the High Commissioner of the Trust Territory of the Pacific, sees the islanders as little changed by the U. S. presence in fundamental values and sense of identity. "Of course, I've seen the improvements brought by our country," she told me, listing airplane runways and COMSAT stations in each capital, maternal and child health-care programs, Head Start classes, and many college-educated young people. "But what I see most is a group of people who, down the centuries, through occupation by four totally different governments—Spanish, German, Japanese, and American—have managed to retain their own culture. They have remained true to their own beliefs and ways of life, have never truly been assimilated, and are now, at last, free to govern themselves, to make their own decisions, to handle their own affairs.

"The best thing we may have done is to help educate and train exceptional island leaders," she said. "In the four and a half years I have been here, I've seen them grow and mature, at home and at the UN."

Lazarus Salii too had spoken of these leaders. They had all once served together in the territory-wide Congress of Micronesia—FSM President Nakayama and Bethwel Henry, Speaker of the FSM Congress; Governor Resio S. Moses of Pohnpei, Governor Mangefel of Yap, Governor Tenorio of the Northern Marianas, President Kabua of the Marshalls, and President Salii himself. The Congress of Micronesia had limited power, subject to veto by the U. S. high commissioner but with an advise-and-consent voice in appointments. It was their training ground—and they had all been together.

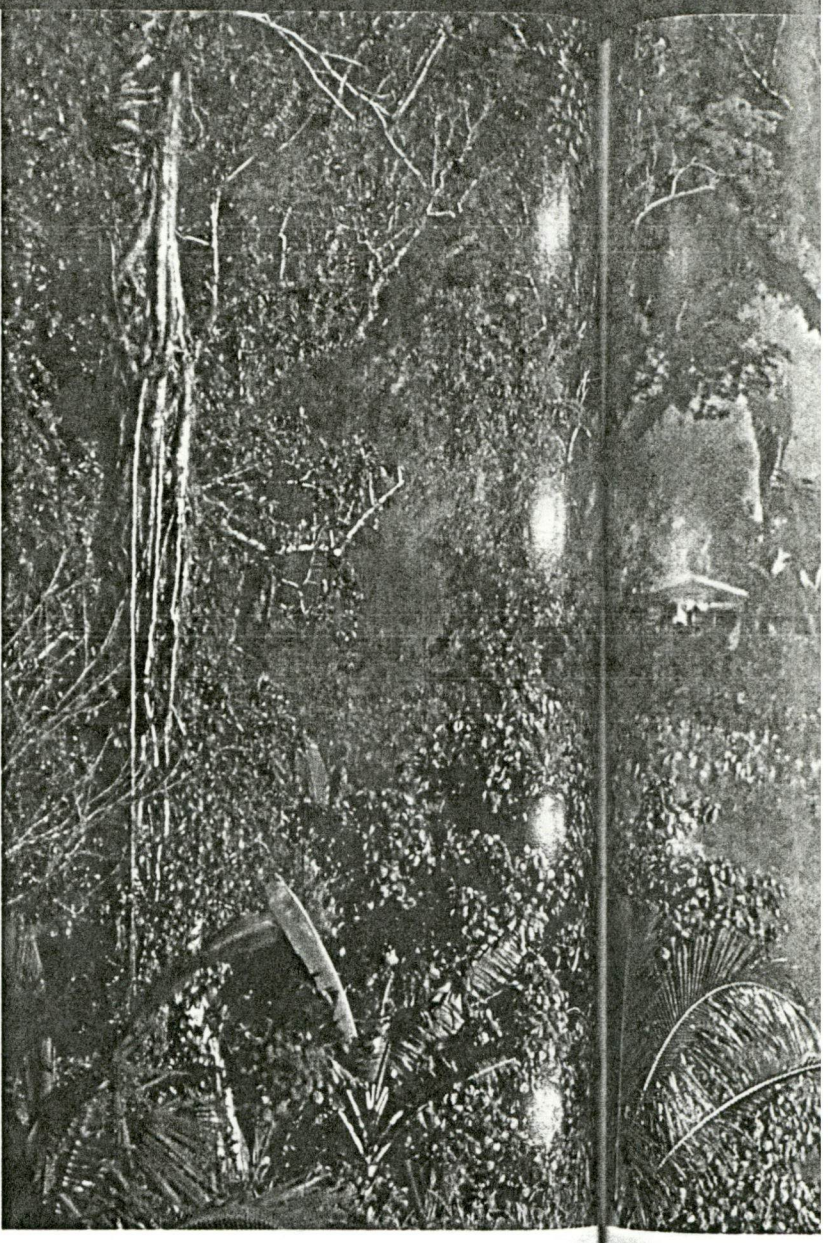
"There was a time when many of us hoped," said Salii, "that we could have a United States of Micronesia—one nation. But it was not to be. . . ."

I remember my last meeting in the Federated States with Tosiwo Nakayama, Bethwel Henry, and Resio Moses. I had invited them and their wives to lunch at The Village on Pohnpei, and we were served delicious fresh crab and breadfruit salad in the big, breeze-swept dining room. As we lingered over glasses of white wine, a tropical storm blew up, and in the fury of wind and rain we seemed to draw closer to one another.

Once I had mentioned to President Nakayama that I had heard the American administration of the trust territory described as the "scandal of the Pacific." And he had been quick to respond. "Not so. We owe everything to the United States. You gave us our freedom, the right to speak our minds. And education."

Now he spoke again of the United States and the difficulty of having a brother so big, so powerful, so flaunting with nuclear power. But it was of a family that he spoke; people in the islands understand about families.

As for me, I felt I had been witness at a birth in that family. The birth of nations that are forever bound by memory of the days they were one, in trust. □



The tall trees of 'Upolu *shelter small farm plots, where the smoke from stone ovens on a Sunday morning hangs heavy as fog. Western Samoans live mainly by subsistence farming, largely abandoned by their cousins on American Samoa.*

was left with seven children and very little money," said this 89-year-old grande dame of the Pacific, daughter of a Samoan mother and an English father. Aggie denies being James Michener's inspiration for the character of Bloody Mary in *South Pacific*.

"I bought some whiskey and made a little bar," she said. "A few tables, a few mats on the floor, a kitchen out back. And I started to put people up."

Today the hotel has 120 pleasant rooms encircling a lush tropical garden. The dining room serves the best food in Samoa, including such local dishes as *palusami*—coconut cream baked in young taro leaves. After dinner Aggie often mingles with the guests and can be persuaded to dance the *siva:* "It makes me happy to dance. If I didn't, I think I'd be in a wheelchair."

Two years ago Aggie received a surprise from Queen Elizabeth: "When I read the letter that I was to get the QSO [Queen's Service Order], I nearly passed out. The New Zealand high commissioner came here and pinned me. We had a big party. The medal was so heavy, I said to him, 'You know I have only a small chest; now you flatten it more!' I always say what I think. That's my trouble.

"I'm frightened of the new airport," she told me. "The big planes with hundreds of people coming in—the island can't take them. This is a pretty little place. I don't want to see it spoiled."

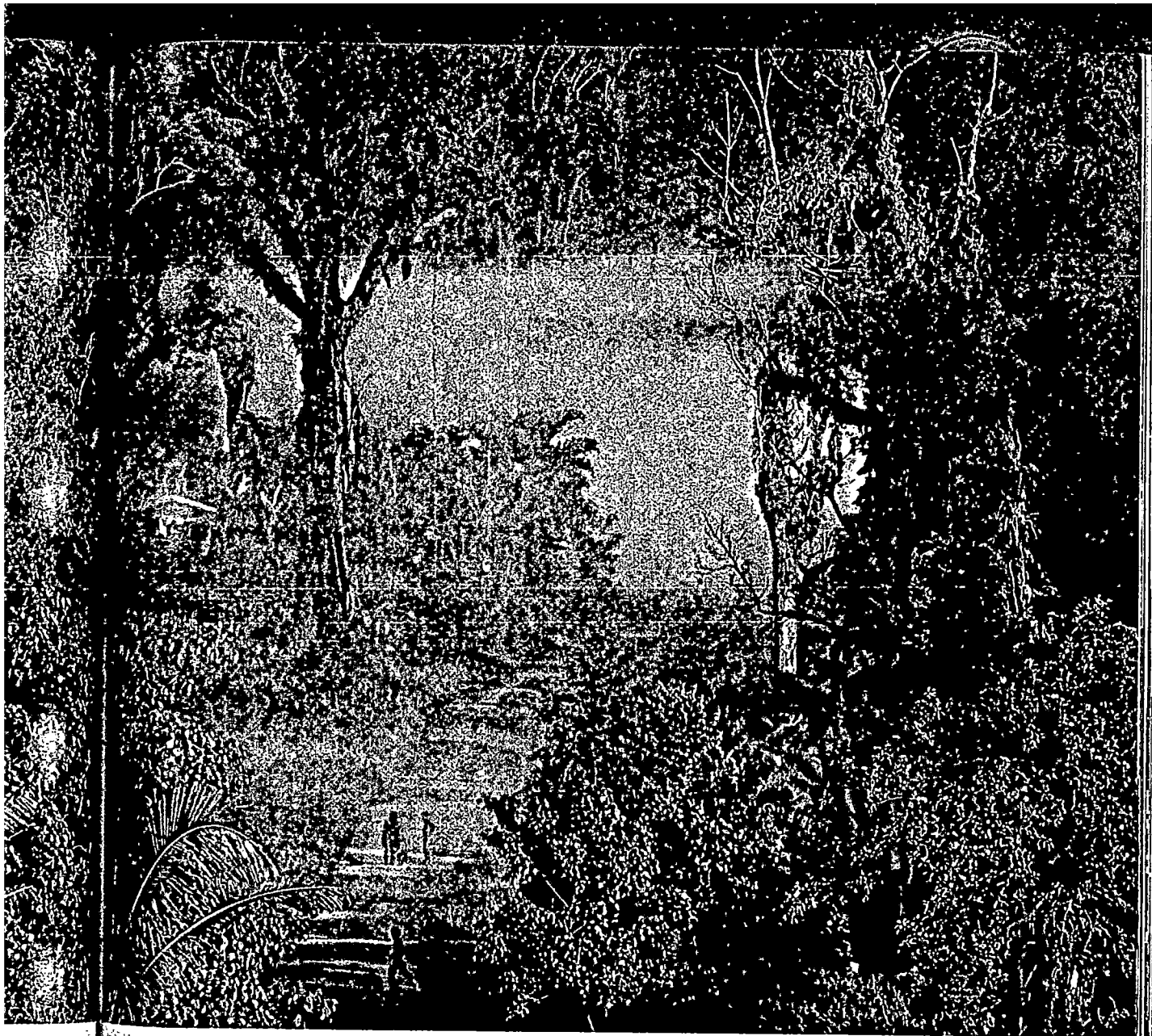
Aggie is also disturbed by what she feels is a growing trend: "There are too many people sitting around relying on money from family overseas. They should be working the land."

So-called overseas remittances, 20 million dollars last year (much of it from American Samoa), are a big chunk of the economy. The country as a whole receives aid too—some 15 million dollars last year from a multitude of foreign sources. But the fact is that most people *are* working the land.

"AGRICULTURE is the backbone of our economy," said Prime Minister Tofilau Eti Alesana, a large cordial man. "In 1984 our exports totaled 15 million dollars, three times the 1981 figure. Growers are getting more for their products, but the cost of living is going up. We need to stimulate foreign exchange. That means we must curb imports and export even more."

The government controls extensive tracts of cultivated land, mainly in coconuts and cacao. It also controls prices paid to small producers, most of whom farm at or just above the subsistence level. There are a growing number of progressive farmers, however, who look at farming as a business.

One of those is Birdsall Ala'ilima, who



works 350 acres in the remote eastern uplands of 'Upolu that his matai father cleared in the 1950s. Birdie and his wife, Marléne, and their four small children live in a frame house not far from spectacular 228-foot-high Sopo'aga Falls. Staying with the family when I visited was Birdie's sister Sisilia, a medical student at the University of Hawaii.

"Cattle used to be our mainstay," said Birdie, as he showed me around the plantation. "But we were having problems with theft. So now it's coconuts. We've been making copra recently," he said, pointing to the drying shed, "though we would prefer to deal in whole nuts.

"Economic planning by the government has been terrible. Two major industries here are a cigarette factory and a brewery: The tobacco is all imported, and the ingredients for the beer are all imported. The government should be developing local industry to encourage local products. Like integrated processing of coconuts—using the whole nut, not just the meat."

Back at the house, he and Sisi expanded on the idea. "The technology has been around," said Sisi, "but Third World countries have been slow to exploit it. The husk makes coir fiber, twisted fiber used in car seats. The shells make high-quality activated charcoal—industry uses it in anti-pollution equipment. And coconut milk has potential as a carbonated beverage."

"The price for a nut now is six cents," said

Birdie. "With integrated processing it could be 14 cents."

The Ala'ilimas had started a petition among nearby villages in support of the idea and planned to present it to the government. "In this place," said Birdie, "it's hard to get action as an individual."

The petition is the first act of what they hope will be a national grass-roots farmers association. "People haven't been getting a fair price from the government," said Birdie. A newsletter would inform villages about prices, markets, and new techniques.

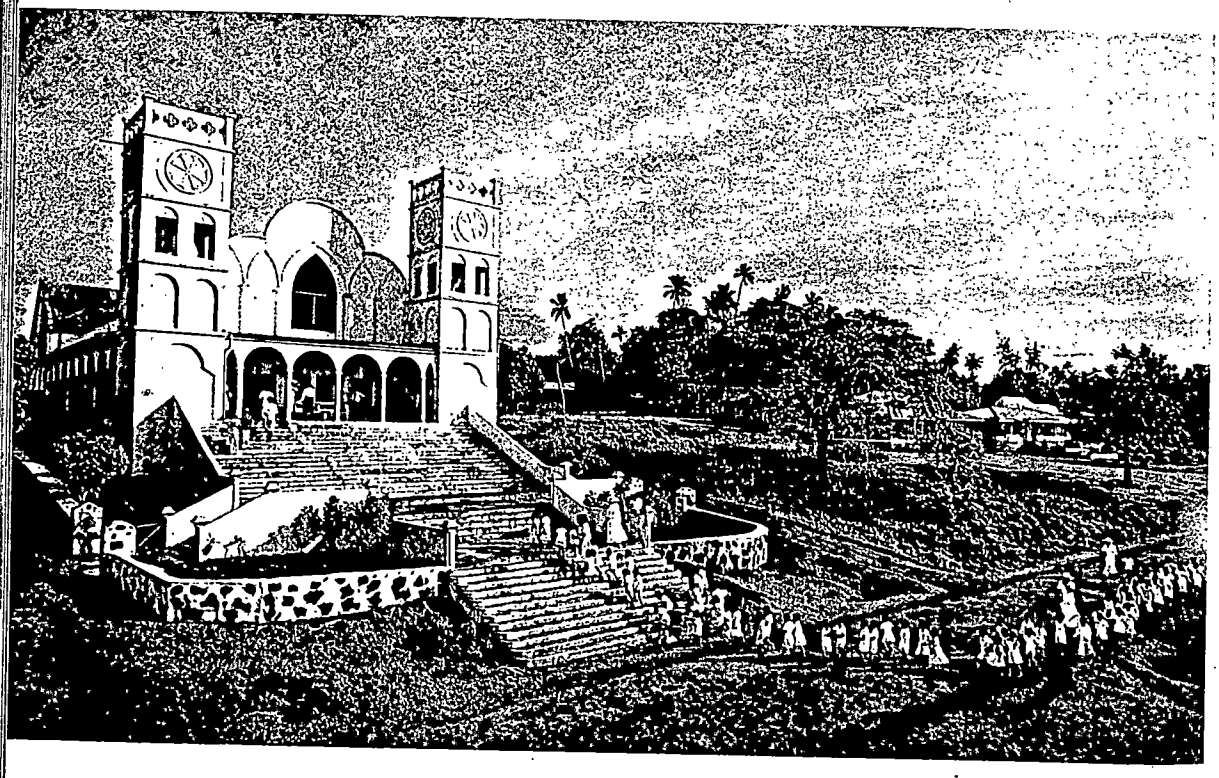
Sisi had taken a semester off to help form the association, yet sounded a note of reserve: "By giving this information to the villages, we are implying that their lives have been incomplete. But as far as they're concerned, their lives are complete and always have been. If government and progress just disappeared, the villages would survive. But the farmers should know their options and decide the future for themselves."

As soon as the association got on its feet, Sisi was going back to Hawaii but vowed to return and practice medicine in the villages. "The country has need of doctors," she said.

Sisi's return will be an exception to the rule. Thousands of people leave Western Samoa every year for American Samoa, New Zealand, and the U. S. While that migration offsets a high birthrate (nearly half the population is under 15), many who leave are educated young adults—the hope of the future. Returning physicians are especially welcome and equally rare.

"The average salary for doctors here is something like $5,000 a year," said Director of Public Health Dr. Walter Vermeulen in his Apia office. "And we are at the top of the wage scale. That's not much motivation to come back. The sirens of affluence are very strong."

Vermeulen, a warm, graying man in his mid-40s, is Belgian by birth but married a Samoan and became a naturalized citizen.





Worship wears white *on Sunday morning as women in flowing puletasi escort children to the Congregational church at Sapapali'i on Savai'i* ***(above)****. Praying youngsters close their eyes in rapt concentration* ***(right)****. Here the Reverend John Williams of the London Missionary Society landed in 1830 to bring Christianity to Samoans, now among the most fervent churchgoers in the world.*

"We are basically a healthy country," he told me. "Our biggest problems are no longer the communicable diseases. We seem to be catching the diseases of the West, like heart disease, hypertension, diabetes, ulcers. Food is one variable. People are relying more on imported food, much of it inferior—chicken backs, mutton flaps, low-grade corned beef—stuff that would never be eaten by most Americans."

One of the most alarming recent health trends is the high suicide rate among young people. It may well stem from the rather authoritarian life-style in the villages. "Typical," said Vermeulen, "is the son who has an altercation with his father and goes out and drinks weed killer. From the outside Samoa looks like a peaceful, pleasant society. Inwardly, we have conflicts."

But Vermeulen remains an optimist. "Samoa is blessed with a good climate and a healthy population," he said. "Poor but healthy. No one is farther than a 15-minute drive from one of our health centers or district hospitals. That is true even for the most distant villages on Savai'i."

SAVAI'I. Samoa's big island, bigger than all the other islands combined. Some say it is the legendary Hawaiki, from which the great Polynesian navigators set sail to discover every habitable speck of land in the boundless mid-Pacific. It has been called the soul of Samoa. Here the 20th century has put down the shallowest roots, and the *fa'a Samoa*—the Samoan way—has the most meaning.

The ferry to Savai'i is a once-in-a-lifetime experience, I was told. That is, you should experience it once and only once. But it wasn't all that bad. The World War II landing craft had room for half a dozen vehicles, including my rental car, along with maybe 50 people and their assorted animals. We plowed across the potentially ferocious 13-mile channel in relative calm.



Until fairly recently, travel on Savai'i was restricted to either walking or paddling, but Australia put up the money and the expertise for paving a road around the island. When the ferry docked at Salelologa, I headed counterclockwise.

Savai'i has the feel of a large landmass. At its center is 6,095-foot Mount Silisili, highest point of all the islands, but the ground slopes so gradually that you don't notice it.

As I drove through village after village, I caught glimpses of Samoan life: boys returning from the plantation, weighted down with baskets full of coconuts; older men gathered in a fale, sitting cross-legged with their backs against the support poles—village chiefs, debating the day's business. In other fale I saw women tirelessly plaiting pandanus mats. Farther on, a group of men were fishing in a lagoon, beating the water as they converged on a central point. In one village a wedding was in progress, with much singing and dancing and exchanges of food and fine mats, the intricately woven units of ceremonial currency.

In many villages the *malae,* or town common, had become an athletic field, where young men were playing volleyball or cricket or rugby. Young Samoan men are seemingly always big and powerfully built. Dressed in their waist-to-knee wraparound skirts called *lavalava,* they look about as effeminate as the Los Angeles Raiders. Several Samoans, in fact, play professional football in the U. S.

Before rounding the island's northeast corner, the road cuts inland and crosses a bleak expanse of lava from the most recent eruption, which ended in 1911. Here and there a few green shoots poked up defiantly.

THE PAVEMENT temporarily runs out at the tiny north coast village of Manase. There Chief Taito Muese and his wife, Rasela, invited me to spend the night. They didn't speak much English, and I spoke less Samoan, but never was I made to feel more welcome.

Sixteen-year-old Auckland, one of four daughters and six sons, took me for a walk along a picture-postcard beach. Her English was unmistakable: "I want to get far away from Samoa," she said. Why, I asked her. "There is no money here," she replied.





Dexterous fingers *weave pandanus leaves into fine mats* ***(facing page,*** *foreground) for ceremonial gifts. Fare for a feast* ***(above)*** *includes—clockwise from the roast pig—bananas, corned beef, breadfruit,* palusami, *or coconut cream baked in taro leaves, taro, opened palusami, fish, cocoa, and coconut.*

A technician ***(top)*** *dusts flowers of a coconut palm with pollen from Solomon Islands trees to produce a more fruitful strain. The United Nations Development Programme helps fund the project to bolster Western Samoa's economy.*

the morning to pursue their sport. Of course, as many of you ladies know, that tradition exists today on the mainland, except it's called golf.

There's a Kauai legend about an ancient group of natives known as the Menehuene (Men-a-hoon-a), a physically short and mischievous people who lived in the island's thick forests and canyons and were similar to Ireland's leprechauns.

The Menehuene were master builders who toiled by the light of the moon, or so it was rumored, because no one ever saw them at work, but saw only the finished precision of their labor. If they couldn't finish a project in a single night, they abandoned it forever. But this rarely happened.

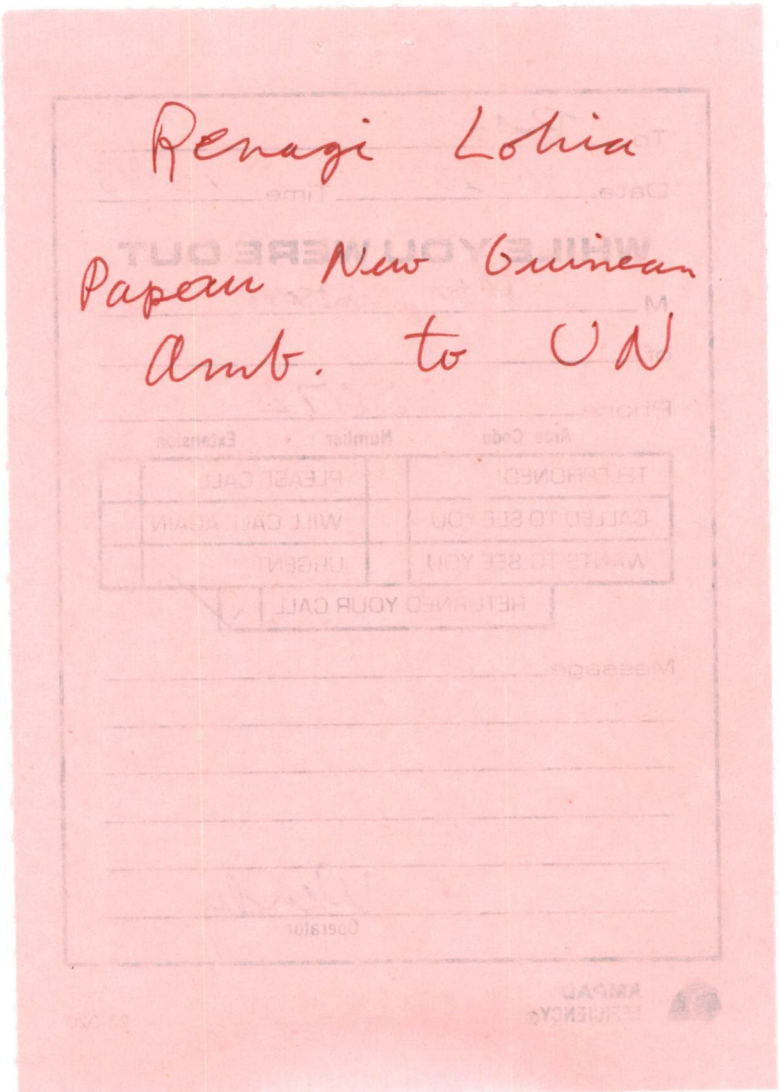
One of the Menehuene's more famous accomplishments is a large fishpond that includes a 900-foot dam with holes allowing young fish to enter but too small to let grown fish escape. Which I think you'll agree is a rather clever accomplishment.

Friends, I tell you the legend of the Menehuene because I believe there's a message in it for us: Bigger is not always better. Size is not a measure of ingenuity, intelligence, or enthusiasm. Value is the delectability of the fruit, not the size of the vine.

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Cook
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Tonga
Dec 1974 p 782-793

Mar. 1968 p 299, p 322-343
p 345-367

Tuvalu
July 1947 p 131-148
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Micronesia
July '48 73-104
June '42 759-785

Marshall Islands
Oct. '86 460-499
June 86 813-834
July '48 73-104
July '46 97-116
May 46 617-640

Pacific Island Summit Set for Hawaii

■ It's time for another summit—this one in Hawaii.

President Bush will meet in Honolulu Oct. 27 with leaders of 13 Pacific island states of Micronesia, Melanesia and Polynesia, the White House said yesterday.

The following leaders have been invited:

Prime Minister Geoffrey A. Henry, Cook Islands; Prime Minister Ratu Sir Kamisese Mara, Fiji; President Ieremia T. Tabai, Kiribati; President Amata Kabua, Republic of the Marshall Islands; President John R. Haglelgam, Federated States of Micronesia; President Bernard Dowiyogo, Nauru; Premier Robert Rex, Niue; Prime Minister Rabbie Namaliu, Papua New Guinea; Prime Minister Solomon Mamaloni, Solomon Islands; King Taufa'ahau Tupou IV, Tonga; Prime Minister Bikenibeu Paeniu, Tuvalu; Prime Minister Walter Hayde Lini, Vanuatu; and Prime Minister Tofilau Eti Alesana, Western Samoa.

—Molly Moore and Stuart Auerbach

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New Guinea
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July 69 148-156

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Ap 43 485-524

Solomons Island

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July 47 131-148

Western Samoa

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Oct 62 573-602

Kiribati

Canton Is. Phoenix Is, Gilbert Is.

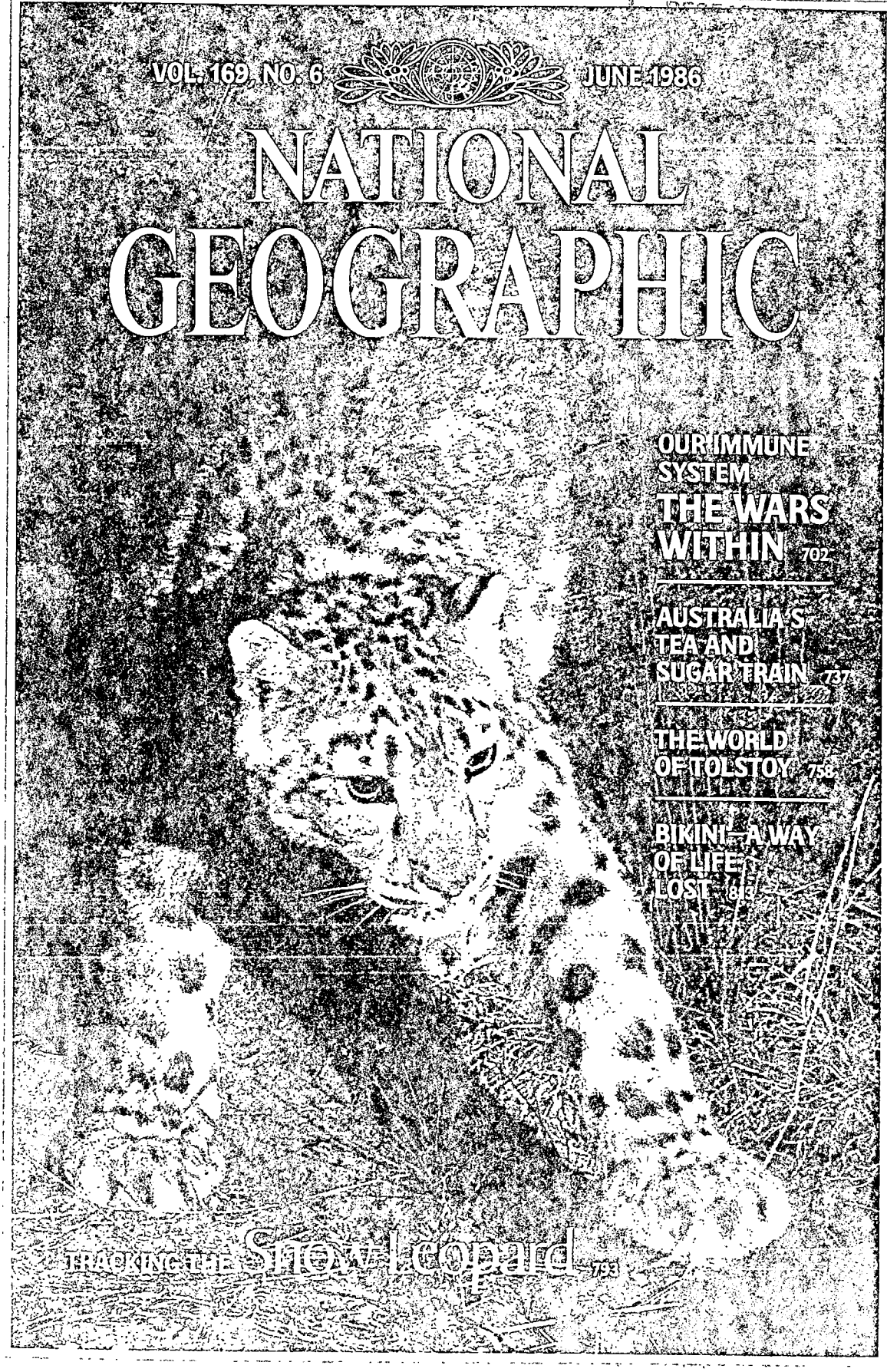
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THE WARS WITHIN 702

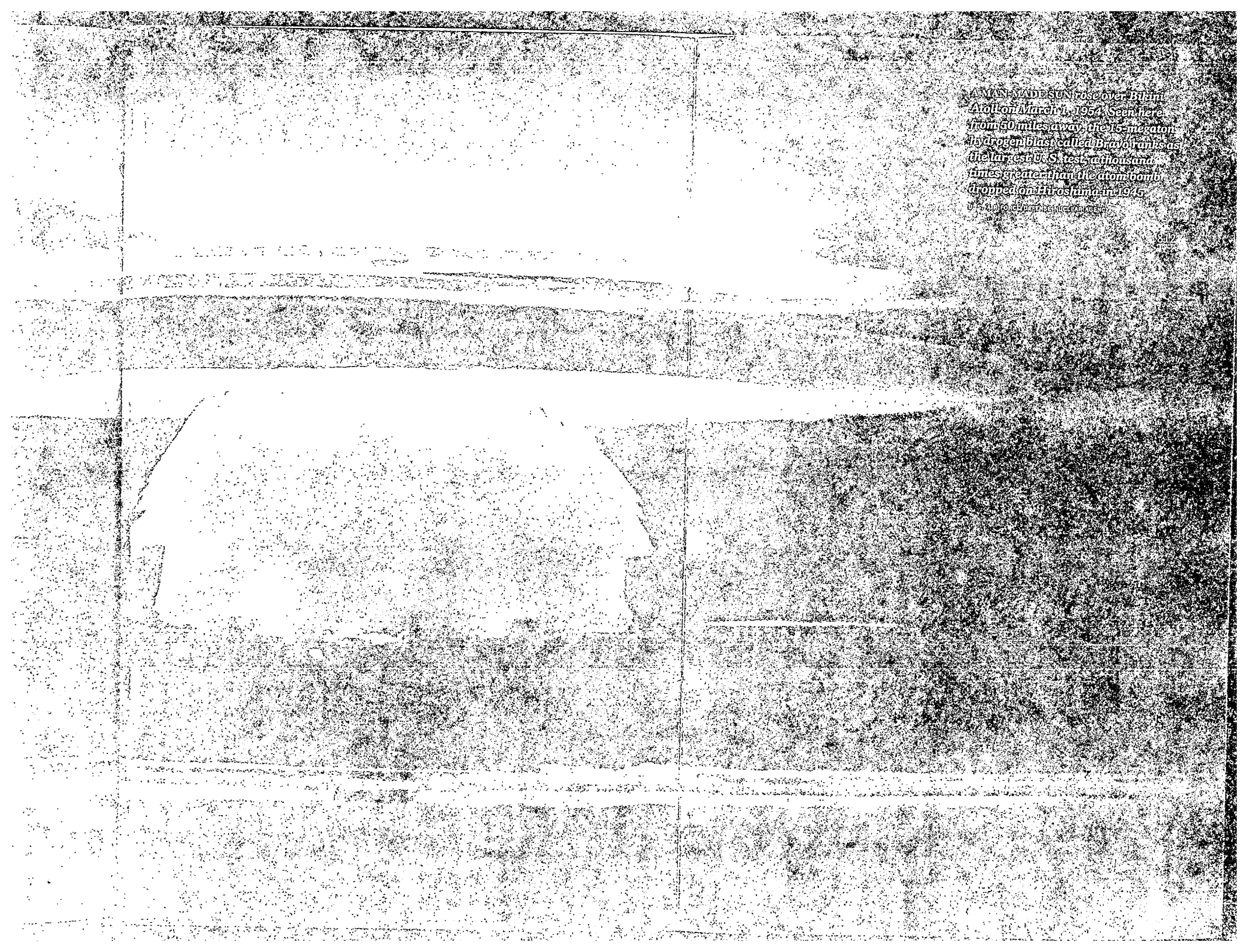
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OFFICIAL JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D.C.



A MAN-MADE SUN rose over Bikini Atoll on March 1, 1954. Seen here from 50 miles away, the 15-megaton hydrogen blast called Bravo rank[s] as the largest U. S. test—a thousand times greater than the atom bomb dropped on Hiroshima in 1945.

U.S. AIR FORCE PHOTOGRAPH

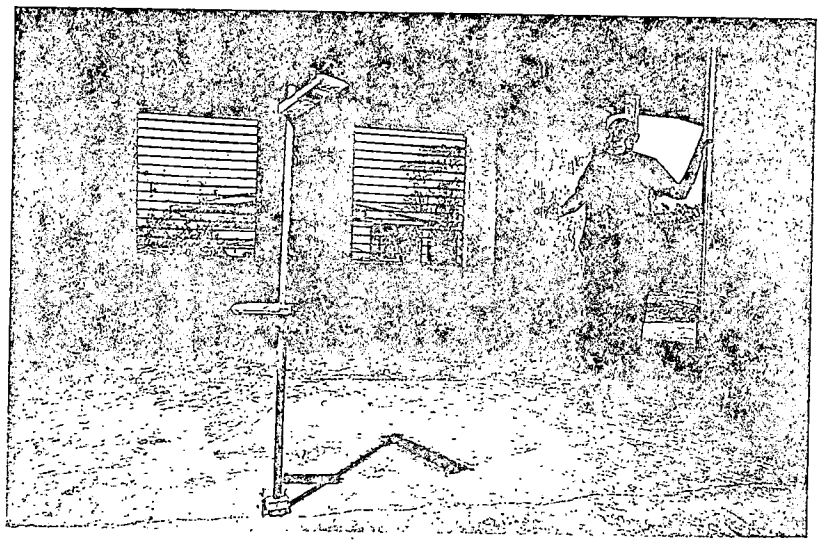
A Way of Life Lost

BIKINI

By WILLIAM S. ELLIS
NATIONAL GEOGRAPHIC SENIOR WRITER

Photographs by JAMES P. BLAIR
NATIONAL GEOGRAPHIC PHOTOGRAPHER

The year was 1946. World War II had just ended in a flash of atomic fury that even the bomb's inventors didn't fully understand. For further tests, the American military chose a remote island cluster in the Pacific called Bikini Atoll. Its inhabitants agreed to vacate their homes, assured that they could return when the tests were over. Today, 40 years and 23 nuclear explosions later, the Bikinians are still waiting, on a cramped, isolated island 500 miles from home. For as instruments on Bikini show (*below*), their atoll is still dangerously radioactive.



THIS PAGE FOLDS OUT

THEY SANG when they left, and now that they were back, they sang again.

Sitting on the beach at night, they raised their strong, good voices until the harmony carried out over the black waters of the lagoon. They sang of love, a song about the fragrance in the morning lingering from the night before. They sang too of a spirit lost at sea, waiting to be caught up in a great current and to be borne to everlasting peace.

Nearly 40 years had passed since that Sunday in 1946 when Commodore Ben Wyatt of the United States Navy met with them after church services to say that their island was needed for a project that would benefit mankind. He implied that an authority higher than any on earth would be pleased if they decided to cooperate.

Being both a devout and benevolent people (and not without awe over America's military power), they announced this decision, through their chief, Juda: "If the United States government and the scientists of the world want to use our island and atoll for furthering development, which with God's blessing will result in kindness and benefit to all mankind, my people will be pleased to go elsewhere." All 161 members of the 11 families were transported to another place aboard a Navy LST. They took with them the thatch from their 26 houses, along with the dismantled church and community hall.

Less than six months later, on July 1, 1946, a B-29 bomber known to its crew as *Dave's Dream* appeared over the lagoon, and from its belly there fell an instrument, hurtling toward one of some 93 unmanned target vessels at a speed of 300 miles an hour. At 34 seconds after nine o'clock in the morning the device exploded at an altitude of about 500 feet. For a wrathful moment then, it seemed as if the sun had risen for a second time that morning.

And then the world came to know about this island and its atoll, a place in the western Pacific called Bikini.

The testing of nuclear weapons in the Pacific by the United States had begun. In the next 12 years, more than 60 explosions would follow, most of them in the lagoon of Enewetak (Eniwetok) Atoll in the Marshall Islands. Of the 23 set off at Bikini, there was one called Bravo, the most powerful bomb ever detonated by this country. The combined power of all the weapons fired in all the wars of history would fall short of that released by Bravo over the 242 square miles of the Bikini lagoon. When the testing ended—when the tens of thousands of servicemen, technicians, and scientists had all left, when the ships of the target fleet had either sunk, sailed, or been towed away, when the shock waves stood the waters of the lagoon on end for the last time—Bikini island was still there with its coconut palms and pandanus trees, a testimonial, seemingly, to survivability in nuclear action.

BUT THE ISLAND and some of the 22 others in the atoll were not the same then and are not the same now. Radioactive material remains in the soil, and after two score years the people of Bikini have not been able to return to their home to live. Rather, they remain on a small, isolated island some 500 miles away, an island without a lagoon, a mere dot of land of 230 acres standing naked to the sea. Its name is Kili, the place where they live, and the old men and women there remember a way of life that is now lost.

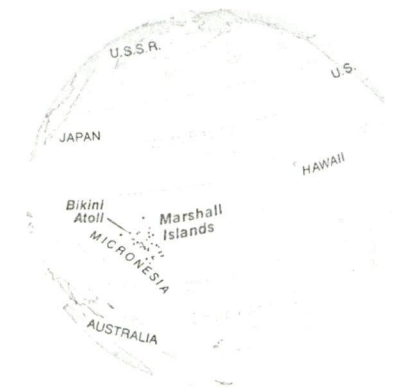
Kili, like Bikini and Enewetak, is part of the Marshall Islands group of Micronesia, taken from Japan in World War II and administered by the United States as a United Nations trusteeship. Divided into two chains, the Ratak ("sunrise") on the east and the western-facing Ralik ("sunset"), the 34 atolls and single islands of the Marshalls lie 2,400 miles southwest of Hawaii.

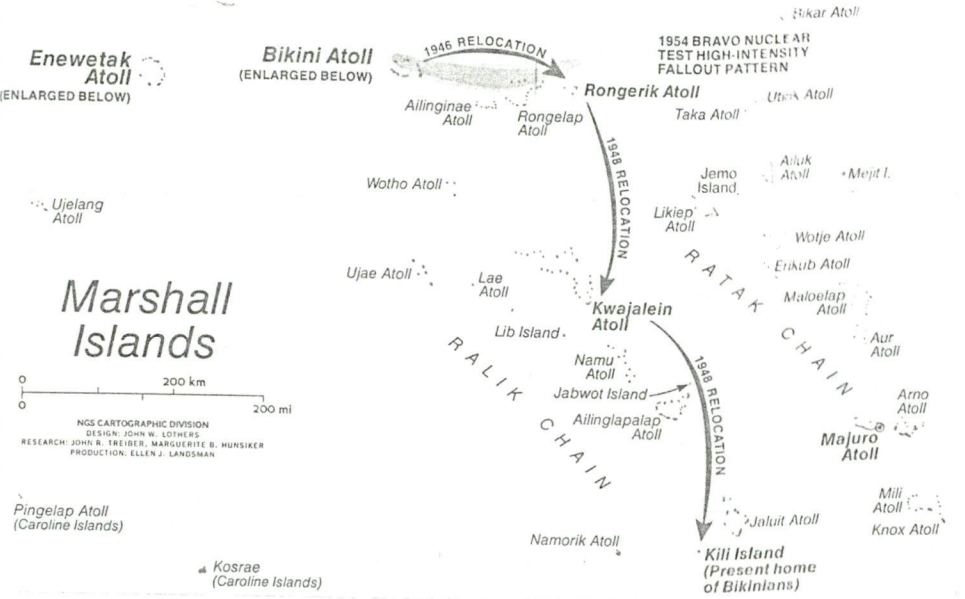
For the most part these are not Pacific islands in the Gauguinesque sense of flowery bliss. These atolls, coral reefs built up on the slopes of sunken volcanoes, barely rise above the water. Many of them are like flagstones in a path, trodden by violent winds and waves, some under recurrent drought, others lush from almost daily rainfall.

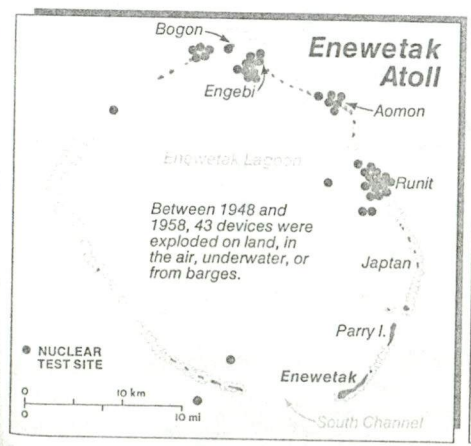
Once, the Bikinians were expert sailors, taking their outrigger canoes across many miles of water to visit other islands in the atoll. They fished and gathered turtle eggs. Their other foods were coconuts and arrowroot. With the disruption in their lives, they became landbound, and their seafaring

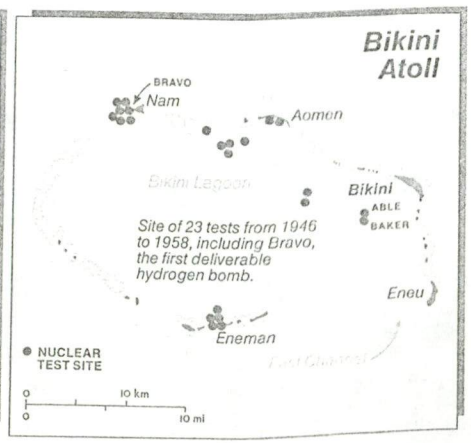
Route of the nuclear nomads

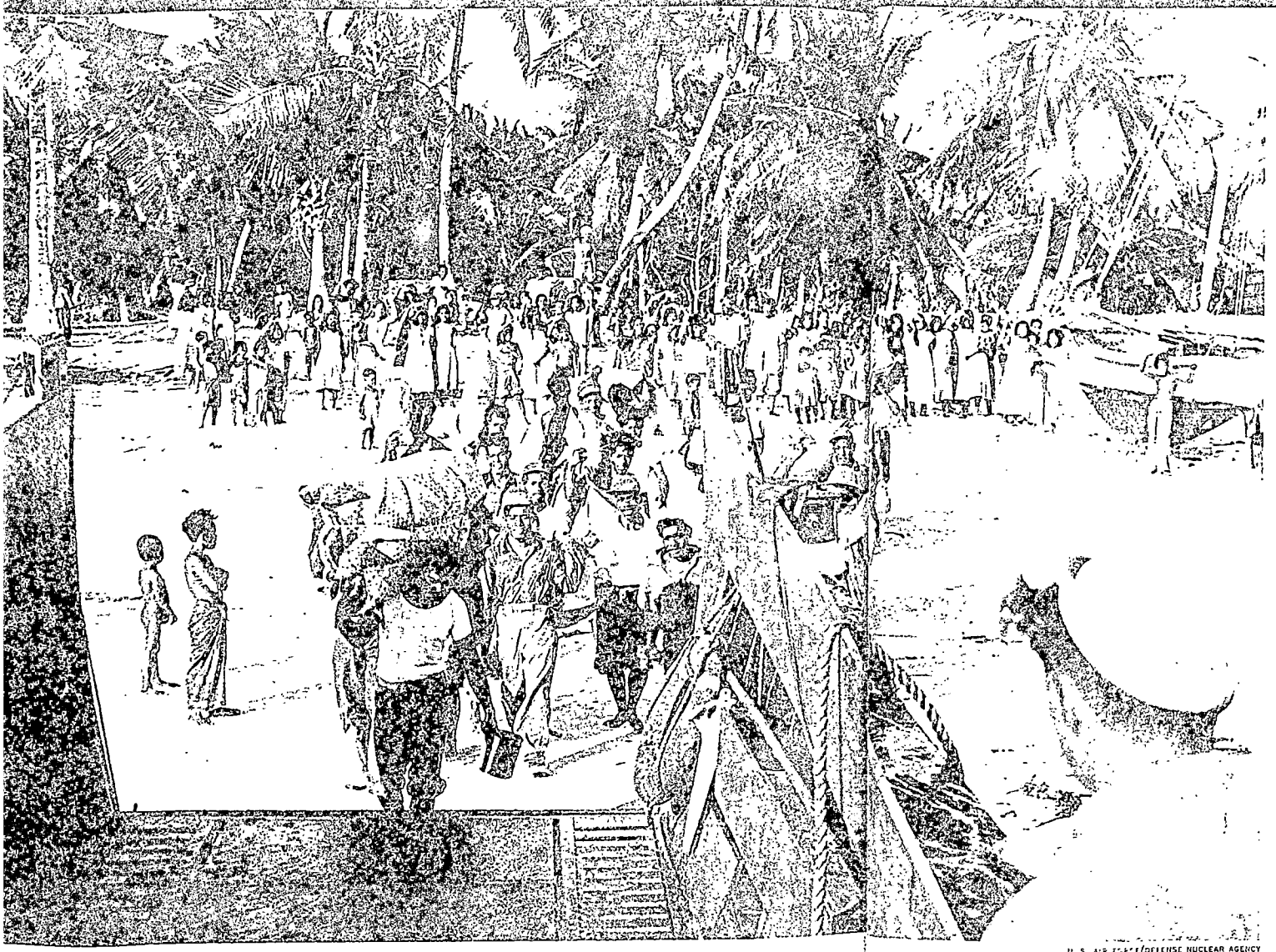
IT WAS A TEMPORARY MOVE, or so the people of Bikini thought in 1946, when they left an uninhabited Rongerik Atoll. Within two years they were starving; many local fish were poisonous and coconuts scarce. Evacuated to a U. S. naval base on Kwajalein, they were moved eight months later to Kili, where about half their numbers remain. The rest are scattered throughout the Marshall Islands. Enewetak (Eniwetok) Atoll, also used for testing, was partly resettled in 1980 after radioactive soil and debris were removed. Bikinians hope such a plan may one day end their 40-year odyssey.











U. S. AIR FORCE/DEFENSE NUCLEAR AGENCY

"For the good of mankind," Bikinians left home to make way for the Able and Baker atomic tests: American negotiators found the missionary-educated Bikinians especially open to religious appeals. Here an advance construction party of U. S. Navy Seabees and Bikinians loads supplies onto a landing craft for the trip to Rongerik.

skills died as the old men died. As wards of the U. S. government, they now receive food from the Department of Agriculture, such as peaches soaked in heavy syrup. Diabetes is a major concern among the Bikinians, and such food only adds to the problem.

They also suffer from despair, and so their comments to outsiders are weighted with complaints. But there is never rancor in what the Bikinians say, no confrontational protest. Their culture does not permit that.

"They promised us we could go back," said Sorry Jelang, an elderly Bikinian, "so all we can do is stay here and wait. But we need more money, more food. You tell them to give us a big bank. Look at my hair, all white now; on Bikini, only black."

On the days when the airplane comes to Kili, banking lazily to the left before threading the eye of the needle between palms and the sea to set down on the runway of crushed coral, there is a stir of excitement among the Bikinians. Except for the radio and periodic visits by a government supply ship, it is their only link with the rest of the world. It also brings them new stocks of Fanta grape soda.

In July of last year the plane—then the *only* operational one of the Marshall Islands airline—left Kili with the mayor of the community and members of the council among the passengers. The destination: Bikini.

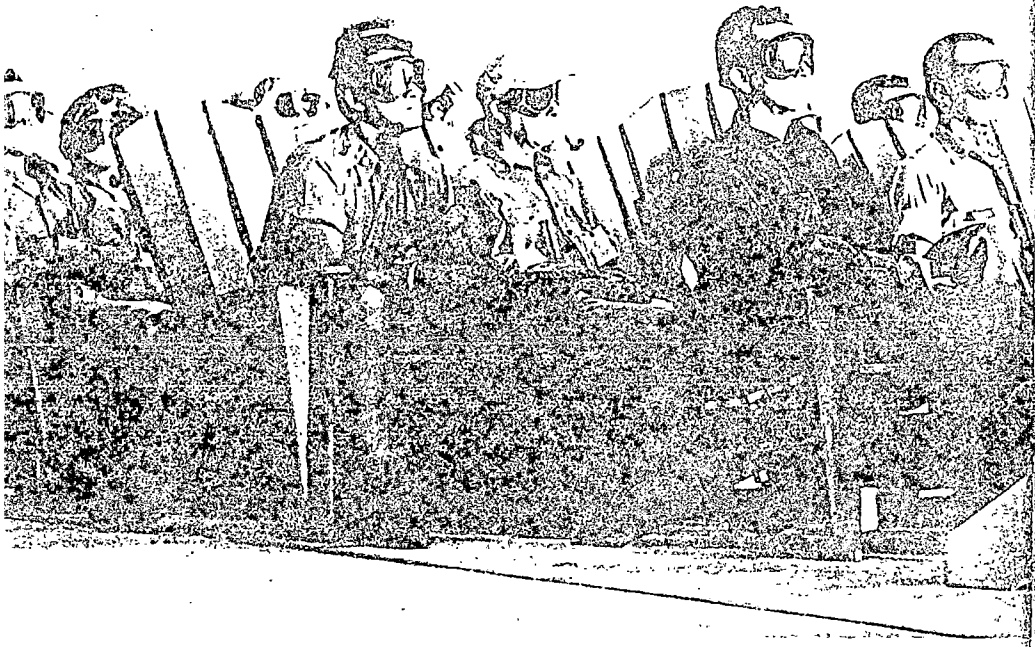
They were returning not to stay but to be shown what the government is doing to make the island habitable. Most of them were elders who had spent their early years as fishermen and boatbuilders, and they were the ones for whom the departure from Bikini in 1946 was most painful.

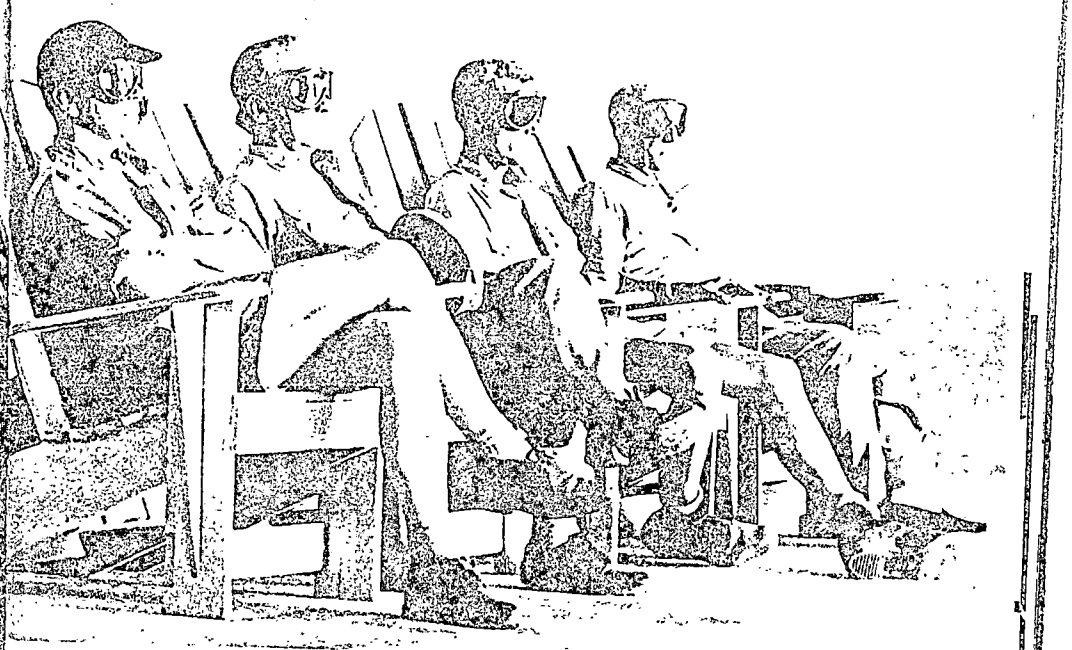
"Bikini not long now." Lore Kessibuki looked out of the window, down to where the Pacific lay sunstruck and still. We had stopped at Kwajalein, the largest island in the largest coral atoll in the world, and were glad to be gone from there, for it is a place where outsiders are not made to feel welcome. Kwajalein Atoll is where missiles land after being fired from Vandenberg Air Force Base, some 4,800 miles away in California. They are seldom far off target as they slam into the lagoon or the sea nearby, unnerving fish and bird, and prompting one person on the plane to observe, "I have no doubt that in the event of a war, the United States can knock the hell out of Kwajalein."

THERE IS no landing strip on Bikini, so we put down on Eneu, in the southeast corner of the atoll. No one lives on the 304 acres of Eneu, and the runway dates from the nuclear testing period.

Tomaki Juda, the mayor and son of the late Chief Juda, may have been the one who caught the first fish from the boat taking the delegation from Eneu to Bikini. It was a 45-pound yellowfin tuna, taken on a handline with only a few strands of burlap for a lure. Unfished for many years, Bikini lagoon gave generously that day of its tuna and other fish, all free now of radioactivity. The 17 vessels in the target fleet that sank during the testing act as convention halls for marine life, including sharks in menacing numbers.

Lore Kessibuki was among the first onto the beach. He is an old man, but he stood there with his back straight and his head tilted upward, like a visionary at a time of revelation, and said, in a whisper, "Bikini,





U. S. AIR FORCE (ABOVE); U. S. NAVY/NATIONAL ARCHIVES

Ringside seats for the "bomb" were a hot ticket in 1951, when military and civilian VIPs (above) watched from the officers club on Enewetak, just 12.5 miles from ground zero. Naïveté was the order of the day during the 1946 tests, when radioactive target ships were boarded within hours of a blast, and men assigned to scrub down the decks (below) routinely ate on board.



Bikini." He was finally home, if only for a few days.

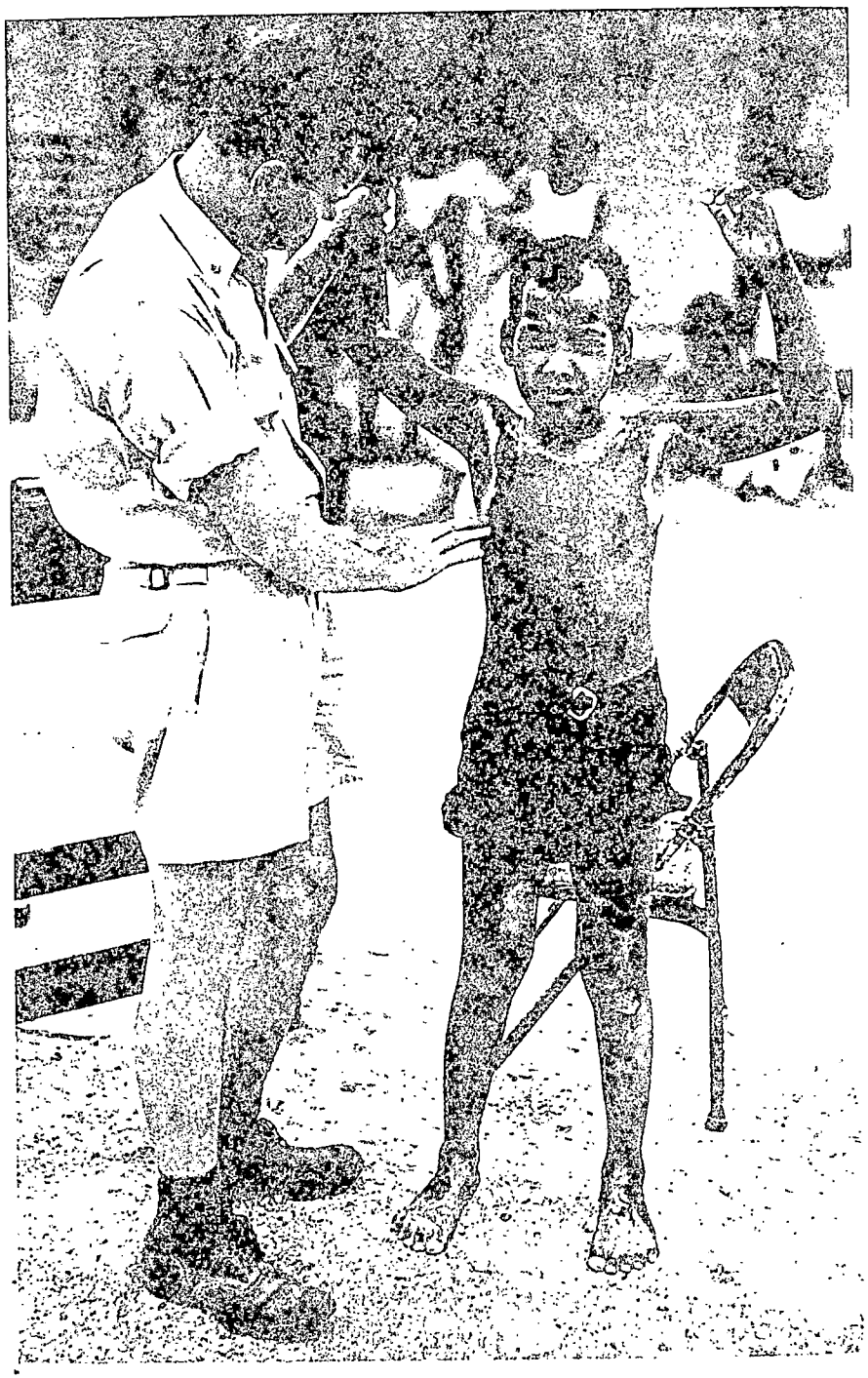
THERE is one radioactive substance almost totally responsible for preventing Bikinians from living on their island. It is called cesium 137. Established in the soil, it contaminates the groundwater and food crops. That is not to say that a person eating a coconut from a tree on Bikini is going to die or even become ill. But a steady diet of locally grown foods could result in serious health problems.

That was the case during a ten-year period starting in 1968 when President Lyndon B. Johnson declared Bikini to be safe. By 1971 some Bikinians had returned, but by 1978 they were found to have ingested more cesium than was considered acceptable. Once again the island was evacuated.

Cesium 137 has a half-life of 30 years, meaning that after 30 years its strength is reduced by half. And then in another 30 years, it is again reduced by half (by contrast, plutonium 239 has a half-life of 24,360 years). By such calculations it will take another 80 to 90 years before the cesium on Bikini has been reduced to acceptable levels. However, there may be quicker ways of cleaning the island, and in the forefront of those seeking them is Dr. William L. Robison of the Lawrence Livermore National Laboratory in Livermore, California.

"It took us years of work just to get a data base so we could make radiological assessments of Bikini," Robison said. "Now we are looking at possible remedial measures, such as blocking the uptake of cesium into the food crops, or reducing the radioactivity by removing some of the soil."

It is possible to do the first, Robison believes, by applying fertilizer rich in potassium to the ground at Bikini. The second measure would require scraping off the top 12 inches of soil to reduce the cesium hazard. Clearly, the use of fertilizer would be less expensive and less destructive. To take 12 inches off Bikini's 560 acres could cost as much as 80 million dollars and destroy 25,000 trees and all the beneficial organic matter now in the soil. Finally, disposal of the "hot" material would present a problem.



For those reasons scientists hope that the soil will not be removed but rather that fertilizer will be applied. Whatever the cost, it would be a pittance compared with the billions of dollars spent to test the weapons.

"There is no question that we owe them rent, and we owe them renovation," said Dr. Henry I. Kohn, professor emeritus of radiation biology at Harvard Medical School. "I feel the United States owes it to Bikini's people to return their atoll as close as possible to its original condition."

Kohn is chairman of the Bikini Atoll Rehabilitation Committee (BARC), a group of scientists appointed by Congress to make recommendations on how to make Bikini livable again. He was among those who visited the island last summer, when the Bikinians were there.

BIKINI WAS SELECTED as the test site because it is isolated from sea and air routes, and because the winds in the atoll blow in predictable directions, thereby controlling the drift of radioactive clouds. But once the winds shifted at the time of a test shot, and because of that the Bikinians remain nomads after 40 years.

Bravo was the first test of a deliverable hydrogen bomb, a surface shot detonated in 1954. It was an explosion of about 15 megatons, or 15 million tons of TNT (the bomb exploded over Hiroshima had a force of 15,000 tons of TNT), making it the most powerful weapon ever activated by the United States. A freight train carrying Bravo's equivalent in TNT would span the North American Continent.

The errant winds showered radioactive pulverized coral and other material over a vast area—perhaps as much as 50,000 square miles. Those caught in the fallout included some 250 Marshallese from the islands of Rongelap and Utirik; 28 weather station personnel on Rongerik; and 23 crewmen of a Japanese fishing vessel, the *Daigo Fukuryu Maru (Lucky Dragon No. 5)*, one of whom died of radiation exposure. To this day the tragedy of Bravo haunts the U. S. government and its victims.

Had it not been for the power of the explosion and the shift in winds from northward to eastward, Robison would not be kneeling down in the dirt of Bikini 31 years later,



U. S. AIR FORCE/DEFENSE NUCLEAR AGENCY (FACING PAGE); BROOKHAVEN NATIONAL LABORATORY

"Bikini snow"—bits of radioactive ash and coral—showered Rongelap Atoll when winds shifted during the Bravo test in 1954. Curious natives played in it, even tasted it, and many—like Iroji Kebenli (facing page)—suffered burns. He recovered, but three out of four children under ten later developed thyroid tumors. Lekoj Anjain (top) had his thyroid removed, free of charge, by New York's Brookhaven National Laboratory in 1968. He died in 1972 (above) of radiation-induced leukemia.

examining vegetables and other crops being grown in an experimental garden. In one place the hot soil had been removed, and in another, fertilizer had been spread on the ground. Robison rose and squinted in the bright sunlight as he explained to the mayor and members of the Bikini council that samples would be tested for cesium content.

"It may be that we can get rid of some of the cesium by flushing salt water through the soil," he told them. "We are experimenting with that." The Bikinians listened and said nothing.

Also present were Dr. Frank L. Peterson of the University of Hawaii, a hydrogeologist; Dr. Earl L. Stone, adjunct professor of soil science at the University of Florida; and Dr. Arthur S. Kubo, a nuclear and civil engineer at BDM Corporation in McLean, Virginia, all members of BARC and all active in working to decontaminate the island.

The scientists share a deep concern for the welfare of the Bikinians, but past deceptions, contradictions, and confusion have left the people with an eroded sense of trust.

"We don't really understand these experiments," said Kilon Bauno, at last. "The only thing we understand is that you poisoned our island and that I am old, with not too many years to live. So all we say is get us off of Kili and give us lots of money so we can live comfortably until Bikini is safe."

Lest the scientists take offense, another Bikinian added: "It's true that we do not understand your work, but we do know that you Americans are very smart."

ON ANOTHER DAY we traveled by boat across the lagoon, over the place where the U.S.S. *Saratoga* lies on the bottom, her flight deck only a hundred feet below the surface. The honored carrier went down during the second shot of the testing, settling upright on her keel, her planes still arrayed on the hangar deck.

Then we sailed over the mile-wide Bravo crater, still clearly defined beneath the water. Nearby were old reinforced concrete bunkers in which automatic cameras recorded the infernal turmoil of atoms gone berserk—the steamy, dirty clouds rising tens of thousands of feet in the air, the waves of heat and sound and motion breaking across the atoll, the complete destruction of an island, its beaches and birds and trees all gone to vapor and dust.

As we passed the islands in the north of the atoll, sounding the ship's whistle to send the terns and petrels rising from the trees, the Bikinians spoke among themselves of the times they sailed here. "If we started out before the sun came up, we'd be here by midmorning," one said. They knew the owner of each parcel of land on each island, for nothing is more important to a Bikinian than land. In their culture a man without land is denied his dignity, his very reason for being.

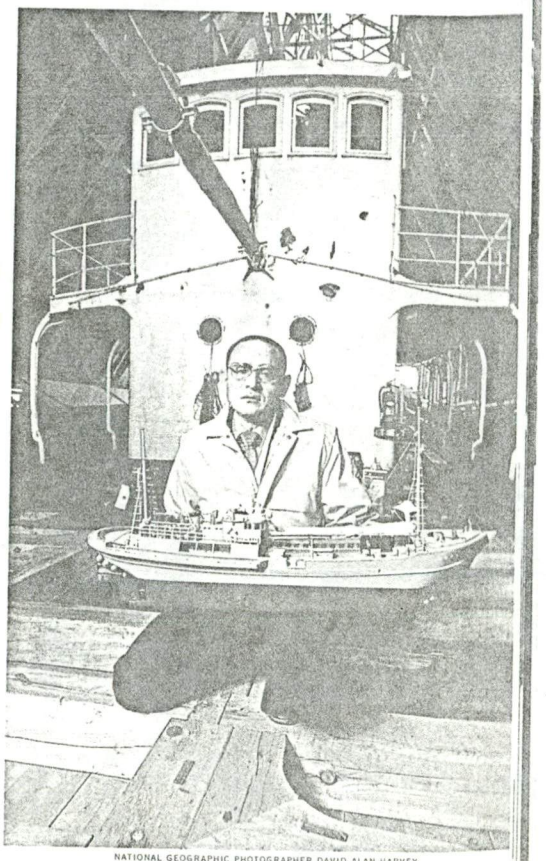
The Bikinians are a people with no written history. It is not certain where they originated, although the Marshall Islands atoll of Wotje is often cited as their ancestral home. Regarded as inferior by the Germans and Japanese, who controlled the islands at different times until the end of World War II, Bikinians came to hold themselves in low esteem. Even among other Micronesians they were considered backward, doltish.

They withdrew among themselves but retained a tenuous link to an outside *iroij lablab,* or paramount chief. Only with the arrival of missionaries in the early part of this century did they accept the teachings of others. They became staunch Christians.

NO ONE understands all of this better than 44-year-old Ralph Waltz from Menominee Falls, Wisconsin, who came to Micronesia with the Peace Corps and stayed on to marry a Bikinian and settle on Majuro, the capital of the Marshalls. For a time Waltz lived on Kili and came to know the hunger that gripped the people in their exile, when the arrival of supplies was delayed by heavy seas and a shortage of ships and by indifference on the part of the Trust Territory administration.

"I was lying in bed at four in the morning," he told me, "and I was still awake. You can't sleep when you're hungry. I heard a breadfruit fall to the ground from a tree just behind my house. I jumped up from my mat and ran to the tree, but the breadfruit was gone. Someone had beaten me to it."

He went on to recall the time that he and four Bikinians set out offshore in a small boat to fish. "If we hadn't been so hungry, we wouldn't have risked the trip in that boat," he said. "The motor gave out, and two of the Bikinians went into the water to swim to shore for help. They never made it. They were eaten by sharks."



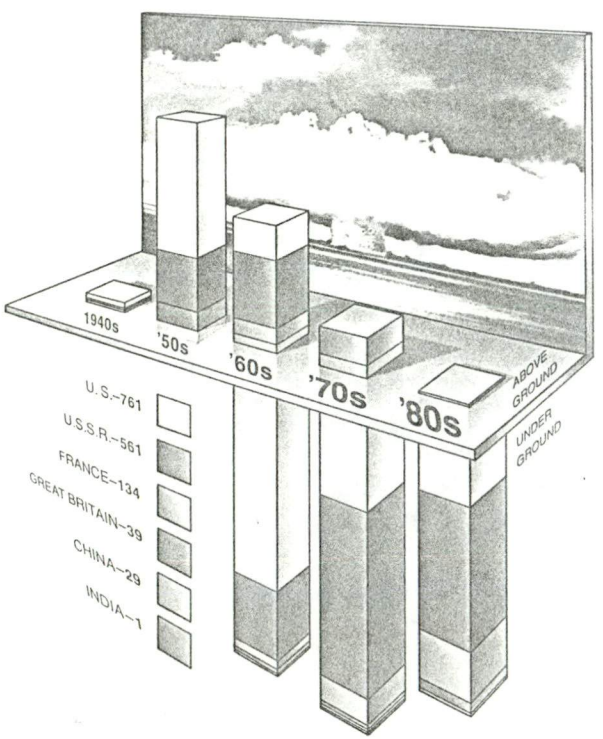
NATIONAL GEOGRAPHIC PHOTOGRAPHER DAVID ALAN HARVEY

Luck ran out *for the* Lucky Dragon *when Bravo's gritty fallout covered the Japanese fishing boat and its 23-man crew, causing one death and many illnesses. Crew member Matashichi Oishi* ***(above)*** *sits on the renovated Dragon with his own model; both are part of a Tokyo memorial to the tragedy.*

Nuclear scoreboard

THE ATOMIC CLUB *had one member—the United States—when testing began in 1945. The Soviet Union made its debut in 1949. Since then four more players have joined the group, which through 1985 conducted 1,525 known tests.*

Fallout from intensive atmospheric testing during the 1950s and early '60s peaked in 1963, when it added some 7 percent to the dose of radiation we receive naturally. The increase today stands at less than one percent, thanks in part to the 1963 Limited Test Ban Treaty signed by the U. S., U.S.S.R., and Great Britain that began the era of underground testing.



NATIONAL GEOGRAPHIC ART DIVISION
DATA SOURCE: STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Unlike the Bikinians, Waltz shows flashes of anger about their plight. This anger has served them well, for he is employed by the council as its liaison officer.

Even more of a counterpoint to the timidity of the Bikinians is the voice and untiring work of Jonathan M. Weisgall, a Washington, D. C., attorney who shepherds their lawsuits for compensation through the courts, who appears before congressional committees on their behalf. Weisgall, too, is driven in no small measure by the steam of outrage.

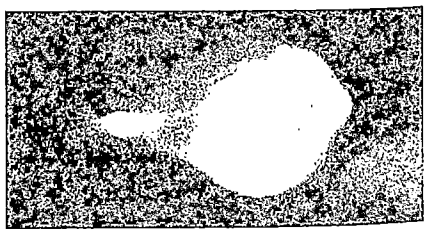
"In addition to all else," he said, sitting in his Washington office amid a clutter of research material on Bikini, "the social impact on the people has been tremendous. They have lost virtually all their fishing and sailing skills."

STILL, they try: There was the mayor, Tomaki Juda, standing in the surf off Nam, the largest island on the northwest rim of the atoll, grinning and waving a spear from which flapped a small rabbitfish. They used to fish that way. On Kili they use a hook and line, sometimes floating on coconuts placed under their armpits, their heads down, moving silently, stalking the catch.

It was a jewel-like day, that time on Nam.



GORDON W. TRIBBLE, UNIVERSITY OF HAWAII (ABOVE); U. S. NAVY/NATIONAL ARCHIVES



The nuclear lagoon of Bikini holds the World War II carrier U.S.S. Saratoga (above), one of many vessels purposely targeted to test damage. Saratoga sank during test Baker, a 1946 underwater blast that raised 100-foot waves and shot water from the lagoon more than a mile high. Radioactivity showed up in a surgeonfish (right) that had eaten contaminated algae.

Pieces of red coral glistened in the sand, while giant turtles slumbered in the lee. The beach was heavy with flotsam, mostly Japanese Suntory whisky bottles (not a message from a castaway in the lot) and mangled flip-flop sandals. There are no dwellings, no people living on Nam, and being there in the harsh sunlight, numbed by the solitude, gives cause to wonder if this isn't the loneliest place on earth.

Nam covers 115 acres. It used to be larger, but Bravo carried away a piece of it and the island of Bokonejen to its west. The nearby island of Bokbata was also blown away in a later explosion.

"That island was a pantry for us," said Lore Kessibuki, speaking of Nam. "We'd sail there and stay two or three days, and then we'd go home with turtle eggs and birds and other things." Even now, going back to Bikini, there was a 300-pound turtle on its back in a skiff being towed by our vessel. Someone suggested that the Bikinians release the turtle, but the past had reached out to touch them; and they liked the feel. The turtle, they insisted, would go with them to Kili when they returned.

THERE would be one more day on Bikini—time enough for Lore Kessibuki to visit the graves of two of his sons. "They got a fever and died," he told me as he looked down at the mounds overgrown with brush. There were markers on the graves, chiseled out of coral.

Lore is the poet, the lyricist of the community. The evening before they were to go back to Kili, he sat in the old schoolhouse being used as a dormitory and said to the scientists: "The thing I want to do is thank you for the work you're doing on this island, the ways you are looking for to get rid of the poison in the ground. All the things you are doing are amazing to me. Just a little while ago I saw a beautiful cloud in the sky. I saw that with my eyes. With my mind I see America being thousands and thousands of miles ahead of all others scientifically. I see too that Bikini people added to America's advancements in science by giving up their island. and so there should be an understanding between Americans and our people. Well, I just wanted to say that."

He and some other council members then went outside to the beach, and, sitting there by a fire fed with driftwood, they sang their songs of love and sorrow.

So they left the next morning. It is likely that Lore and some of the other elders will never see the island again. At the same time most young Bikinians show little sincere interest in going there. It may be, therefore, that even if the cesium is removed, Bikini will remain abandoned.

Those who were born after the 1946 evacuation of the island have grown attuned to a world broader than the traditional social order of their parents. And, as wards of the U. S. government since birth, they have become addicted to welfare. They are fed and housed, and their illnesses are tended to, more or less. There is no turning back now to fishing and gathering for the Bikinians. It is too late. They *like* Spam.

IT HAD RAINED for four hours on Kili, buckshot rain pinging on the metal roofs, and the water lay in chalk-colored pools from one end of the mile-long island to the other. All around, the sea swells beat against the shore. Here and there pigs rooted in garbage thrown on the ground while chickens performed in their interminable fandango of walking and pecking, walking and pecking. Generators fed power to the houses in noisy, fitful surges.

And everywhere there were children; the birthrate on Kili must be among the highest in the world. They have few toys so they squat in the sand and juggle pebbles. They walk with their mothers to the beach and watch as soiled diapers are discarded in the surf. Then they play in the water, imagining themselves as sharks and ships and madcap monsters risen from the deep.

Shem Jamore, Toshiro Jelang, and Uraki Jibas stood together in a doorway and waved to the driver of a pickup truck passing by. There are six pickups on Kili, and for a fare of a quarter a Bikinian can climb into the back and be driven around the island. It is a fine way to catch a breeze on a hot day, especially racing down the airstrip.

"Right here, where we are, is downtown Kili," Toshiro said, laughing. "At that end is Chinatown, and on the other end is the high-rent district."

There are no Chinese on Kili, and there is



Off-limits forever for habitation is Runit (below), where 111,000 cubic yards of radioactive soil and debris scraped from islands in Enewetak Atoll lie entombed in a bomb crater beneath an 18-inch-thick concrete dome. The effort earned Enewetak a clean bill of health, but medic Kunio Joseph (above) says fearful islanders think "maybe 'they' put radiation in the ocean, and that is why there is always sickness here."

no rent, high or low. Toshiro had meant to mock the suffocating confines of the island and the sameness of the 75 or so houses made of plywood and metal. There is also an elementary school, a church, and a restaurant that may or may not be open on any given day to serve chicken and rice—hardly ever anything other than chicken and rice. The sale of alcohol is banned on the island, although soda pop is available through a process laced with mystery and intrigue.

"You want a soft drink?" Toshiro asked. "It is very expensive. Seventy-five cents. And it may take some time." After half an hour the drink appeared, but not before furtive consultations behind a water cistern. The reason for this was never made clear.

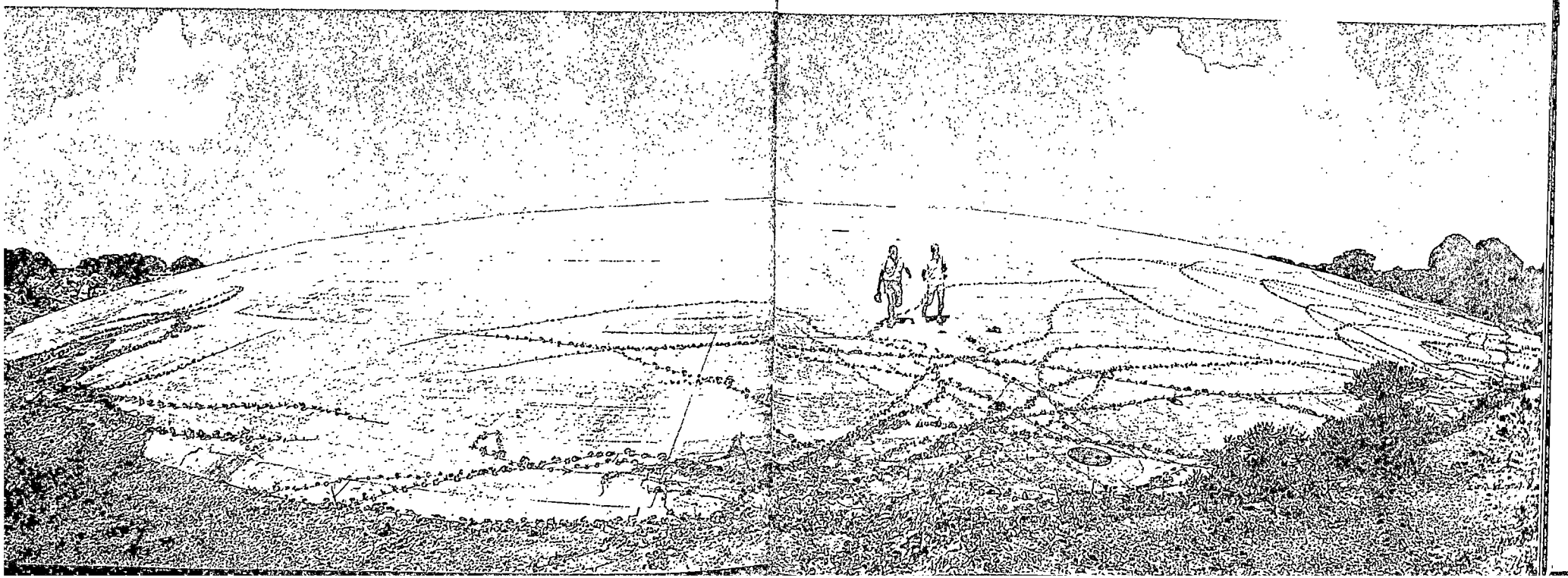
Toshiro and his friends Shem and Uraki are all too young to have been born on Bikini. They know little, if anything, about sailing an outrigger canoe or tending coconut palm trees. Ask them where they would like to live and they will answer, as one, Maui, in Hawaii.

Maui is the first choice for a homesite among most Bikinians. Many say they want to live there until Bikini is ready, but after that intimate exposure to the outside world would they want to return to the island?

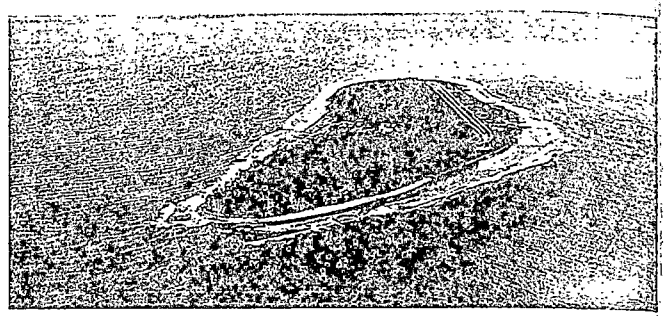
SOMETHING ELSE: An agreement with the United States, through which the Bikinians received 20.0 million dollars for resettlement, stipulated that they must find a place to live within the Marshall Islands. Also, it has been made clear by a citizens group on Maui that the people would not be welcome there.

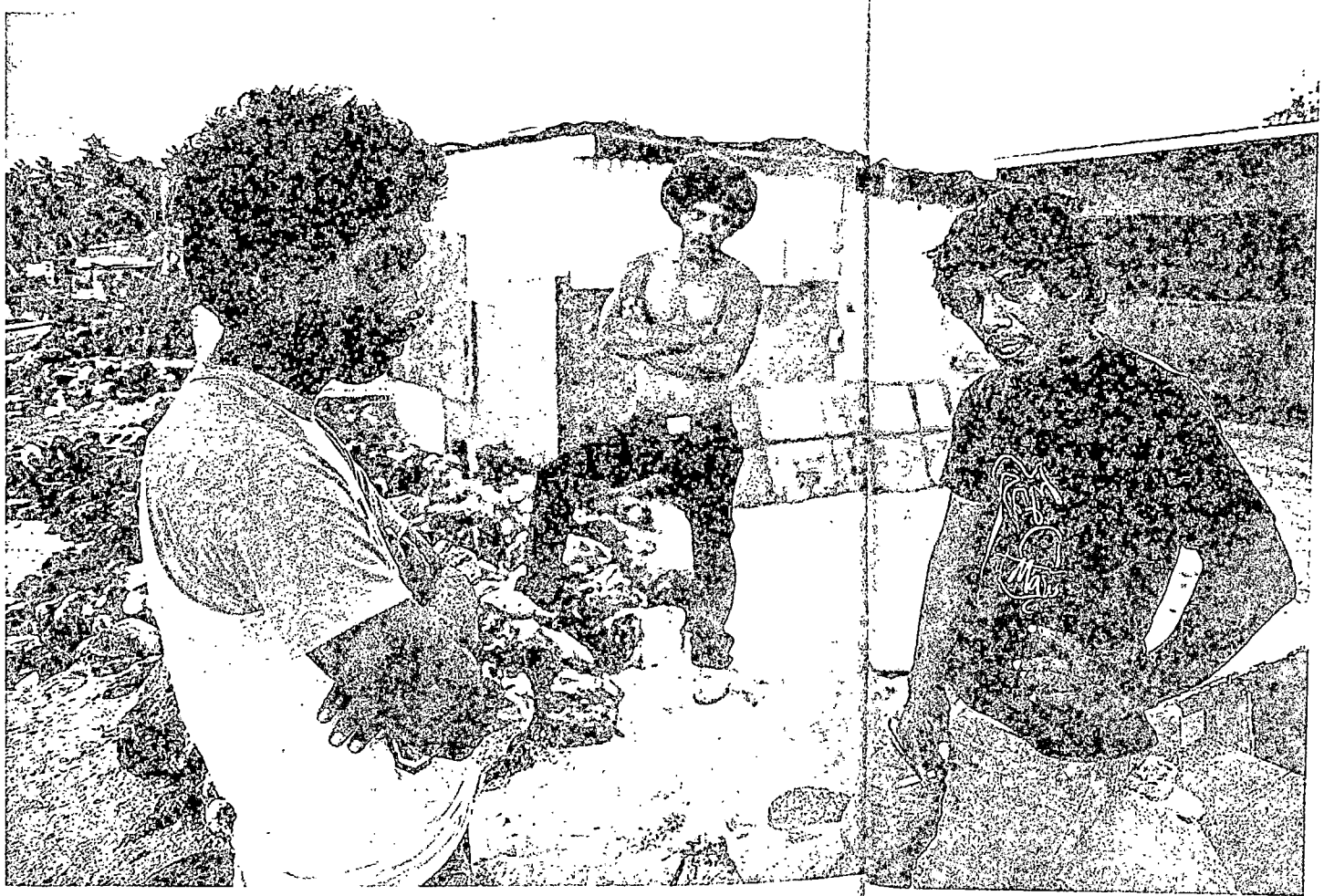
There has been other financial compensation in addition to the resettlement fund to ease the many hurts, but nothing like the 450 million dollars they are seeking in a lawsuit as payment by the U. S. for taking and damaging their atoll. This action was scheduled to go to trial last October, but it has been delayed because of a major development in the status of Micronesia as a trust territory.

Under recently signed congressional legislation the Marshall Islands, to which Bikini belongs, will become a "freely associated state," independent except for matters of defense. (This same surge toward political autonomy within the Trust Territory will also create the Federated States of Micronesia, the Republic of Palau, and the Commonwealth of the Northern Mariana Islands.)



Time passes slowly on Kili, the 230-acre island (right) where many Bikinians have lived since 1948. Fed and housed by the U. S. government, even able-bodied young men (below) have little incentive to battle the island's pounding surf for fish. This leaves 650 Bikinians with nothing to do but watch for the supply plane or dream of being somewhere else. "All we can do is stay here and wait . . . wait," says one islander.





Although most of its islanders favored creation of a new Republic of the Marshall Islands, as it will be called, 89 percent of the Bikinians voted against it. They are reluctant to break their strong tie to the U. S. for fear the welfare will end.

"Without the government food my diet would be something like four crabs and a scoop of rice each day," said Tomaki Juda. "Also, we would not feel comfortable if the Marshallese government was put in charge of our money. There are now many programs beneficial to the Bikini people, but we have concerns that they may not continue under a compact of free association."

While the future of the Bikinians hangs now in a dark limbo, their numbers have grown from the 161 who were taken from the island in 1946 to more than 1,260 today, of whom about half live on Kili. And they pass their days there waiting—the old men with faces like book bags, lumpy and strapped with wrinkles, the young girls with large combs in their black hair, the teenage boys surly with boredom—waiting for their flight from despair. They have reason enough to curse those errant Bravo winds.

Also because of their fallout:

• A man named Gene Curbow seeks redress from the government, claiming his health has suffered. As a weather specialist in the Air Force, he was one of 28 servicemen stationed on the island of Rongerik at the time of the blast. The government paid him $53, the cost of the clothes he had to leave behind. He claims to have received 117 rem of external radiation in two days (200 times the maximum annual dose allowed by federal radiation standards) from those heavy, powdery flakes they called Bikini snow. He had three heart attacks by the time he was 42 and now has three clogged arteries in his body. He attributes all this to Bravo.

• The people of Rongelap, also caught in Bravo's poisonous dust, claim to be plagued with illnesses. They have developed a high number of thyroid tumors, some cancerous. The claim that their women give birth to grossly deformed babies is highly contested. Last year the people were taken by the Greenpeace organization to another island in the Marshalls.

• Roger Ray, a gentle and thoughtful man, struggles against the forces that would have him change his feelings of regret to those of guilt. As a physicist he was present at Bikini for Bravo. Subsequently, as the U. S. Department of Energy program manager for the Marshalls, Ray devoted the last 14 years of his career to exorcising the terrible legacy of the bomb from the lives of the islanders.

There are those who charge that the government, knowing that the winds had shifted, went ahead with the detonation of Bravo with the thought that those caught in the fallout would serve as guinea pigs for the study of the effects of radiation. Roger Ray disputes that, and so does Gene Curbow. "It was incompetence," Curbow told me.

"That's all you can flat outright say about it. If they set me up as a guinea pig, why haven't they been around to check on me?"

The people of Rongelap and Utirik caught in the fallout continue to have their health monitored and their illnesses treated by the Brookhaven National Laboratory of Long Island, New York, working as a subcontractor for the government. Dr. William Adams, who is in charge of the program, contends that there is no medical reason for the people to have left Rongelap last year.

"Obviously, there was fallout over these atolls, and some residual radiation in the soil. But the radiation the people received on Rongelap since they moved back there in 1957 is less than if they had lived in Denver all that time."

Adams and other physicians travel to the islands twice a year to examine and treat the people. There are thyroid problems among the population, he said, and two pituitary tumors have been diagnosed. "A great deal has been made about malignant disease and the radiation exposure," Adams said, "and while I do not want to make light of it at all, there are groups that magnify the horror of what happened, and that has led to such things as this exodus of the Rongelapese from their ancestral homeland."

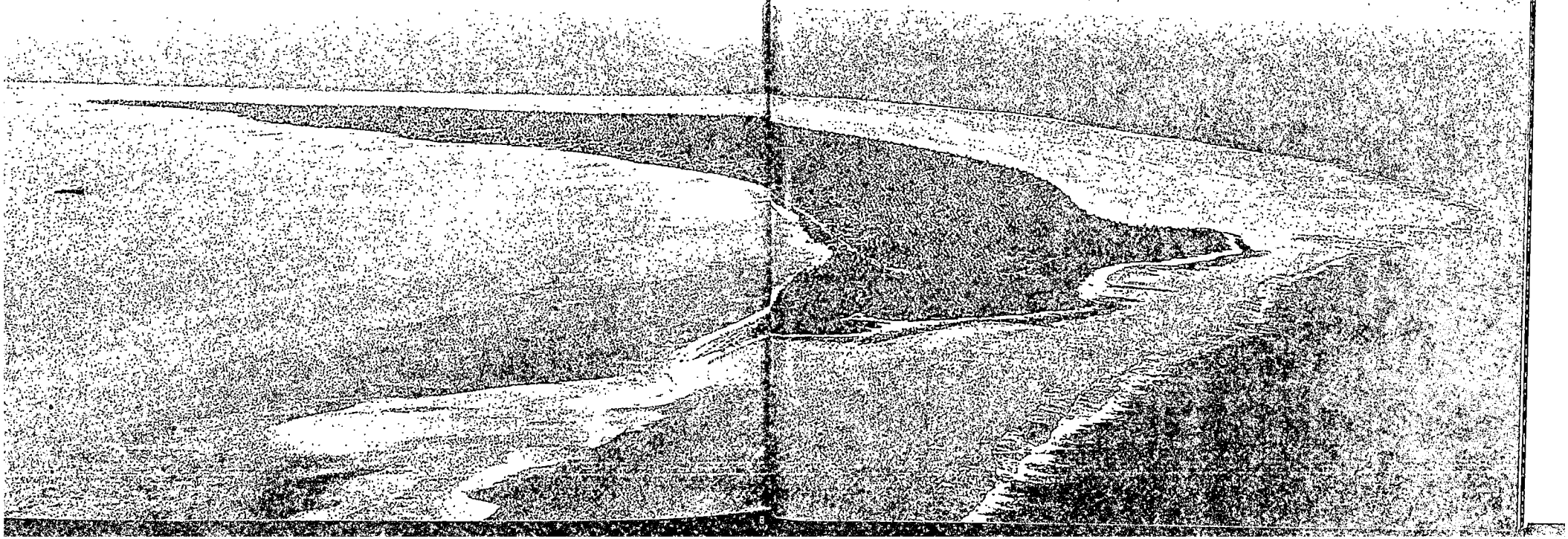
HAD THE TESTS of 1946 shown the naval fleet to be obsolete, useless as a war machine? Certainly there was nothing for the Navy to cheer about as five ships went to the bottom in just the first shot, while others burned with the hidden fires of radiation. But there were ships that survived, ships that steamed from the scene after taking a battering unequaled in the annals of fury at sea. Decision: too close to call.

There was widespread ignorance about nuclear weapons at the time of the testing. Thus, the errors, the miscalculations, the orders that had sailors scrubbing the woodwork of a ship to remove radiation while the brushes may have worked the poison deeper into the pores. The devices used to monitor radiation were inadequate in many cases; also the men sometimes took off their gloves in contaminated areas, necessitating removal of the outer layer of skin with acid.

Yet, at the time of the first two tests there was not a single recorded death or serious

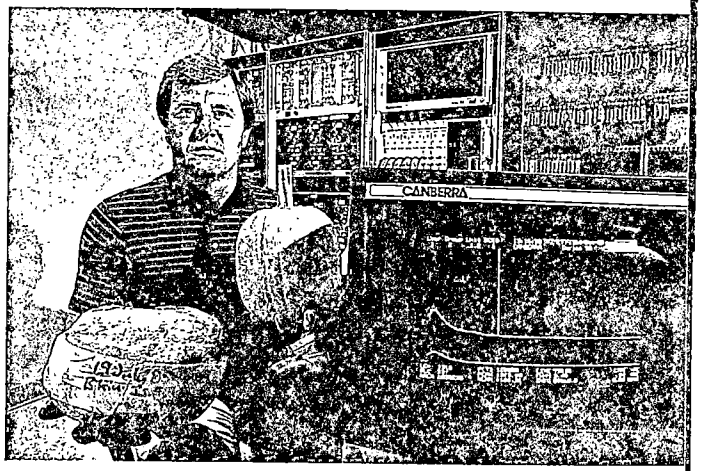


Paradise lost, *the island of Bikini (below) has what Kili lacks—a sheltered lagoon and plenty of space. Several Bikini families moved back in 1971 after the U. S. pronounced it safe. By 1978 they had ingested, through their diet, unacceptable levels of radioactivity and were re-evacuated. In July 1985 members of the Bikini council returned (above) to observe current decontamination efforts.*









injury due to radiation among the more than 40,000 servicemen and others present at Bikini. The atoll was evacuated; the target ships were unmanned; test personnel were stationed safely upwind.

Still, it was messy.

ON THE EASTERN SIDE of Enewetak Atoll there is a small island called Runit, and on that island there is a massive concrete dome called Cactus Crater, under which lies buried the deadly garbage of radiation (pages 826-7).

The 43 explosions around the lagoon at Enewetak left tons of hot debris and soil. It took three years to clean the atoll, at a cost of 120 million dollars, and the rug under which the dirt has been swept consists of 358 panels of concrete domed over a hole 30 feet deep and 350 feet wide. And still there remain loose on Runit 160 grams of plutonium oxides, a mere thimbleful, but enough of this toxic metal, in its elemental form, to wipe out an entire population.

Kunio Joseph worries about the plutonium, but he worries much more about his empty aspirin bottle. For the past six years he has held the job of medical assistant on the island of Enewetak. "I have run out of supplies," he said. "I meet the plane every time it comes in, hoping there is something on it for me. I am down to one aspirin."

On Kili, Uraia Jibas complained that he was out of bandages. On a table there were bottles of pills, one of which was marked Worms, another Arthritis, and a third Scabies. Nothing was refrigerated. In all the 68 clinics in the outer islands of the Marshalls, there are fewer than a dozen refrigerators that work.

For want of a medicine costing 85 cents, a local paper reported, a child on an outer

Radioactivity will linger on Bikini unless its soil is decontaminated. That's the verdict delivered to the Bikini council by Dr. William L. Robison (left), director of the Bikini Atoll project of Lawrence Livermore National Laboratory in California. Foods grown on the island show high levels of radioactive cesium 137 (pink spike on screen, above). The contaminated fruit held in Dr. Robison's right hand shows reduced radiation; it was grown in an experimental pumpkin patch (top) where the top 15 inches of soil had been removed. High-potassium fertilizer or saltwater irrigation may further block the uptake of radioactivity.



"There are no words to express my depression," sang Lore Kessibuki (standing, foreground) when he left Bikini 40 years ago. His dream of returning burns brighter during a visit to the atoll, and he believes that those who ruined his home are still his best hope—"It is not impossible for the United States to do anything."

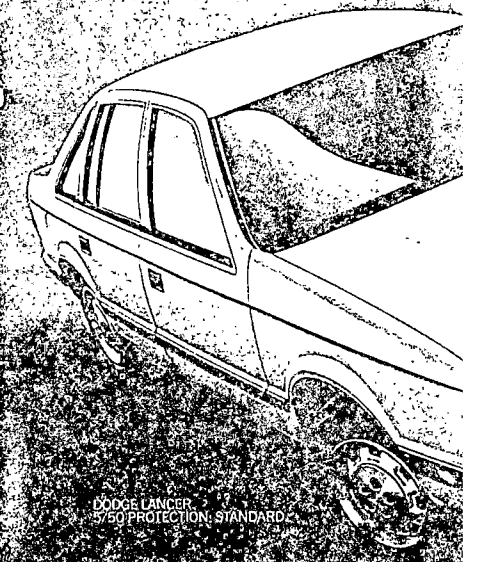
island died last year. The infant mortality rate in the outer Marshalls is at least three times as high as the United States average. More than 50 percent of the deaths last year were of children under five. Small Styrofoam caskets are neatly stacked on the floor of a store on Majuro, as if on display for a weekend special.

BUT THERE IS NO DEATH on this Sunday morning in Kili. Rather, someone is striking the empty steel oxygen cylinder that hangs from the old breadfruit tree in front of the church, striking it with a length of pipe to produce a sweet but muscled sound, like a requiem for a tsar.

It is the call to church, and soon the Bikinians are sending up their voices to Zion, filling that small hall with a devotion in song. It is then that the outsider comes to know a certain truth about these people, a people at peace with their lives: There is great strength yet in their souls, and only when they sit in those wooden pews, fanning themselves and reaching deep for the pieces of voice that fit together in glorious harmony—only then does the strength come forth.

So on this Sunday morning they are not only singing and worshiping. They are once again sailing their outrigger canoes, and they are fishing and clawing in the sand for turtle eggs. They are fathers smiling as their sons make their first climb to the top of a coconut tree.

It is not the sea that they hear outside, pounding Kili's unprotected shores. It is the ghost of a lost culture calling out to them. □

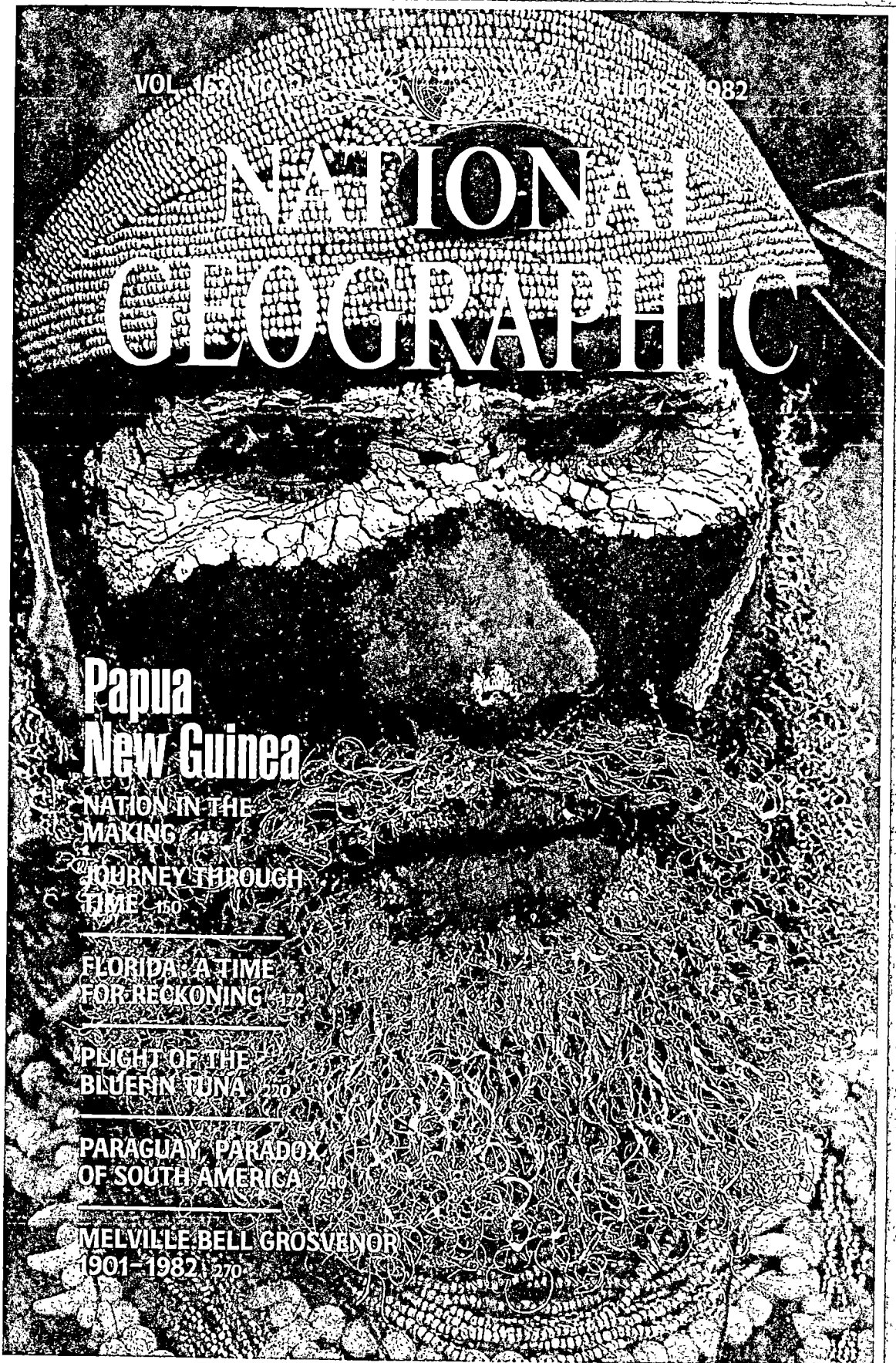


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PAPUA NEW GUINEA

Nation in the Making

By ROBERT J. GORDON

Photographs by DAVID AUSTEN

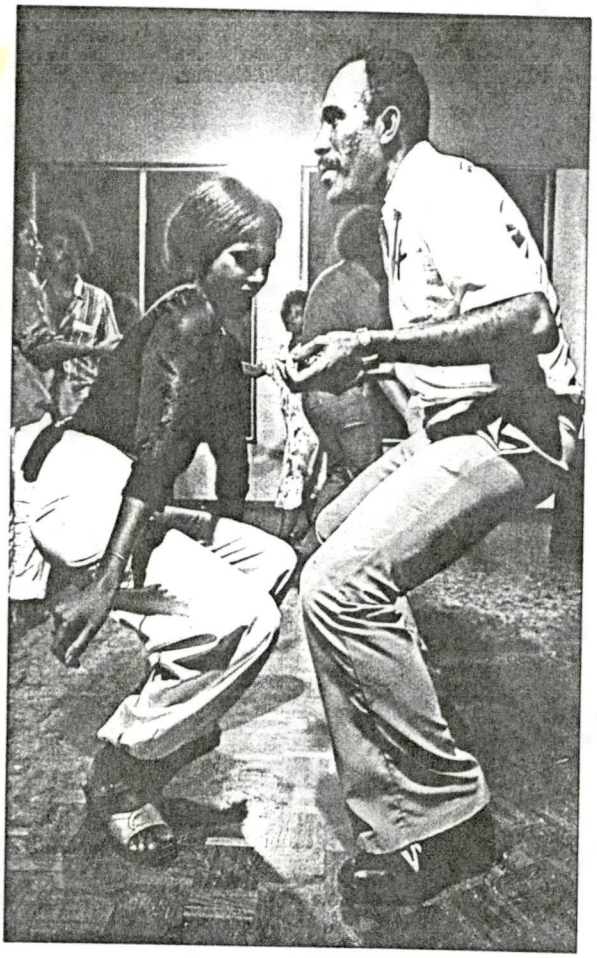
IT WAS NOT UNCOMMON for students at the University of Papua New Guinea to change their names. Flash Gordon attended a class I taught, and there was a Joseph Stalin on campus. Others took indigenous names. But the person behind the name remained the same, secure in his or her tribal identity. Their land has changed its name several times, most recently to Papua New Guinea, but the people's identity remains firmly fixed—ethnically diverse, fiercely independent, and egalitarian in spirit and instinct.

The students take pride in their new nation. One told me: "This is one of the centers of the world." From the perspective of prehistory, he had a point. The island was a stepping-stone between Asia and Australia in the great migrations that took place more than 30,000 years ago.

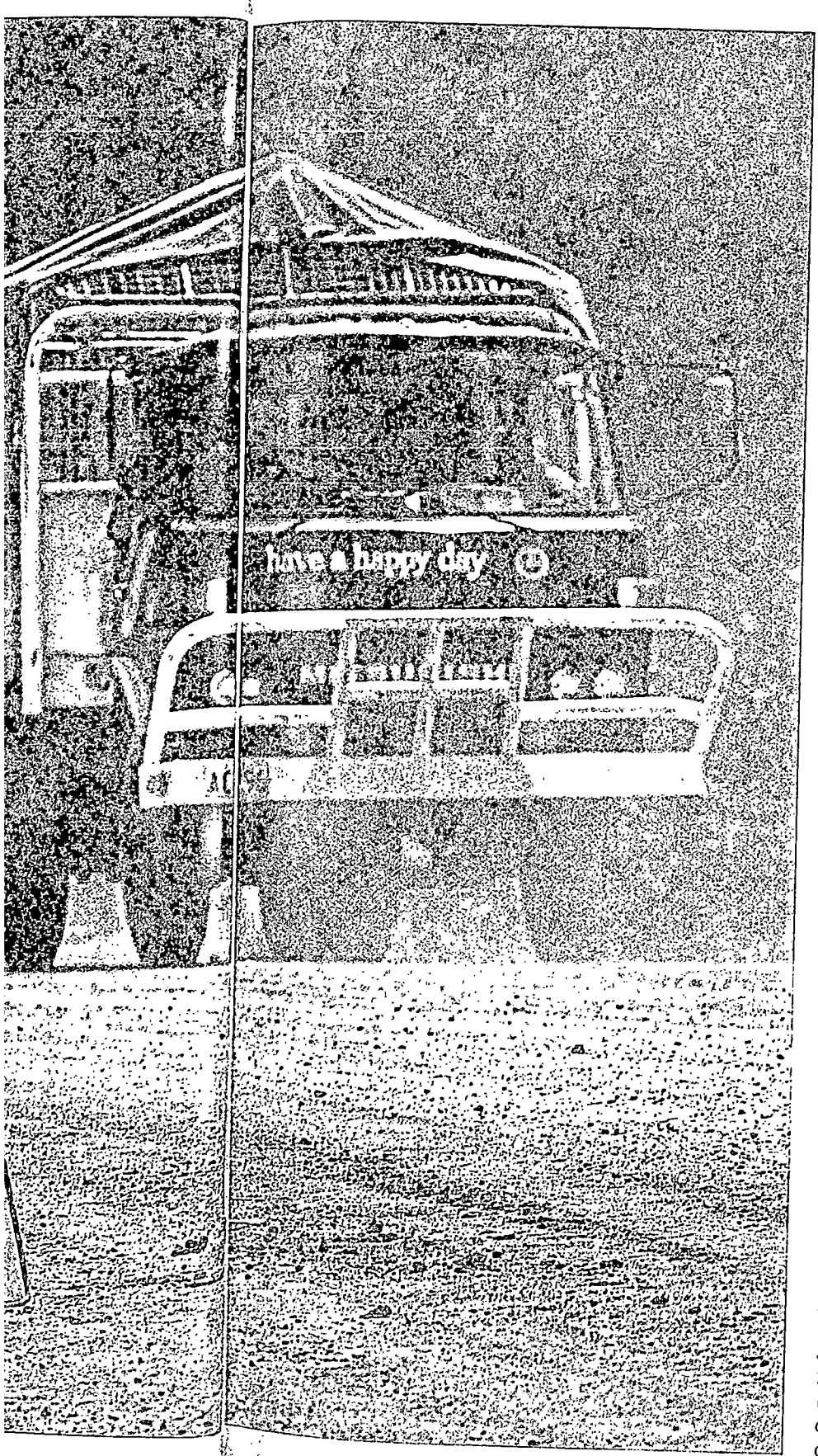
Four hundred and fifty years ago Europeans discovered and named New Guinea. In 1975, after less than a century of colonial rule by Germany and Britain, and later by Australia, the island's eastern half became the state of Papua New Guinea and the United Nations' 142nd member state.

The rugged topography of the main island and its 600 smaller islands presented formidable geographic barriers to colonization. The dominant form of Western penetration has not been by road but by air. Today Papua New Guinea probably has more airstrips per capita than any other country.

The isolating effects of rivers, forests, and mountains have helped preserve the rich linguistic



Seven years independent, *Papua New Guinea adds new ways to age-old values. Disco rocks the capital of Port Moresby, while in the highlands an umbrella replaces a banana leaf for shelter. But the carryall bilum bag has no modern peer.*



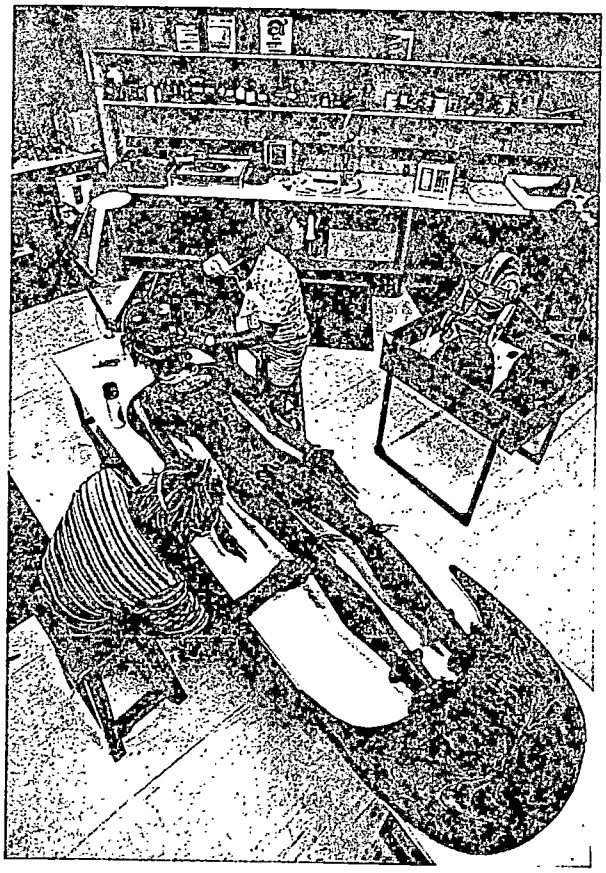
and cultural mixture of Papua New Guinea. Perhaps a sixth of the world's languages are found there. However, recent research confirms a complex pattern of precolonial trade routes, communications networks, and migrations linking the mountainous interior and the coast. There has always been a continuous process of adapting ideas, language, and artifacts; in recent years this process has been speeded up with the improvement of long-range communications.

One example of such adaptation is the development of Tok Pisin, a pidgin language that has fast become the foremost lingua franca. It is resplendent with creative and ambiguous words like "grisman," meaning grease man, a flatterer, a fat person, and "mauswara," literally mouth water, to talk nonsense or make idle promises like politicians.

If there is one lesson to be learned from the peoples of Papua New Guinea, it lies in their ability to coexist in spite of language and cultural barriers. When fighting does occur, it usually involves related clans.

My dominant impression, after three years of teaching and researching at the university in Port Moresby, is the people's lack of ethnic tension and their tolerance of outsiders.

Pidgin warning *translates "Work on road, all cars must stop when you see the red sign." A land of some 700 tongues, Papua New Guinea (PNG) promotes pidgin as a common language. Some 20 percent of the population speaks English.*



Legacy of Australian rule, *a catamaran sprints toward high-rise offices in Port Moresby, PNG's overwhelmingly largest city. Australia governed the land before independence and still contributes more than a quarter of the national budget. The foreign population declines as nationals gain higher roles in business and industry.*

*Totem of success for hunters of the Iatmul tribe in the Sepik River area, a wooden statue—probably carved in the early 1960s—comes clean of mold at the National Museum in Port Moresby (**above**). The museum purchases and preserves such artifacts, which are still revered by many citizens.*

Dr. Robert J. Gordon, born in Namibia and now a professor of anthropology at the University of Vermont, taught and did research in Papua New Guinea for three years. **François Leydet,** a noted writer on the American West and wilderness, has contributed seven previous articles to NATIONAL GEOGRAPHIC. **David Austen** (see On Assignment in this issue) traveled to many corners of the young nation to make the photographs with both articles.

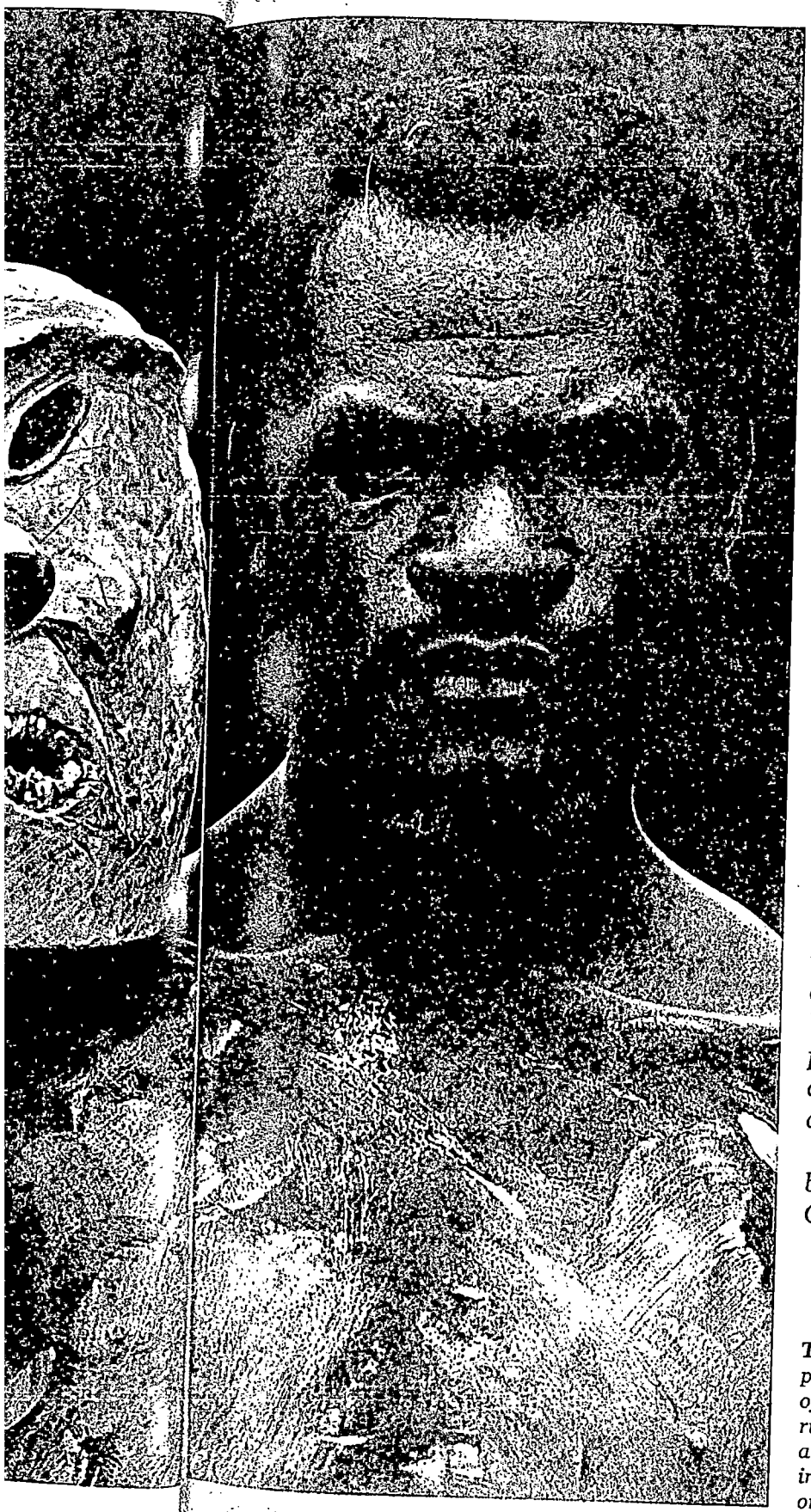
This can be seen in the way many Papua New Guineans had to be nudged unwillingly by the Australians into accepting independence. It is epitomized by the fact that the prime minister, Sir Julius Chan, is half Chinese. The educational organization Freedom House cites PNG as one of the better Third World countries in respecting human rights.

Perhaps an important clue to this remarkable tolerance lies in the nation's ethnic diversity: No group is strong enough to dominate others at the national political level. Loose, ever changing coalitions, rather than a few dominant parties, are the motive forces in PNG politics.

To govern such a fragmented territory, Australia was forced to develop a very large administration, and at independence it bequeathed the two and a half million Papua New Guineans a public service of 28,000 employees. In the first five years of independence the public service continued to grow apace, almost doubling in size to about 50,000. It is clearly the major growth industry of the country. It also provides the most visible manifestation of national integration.

Many observers believe that an important factor, which makes for the melding of national identity, is the so-called Indonesian threat. The western portion of the island was taken over from the Dutch by Indonesia in 1963, and some Papua New Guineans feel that the next exercise in Indonesian expansionism will involve them.

Papua New Guinea can be described economically as having two circuits. The upper one is



urban biased and cash dominated. Characterized by large mining and timber projects, it is more strongly integrated into the world economic system than is the second or lower circuit. This larger circuit is based on the traditional subsistence activities of the rural majority. In the highlands, however, where about 40 percent of the people reside, large profits are made from a cash crop—coffee.

But the money from the crop is not used to transform traditional farming. Rather, it is spent on consumables, and also at large and elaborate traditional ceremonial exchanges in which a prosperous grower attempts to gain prestige as a "big man."

The expansion of the public service was in part due to the need of the government to legitimize itself by tackling the problems of poverty, malnutrition, illiteracy, rising unemployment, and lawlessness. Many officials now realize that a lot of the country's problems are themselves the product of development. Thus, the government recently withdrew a request to the United Nations for famine relief, perhaps fearing that such a precedent would increase the country's dependence on outside donors.

Such a move, even if only symbolic, bodes well for Papua New Guinea's future.

* * *

***The face behind the mask** is a practical businessman. "Mudmen" of the Asaro Valley now enact their rituals mainly for paying tourists and photographers. Fame spawns imitators in other regions. The origin of the practice is obscure.*

PAPUA NEW GUINEA

Journey Through Time

By FRANÇOIS LEYDET

IT WAS A LOVELY sunny morning on Umboi's quiet little Simbana River, meandering between banks lined with nipa palms and taller trees. A large fertile island of volcanic origin in the strait separating New Britain from Papua New Guinea's mainland, Umboi feels remote. It is. With a group of 15 European tourists off a small cruise ship, I was aboard a launch about three kilometers upstream from the river mouth when we were greeted by shouts. There atop the high right bank a throng of men, women, and children stood waving and calling to us—a spontaneous and charming welcome. Later we learned that the villagers had never seen such a large party of tourists.

I clambered up the steep, slippery bank and followed a path beneath coconut trees to the village of Gauru. An old man met me, shook my hand, and said in pidgin, *"Yupela kam na kisim win insait long dispela haus*—You-all come and catch your breath in this house."

He led me to a thatch-roofed, unwalled platform on stilts—the men's clubhouse, he said—and invited me inside. Then he added, pointing to the ladies in our group, *"Olgeta meri olsem*—and all the women too." In a country where women generally occupy a subservient position and are rarely allowed in the men's meetinghouses, this invitation went beyond the call of hospitality.

After a smoke with my aged friend I walked around the attractive, prosperous-looking village. The thatched, rectangular stilt houses were beautifully built with walls of planks hand-adzed from driftwood, and the bare earth of the village square was tidy. The people seemed healthy, cheerful, and neatly clothed. Some older women were bare breasted; the younger wore shifts, or blouses and skirts of bright contrasting prints; the men and boys wore shorts or *lap-laps* (mid-calf-length wraparounds).

A village leader, a wide-awake young man named Jacob, told me in English, "We have plenty of everything we need here in Gauru. Yams, sago palm, tapioca, *kaukau* [sweet potato], coconut, vegetables, cash from copra and cocoa. We have plenty fish from the river and sea, plenty pig and cattle all around in the bush."

I noticed three piglets trotting across the square, and Jacob laughed. "We have a small health station here, and we tell the people to keep the pigs outside the fence, for good health. But with some, words go in here"—he pointed to his right ear—"and out there"—pointing to his left ear.

"You like this place?" Jacob said as we parted, pleased by my open enjoyment of it. "You come back and stay longer!"

My tourist companions were voluble in their praise of Gauru's charm, and this and other such villages may be seeing a lot more like them. Though Papua New Guinea (PNG) is still no tourist mecca—fewer than 40,000 people visited it in 1980—the number of tourists attracted to its many physical splendors and the colorful diversity of its ways of life has been steadily growing.

PNG's Diversity Charms Visitors

Just what kind of country is this Papua New Guinea they are going to see? It is a constellation of islands, including roughly half of the world's second largest island, New Guinea, which it shares with Indonesia's province of Irian Jaya (map, pages 154-5). Its population of a little over three million is divided into more than 700 linguistic groups, whose customs differ almost as much as their languages.

Though customs and languages are ancient, PNG is a very new nation. September 16, 1975, marked the end of nearly a century of colonial rule—first by imperial Germany and Great Britain, then by neighboring Australia. Papua New Guinea became a

Almost 160 kilometers from the nearest competitor, *Haraula Kapali's backyard gas station in Tari fuels Highlands Highway traffic. He himself owns no car. Such contrasts abound in this land where some communities still talk by drums, yet others converse via one of the first solar-powered microwave telephone systems.*



sovereign state within the Commonwealth, with Queen Elizabeth II as chief of state, a governor-general, a prime minister, and a one-house parliament of 100 (now 109) elected members.

Independence has not yet become an unalloyed boon, and in some places the new tourists will be shocked that life still seems so primitive; others will find it enchanting. It depends upon the tourist—and the place.

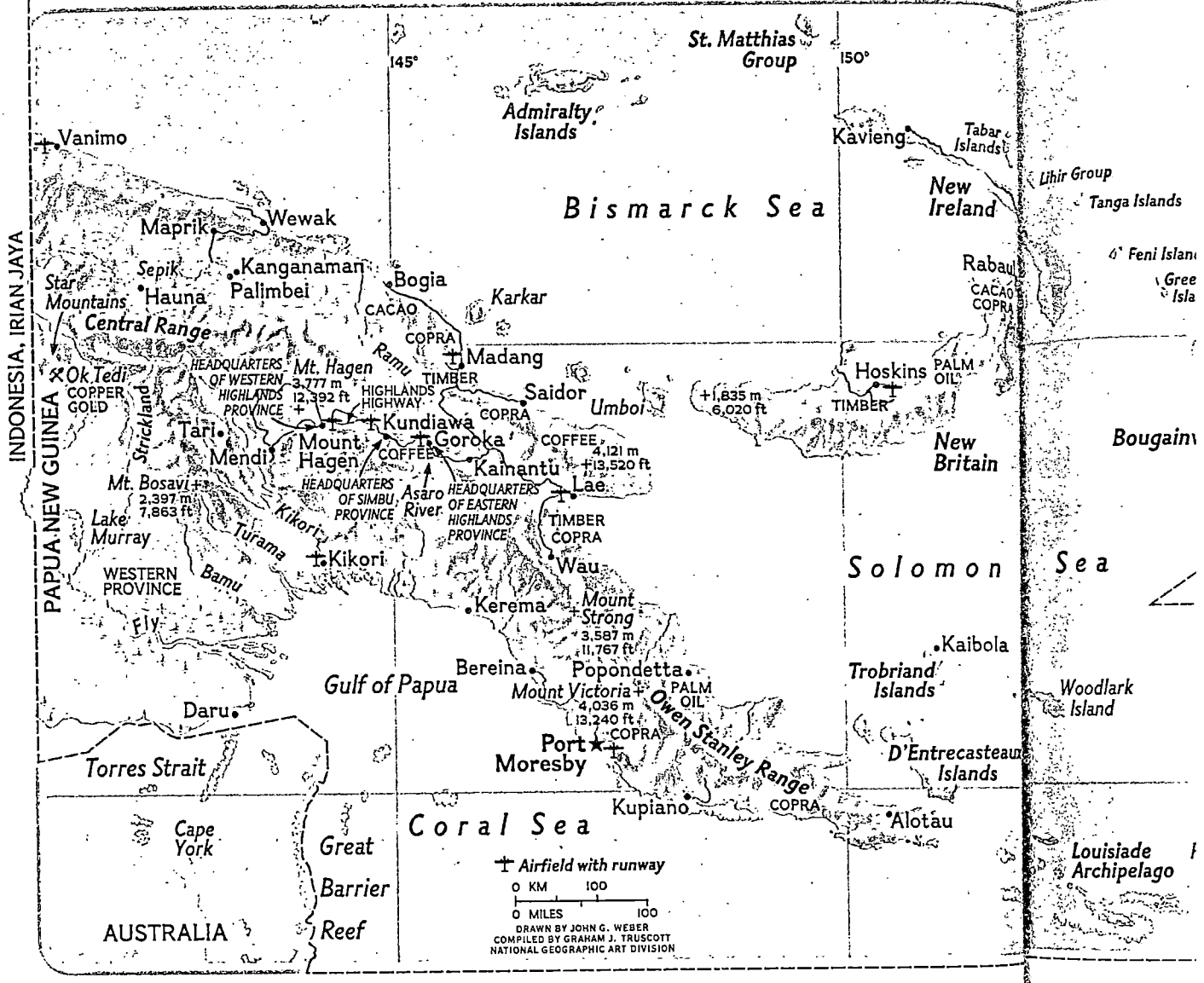
In the village of Kasena, which lies northwest of Goroka, headquarters of the Eastern Highlands Province, enchantment has not arrived. Set among small plantations of shiny-leaved coffee trees, the village consists of two rows of low, circular huts ranged on either side of a long strip of bare earth. The houses are picturesque, with walls of decoratively plaited matting and smoke seeping through the roof thatch. But inside



***Only 50 years ago**—and mainly by air—did the outside world penetrate the highlands, home to 40 percent of PNG's population. Coffee, the nation's most lucrative crop, now flourishes in these altitudes. Here along the upper Ramu River, sugarcane farming and processing begin to supply the country with sugar, a commodity once entirely imported, despite native cane.*

they are dark, unventilated, redolent of smoke and of human and porcine effluvia. Pigs, chickens, and emaciated little dogs wander in and out at will.

The ground between the houses, muddied from last night's rain, was smeared with pig droppings and red splotches from chewed betel nuts. A shriveled old woman sat on a log, throwing kaukau peelings to a pet hornbill with clipped wings. A young widow



stood zombie-like near her house, her face painted in mourning with gray-green mud.

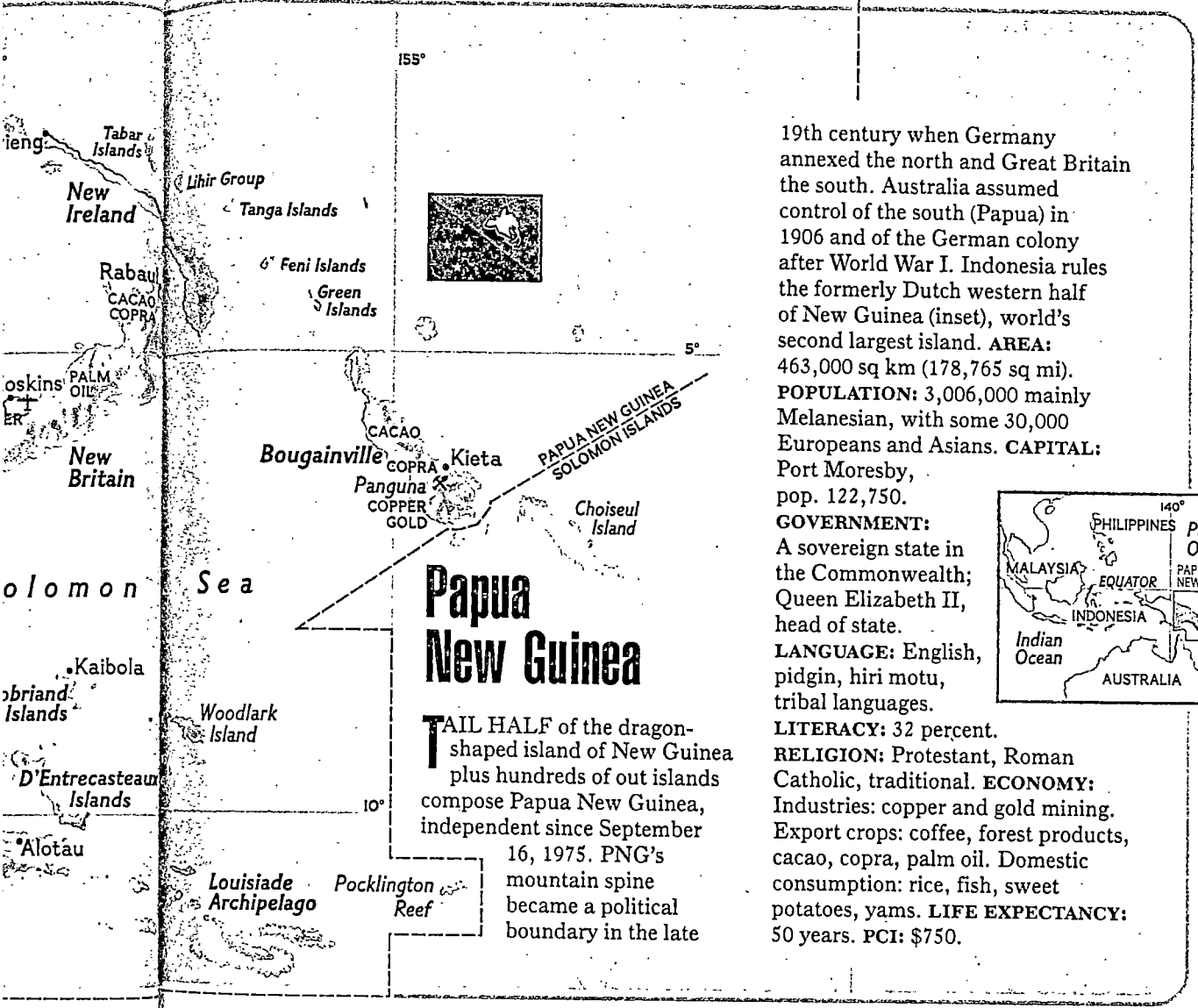
I photographed an older man, whose appearance was fairly typical of the men of the region: short, muscular, strong featured, with aquiline nose and deep-set eyes. He was arrayed in traditional finery: feathered headdress, quill piercing the nose, pig-tooth necklace, loincloth, and *asgras* (an apron of leaves that covers the buttocks).

The excuse for this festive garb was the presence of the Raun Raun Theatre, a troupe of actors from all parts of PNG. They had come here today to entertain and educate the villagers with some skits about health.

The performance began on the ground outside one of the houses. Actors with masks representing a dog, a pig, and a fly conveyed the message that allowing these animals inside the huts causes diarrhea in humans—a condition vividly acted out.

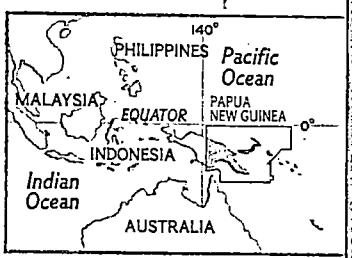
The second skit was a plea for birth control, featuring a drunken husband and a young woman who dies in childbirth. I wondered whether the audience of a hundred or so, which was howling with laughter, was getting the serious message behind the comedy. Children outnumbered the adult viewers by something like six to one.

While watching the show, I was struck by the contrast between the pretty, scrubbed-looking actresses in nurses' uniforms holding up posters illustrating birth-control devices, and the old crone with her clipped



Papua New Guinea

TAIL HALF of the dragon-shaped island of New Guinea plus hundreds of out islands compose Papua New Guinea, independent since September 16, 1975. PNG's mountain spine became a political boundary in the late 19th century when Germany annexed the north and Great Britain the south. Australia assumed control of the south (Papua) in 1906 and of the German colony after World War I. Indonesia rules the formerly Dutch western half of New Guinea (inset), world's second largest island. **AREA:** 463,000 sq km (178,765 sq mi). **POPULATION:** 3,006,000 mainly Melanesian, with some 30,000 Europeans and Asians. **CAPITAL:** Port Moresby, pop. 122,750. **GOVERNMENT:** A sovereign state in the Commonwealth; Queen Elizabeth II, head of state. **LANGUAGE:** English, pidgin, hiri motu, tribal languages. **LITERACY:** 32 percent. **RELIGION:** Protestant, Roman Catholic, traditional. **ECONOMY:** Industries: copper and gold mining. Export crops: coffee, forest products, cacao, copra, palm oil. Domestic consumption: rice, fish, sweet potatoes, yams. **LIFE EXPECTANCY:** 50 years. **PCI:** $750.



hornbill or the widow with her mask of mud. But such is PNG today—in uneven transition from stone tools to 20th-century technology; from colonial dependency to national self-reliance; from allegiance to the village, clan, or tribe to a sense of national identity.

What has independence meant to PNG? A young, educated national at the University of Technology in Lae parried my question with an accusation. "In Australia I've met Aussies and other foreigners," said student counselor Peter Tasin, "who have no idea of the social, economic, and political changes taking place here. They think ours is still a primitive headhunter culture."

Lukis Romaso, the assistant director of the Appropriate Technology Development Institute, seemed to think the foreigners were partly right. "Development has not touched the people in the bush," he told me. "They still carry on in the old ways—hunting, subsistence farming, warring with neighboring clans. They don't know what independence means. Most are where they were a hundred years ago."

The institute fosters simple technology, labor-intensive projects at the local level, such as charcoal kilns, micro-hydropower stations, and sundry small industries. He feels that these projects may be of greater benefit to the 85 percent of the people who still live in small villages than the huge mining or timber operations that attract foreign capital to the country.

It is fair to keep in mind that when independence came, almost overnight PNG's few highly trained professionals had to run a country where many people "first saw a wheel on the nose end of a plane" (as a U. S. Embassy official put it to me).

Communications were, and remain, difficult. The road system is fragmented—the capital, Port Moresby, for instance, has no highway connection with the rest of the country. On the main island, coastal swamps and jungles, threaded by innumerable streams and swarming with malarial mosquitoes, rise inland to a jagged labyrinth of high mountain ranges. In mountain valleys a number of hostile clans harass one another in sporadic warfare. Wide stretches of ocean separate PNG's myriad large and small islands.



***PNG's first woman lawyer,** Meg Taylor lobbies for a new women's prison with Goroka police commander James Nanatsi **(above)**. The jail, housing both sexes, lacks women's toilets and facilities for nursing mothers; PNG bans baby bottles unless prescribed. Taylor grew up riding horses on her family's coffee plantation in the Asaro Valley and now tests her skill in the sport of polocrosse.*

One thing the diverse PNG tribes have in common is that most, even the nominally Christian, believe in spirits and in the practice of sorcery. But a Star Mountains tribesman, clad only in a penis sheath, and a Trobriand islander, paddling his outrigger, are worlds apart in looks and customs. That they share a common nationality may mean little to either one.

Young Nation Faces Serious Problems

This cultural fragmentation is one of many frustrations the newly independent nation faces. At the Roman Catholic mission in Taraka, I spoke with Father Guy Cloutier, a tall, black-bearded, ascetic-looking young French Canadian, who was worried about PNG's difficulties. He was familiar with many of them from his work in Taraka, a "settlement"—part government housing, part shantytown—on the outskirts of the port city of Lae, which is second in population to Port Moresby and PNG's largest industrial center.

"There is high unemployment, and the great majority of the employed are semiskilled or unskilled," Father Cloutier said. "An unskilled laborer makes 60 kina—about $84—a fortnight. This may be enough for a man who's drifted in from the highlands or the islands to send home for his wife and children. Or just as likely he'll *not* send for them, marry a local woman, start another family, then ferry between them. Polygamy is legal here."

Father Cloutier continued: "The typical laborer lives in a two-room shack with half a dozen other adults and many children. On the average a woman will have a baby every two or three years. Very little family planning. Four or five kids are common."

The government's efforts to improve conditions have not taken hold, Father Cloutier believes. "It is putting all its priorities on superstructure *(Continued on page 161)*

Success stories *spun in a nation of new opportunity include 36-year-old Renagi Renagi Lohia (**below,** at left), head of the Public Services Commission and former vice-chancellor of his alma mater, the University of Papua New Guinea. Shouldering stalks of bananas, he greets relatives during a food-exchange ceremony honoring recently deceased elders of his native fishing village 28 kilometers from Port Moresby. Clan bonds remain strong, even for those who move away.*

*At ease with power, Sir Julius Chan (**right**), leader of the People's Progress Party, became PNG's second prime minister in 1980. Though a stickler for self-reliance, Chan advocates the use of foreign capital to increase industrial and large-scale agricultural output. The nation's first prime minister, Michael Somare, leader of the Pangu Party, counters that the country is best served by encouraging grass-roots development.*

*Chefs taught from scratch at the catering division of Lae Technical College (**right center**) will feed the nation's infant tourist industry and also work in hospitals and schools.*

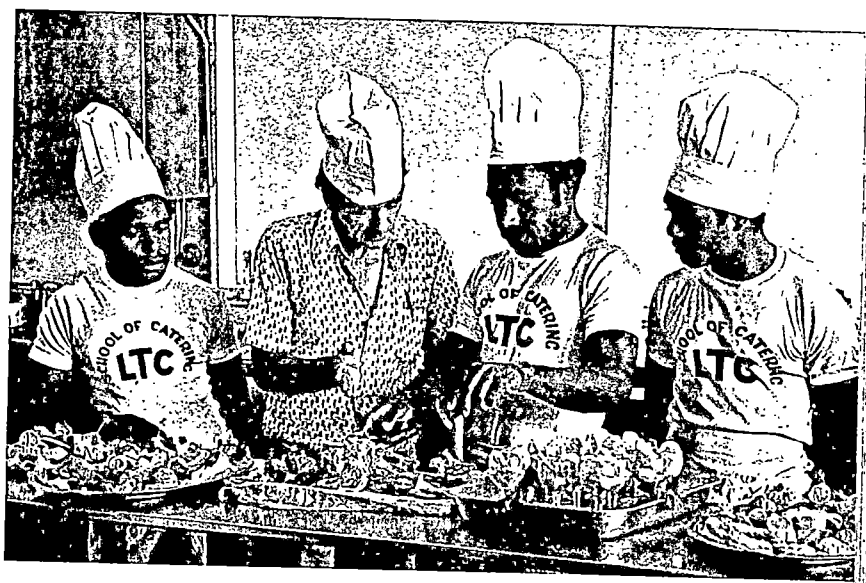
Health care expands as the corps of



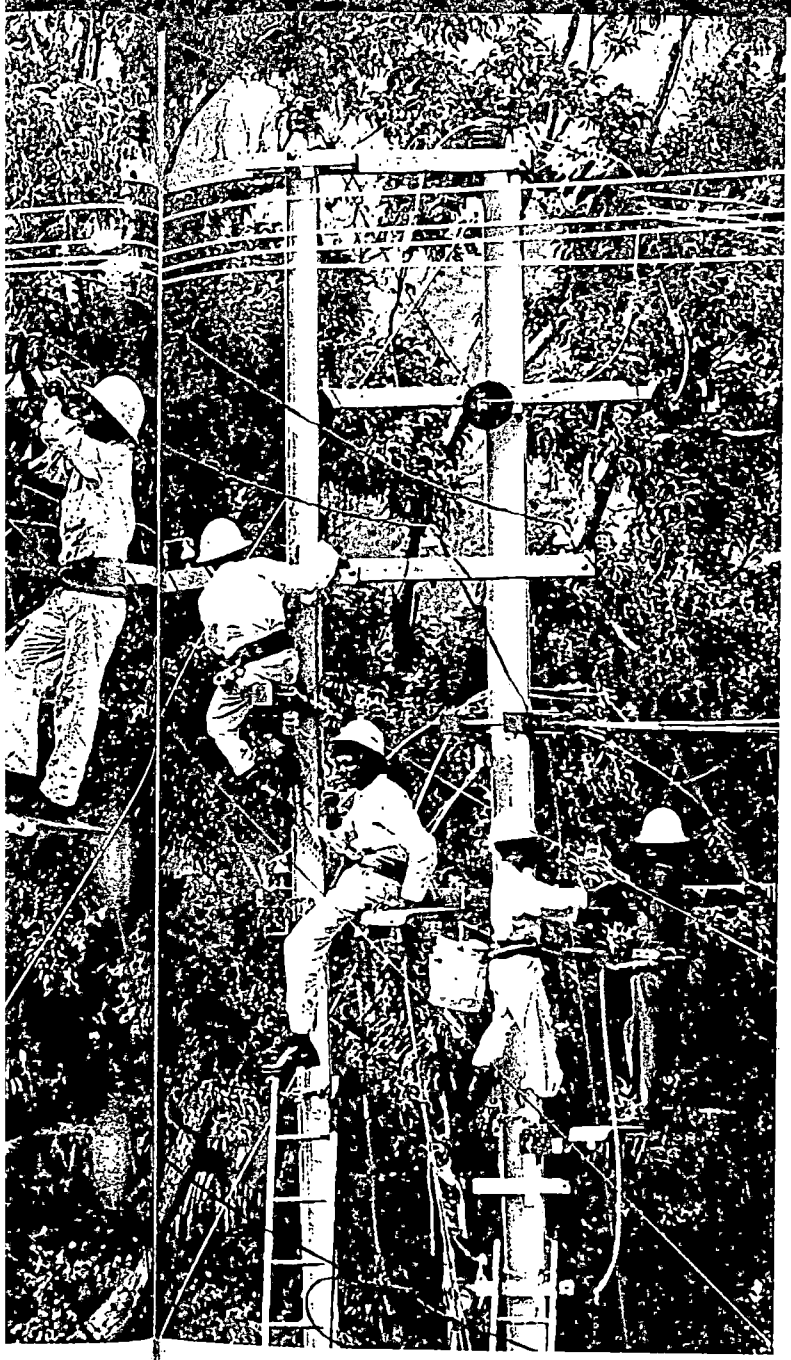
*health extension officers grows. In her second year at the College of Allied Health Sciences, Maria Waria, age 17, draws spinal fluid from a child to check for meningitis (**bottom right**). A nurse's aide and worried mother look on. With infant mortality down, the government promotes birth control in a nation of large families.*











Harnessing skilled manpower— *PNG's greatest need—the Electricity Commission Training College in Port Moresby aims toward less dependence on foreign labor. Future linemen* ***(above)*** *practice above their teacher, himself a graduate.*

At Ramu I Hydro-Power Station ***(left)*** *students and instructor, in glasses, synchronize generators that tap the upper Ramu River. River-rich PNG surges with hydroelectric potential, but with few technicians it still relies largely on imported oil. Less than 20 percent of the population has electricity.*

rather than basics—on things that show, like nine million kina for a new wharf. Not much of this helps the people."

Because of its uneven development, technology in PNG ranges from the wooden digging stick with which the highland woman works her patch of kaukau to huge machines scooping up copper ore on Bougainville at Panguna, one of the world's largest open-pit mines. The 15 percent of the population who live in urban centers are relatively sophisticated, but even in the bush change has been occurring, sometimes subtly.

An "expat" (resident foreigner) in Madang opened my eyes to this. We were having a drink together in the pleasant north-coast port town, and I couldn't help comparing it with the highland village of Kasena, where the Raun Raun Theatre had taught concepts of modern hygiene.

"Appearances can fool you," the expat cautioned. "Those highland villages may look dirt poor, but there's a lot of cash up there, mainly from all the coffee they grow. Not too long ago this fellow came down into Madang with a group of his friends. He was the real thing—nose plug, asgras, and all. To look at him, you wouldn't think he had two toea to rub together. He walked into a local car dealer, looked over the stock, and asked the manager, 'How much for three of these?' The manager figured it out, told him the price. 'I'll be back,' the highlander said.

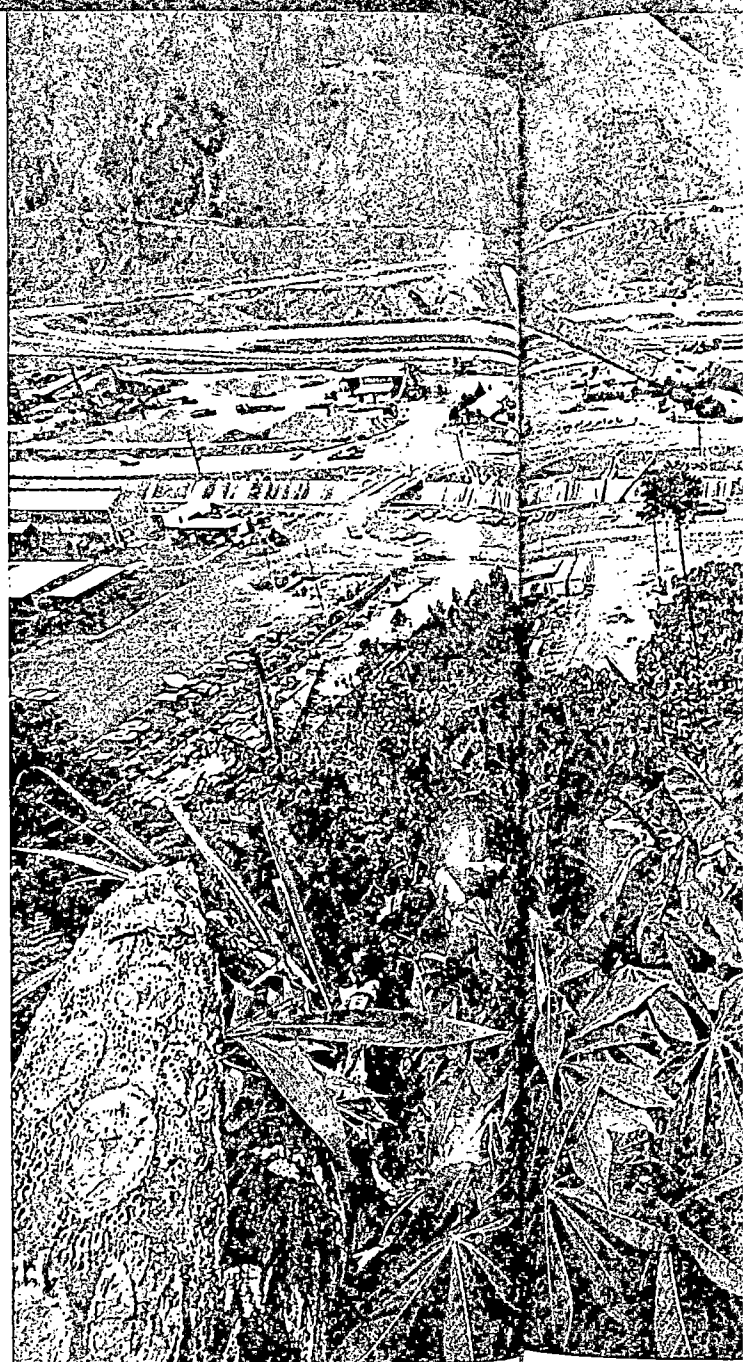
"Half an hour later he and friends were back, with a bag that he emptied out on the manager's desk. There was the exact amount for the three cars, to the last toea. Come back in the morning, he was told; the cars will be registered and ready. *'Nogat,'* the highlander growled. 'Here's the money; we want the cars today!' His friends began to growl too. 'All right, you win,' the dealer said. 'You'll get them today.' And they did!"

Automobile salesmen aren't the only ones intimidated by highlanders. Though tribal warfare is a thing of the past in most of the country—and cannibalism and headhunting no longer exist—it has resurged in the highland provinces since independence, with the departure of the tough but savvy Australian *kiaps,* or field officers.

At a curve of the Highlands Highway between Goroka and Kundiawa, I passed a man sitting on a rock, cradling a dog in his

Bonanza of copper and gold makes the Bougainville mine PNG's leading industry. Senior operator Stanis Mataria and his family (below) live in company housing built for foreign workers before the mine opened in 1972. Above mine buildings Katherine Kontarinu and a grandson harvest vegetables near where they once lived. Mine expansion has twice relocated their village.





lap and tenderly stroking its head. I waved to this fellow dog lover; he grinned and waved back, calling out "*Apinun, masta!*—Afternoon, master!" (the term of address usually used for Europeans). On a rock by his side lay a bow and a sheaf of arrows. Several times in the next few days I passed men walking along the road armed with spears or carrying bows and arrows.

"Are those men hunting?" I asked a Goroka national. "No," he said, "they're armed for self-defense in case they run into a personal or tribal enemy with a score to settle."

Although the bloodshed is minimal compared with loss of life in PNG highway accidents, outbursts of tribal fighting worry local authorities. In 1981 the premiers of the five highland provinces pressed the national government to declare a state of emergency, but Prime Minister Sir Julius Chan refused to do so.

This disturbed Nambuga Mara, the premier of the Western Highlands Province, who said that what concerned him most was that the warriors were not fighting by the rules. "Our traditional rules of tribal fighting

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say women, children, and chiefs should not be injured or killed and that no person killed should be burned. These are sacred rules, but they have not been observed lately."

Land, women, pigs—these have been the issues over which neighboring highland tribes have long waged wars. When there were wars to fight, the men became almost full-time warriors. The *pax australiana* enforced by field officers thus deprived the men of a principal role in their lives.

The highlands may be losing their warriors, but they are gaining babies. Public-health services introduced by Westerners have contributed to a population explosion in a region that already was densely inhabited when the first white men "discovered" it in the 1920s and 30s.

Dr. John Christie, Eastern Highlands Provincial Medical Officer, told me: "Population growth is about 3 percent per year—more than doubling every 24 years. Highland families were always large—to be a 'big man' you had to have a big family. But then, if a woman had ten children, six or seven would have died; now seven or eight live."

Another mixed blessing laid at the door of Westerners is coffee planting. Australians brought it into the highlands in the 1950s, and now most of the plantings are owned by nationals. Lukis Romaso, who worries about appropriate technology, also worries about "inappropriate" coffee.

"In Simbu Province," he told me, "coffee has taken over a lot of the good flatland. Farmers have to grow their food crops on the hillsides, where the soil quickly washes away. Soon they end up with nothing but cash, and cash is no substitute for land. With a fast-growing population and much of the land growing coffee instead of food, there's suddenly a real land shortage. That's one cause of the fighting in the highlands."

Cash crops—coffee, cocoa, and copra are the big ones—almost equal copper's share of PNG's exports, and together the "4 C's" contribute 80 percent of total exports—and all involve gobbling up the land.

One sunny afternoon I took the North Coast Road from Madang and saw how land there was being used. In the 50-kilometer drive to a point across from the island of Karkar and its restless volcano, I passed through an almost uninterrupted succession of coconut plantations, many owned by the Catholic and Lutheran churches.

"All the good soil along the coast," Madang Deputy Premier Galen Lang told me, "is taken for cash crops. There's good soil inland, too, where it's flat, but the problem is that there are no roads, so the people can't get their produce to market."

Logging Brings New Roads

Why don't the villagers themselves build their own roads? Peter Colton, provincial planner for Madang, explained: "It's not that easy to build roads through the jungle with hand tools. Probably, though, the villagers could do more for themselves."

Mr. Colton was an Australian patrol officer in the highlands 20 years ago. "Back



Survivors of World War II, *caves tunneled for Japanese landing barges lure bat hunters in Rabaul, on New Britain. Captured in 1942, Rabaul served as Japan's command post in the southwest Pacific. Three cemeteries honor Allied forces that*

then," he recalled, "the kiap would tell a village, 'You build a road to that point'; the next village would be told to pick it up from there. One day a week the men would be put to work building roads, and the roads would get built. You can't do that any more. They wait for the *gavman* [government] or somebody to bring the roads to them."

The somebody doing the road building in the Gogol Valley southwest of Madang is Jant, the big Japanese-owned timber company whose plant in Madang converts jungle trees into wood chips. Arenaso Masapuhafo, a young forestry officer, took me on a loop drive around the valley. Where the jungle is intact, it is a delirious exuberance of vegetation: lofty trees adorned with mosses and ferns and orchids or wrapped in the fatal embrace of strangler figs. Elsewhere large clear-cut tracts look devastated, but sections cut only six months ago are already grown over with thick brush. "The secondary forest grows a few meters a year," Mr. Masapuhafo informed me. "What happens to the wildlife?" I asked him. "A lot of it disappears," he said.

The principal benefit of the logging to the villagers is the roads. Before the timber operation, the rural population was being whittled down, but now more of the young people are staying home. They can travel to jobs without having to move away.

Cottage Industry Flourishes

Neither timber trees nor coconut trees fuel the economy along the Sepik River, which spills into the Bismarck Sea 200 kilometers northwest of Madang. Here I found a cash crop of a different kind: *"Mipela laikim turist. Igat kaving hia*—We like tourists. There are carvings here."

The crude, hand-lettered sign, large enough to be read from a passing boat, stands on the bank at a small village on the lower Sepik. Masks, animal figures, wooden drums, and other such artifacts used to be



reclaimed the islands in 1945. Members of the Rabaul Japanese War Veterans Association mourn their fallen at a shrine above the city. Leading investor in PNG's timber industry, Japan is the top customer for PNG's products.

produced for ceremonial use only. Today such carvings have become an important cottage industry in the handsome but mosquito-ridden villages that border the mighty river, and are sold directly to art dealers or to tourists from excursion boats.

One of the oldest and most beautiful of such villages, on the middle Sepik, is Palimbei. At either end of a long grassy mall, bordered by huge trees and flowering shrubs, rears a spectacular *haus tambaran,* spirit house. Halfway between them stands the skeleton of an older haus tambaran, bombed during World War II—leaving only the massive carved tree trunks that had supported the structure.

I was invited into one of the spirit houses, a long, two-story building faced with intricately woven matting, the roof thatched and soaring to a peak at either end. On the ground floor, men sat on platforms smoking twist tobacco or chewing betel nut; this is strictly men's territory. Grotesquely beautiful, eerily powerful, carved masks and figures stared at me from the ceiling beams and columns.

On the second floor, initiation ceremonies are held: The boys' backs are incised, leaving patterns of raised scar tissue that resemble a crocodile's skin. No initiations today, but a stirring performance for my benefit. Two men performed, each on a *garamut,* a drum made of a hollowed tree trunk. Louder and louder, faster and faster, the syncopated rhythms boomed out as the men walked up and down with a dancing motion alongside the great drums, striking them in perfect synchrony with large wooden sticks.

As I was leaving, a man sold me a ritual flute—a long bamboo tube that can play four mournful notes. I was about to walk outside with it when the man stopped me, took the flute from my hand and walked back into the building. Returning, he handed me back the instrument wrapped in a taro leaf. *"Itambu*—it is forbidden," he explained, "for the sacred flute to be seen by *ol meri bilong ples*—the village women."

In Kanganaman, another Sepik village, I watched a woman preparing sago. Mashed from the fibrous heart of the sago palm, it emerged as an orange mush that would dry into a sort of flour. Sago and river fish are the staple diet, though nowadays they are supplemented by other food.

I happened to be out of cigarettes, so I climbed a ladder to the platform where the little village store perched. There I bought a couple of packs of PNG-made Cambridges from a charming young girl, who invited me to inspect the merchandise. There was little to buy other than tinned mackerel and beef, bags of rice and sugar. All of these, I noted, were imported—from Australia, the Philippines, or Japan.

Fewer Imports, More Self-sufficiency

PNG's dependence on imports is a major concern of the government. When I talked with Prime Minister Sir Julius Chan in his reception room at the parliament building in Port Moresby, he said, "We import 20 percent of our food. Sugar, rice, tinned meat and fish account for 75 percent of that. We've got to cut that down!"

The prime minister, a small, spare, youthful-looking man whose features reflect his mixed ancestry—his father was of Chinese blood, his mother a New Ireland woman—spoke in a quiet, firm, precise voice, looking directly at me. "We will soon be producing our own sugar," he went on. "We plan to grow a lot more of our own rice. But you don't become a rice-producing nation overnight. Rice growing is a traditional skill—people who've been growing it for centuries have developed strong backs"—here Sir Julius stood up, went through the motions of planting rice in a paddy—"so they can bend like this all day."

Then, with a little smile, he sat back in his chair and continued: "Self-sufficiency means more than just growing our own rice and *kaikai* [food]. We have huge potential resources and small population. There's a lack of appreciation of why we must go

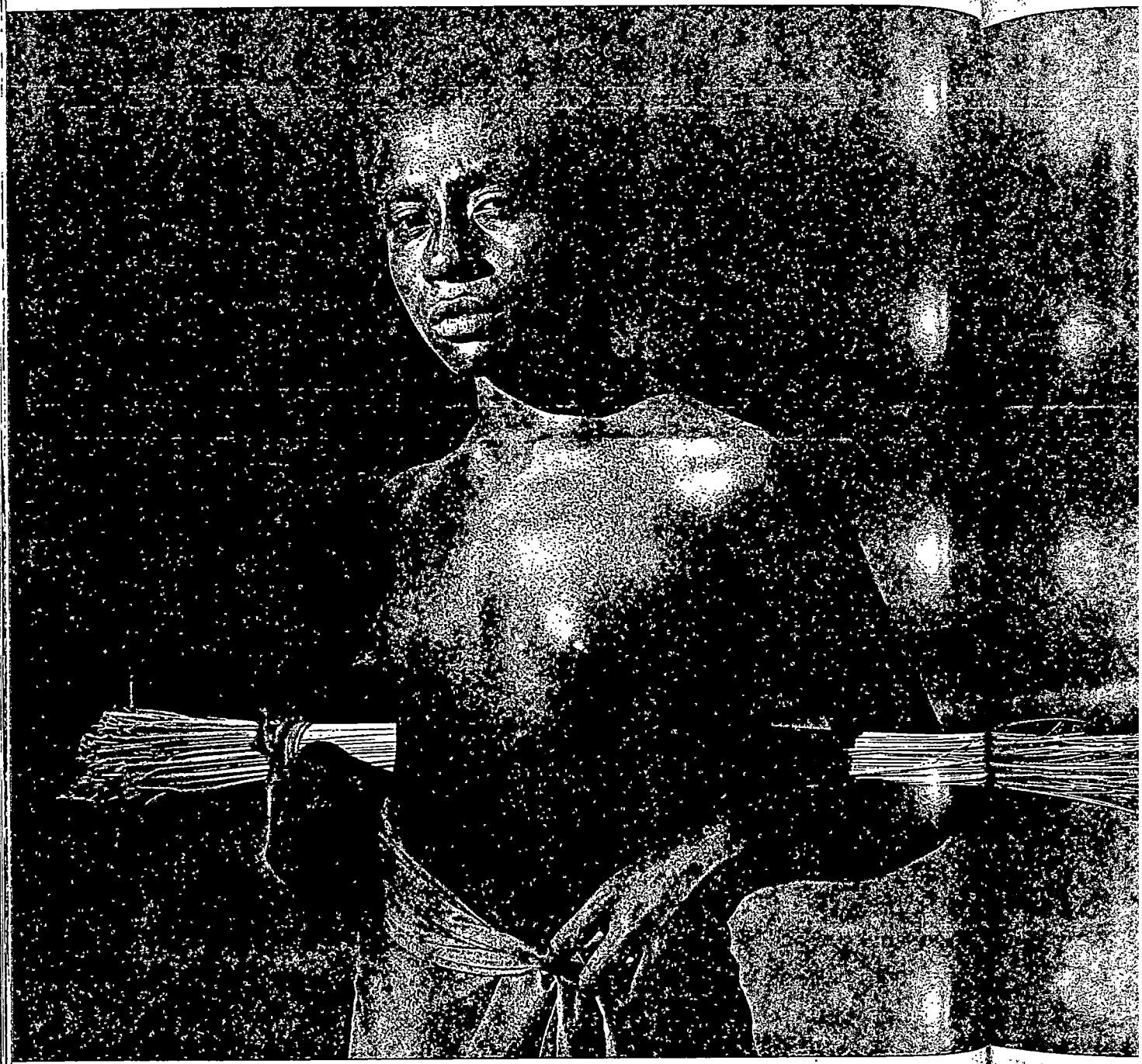


Pork rides piggyback *as hunters wade home to the village of Hauna near the Sepik River. Wild pigs are easier—but still dangerous—game when November-to-May monsoons flood the region. Revenue from crocodile skins and a canoe-borne store augments Hauna's bank account in the town of Wewak, three days away.*



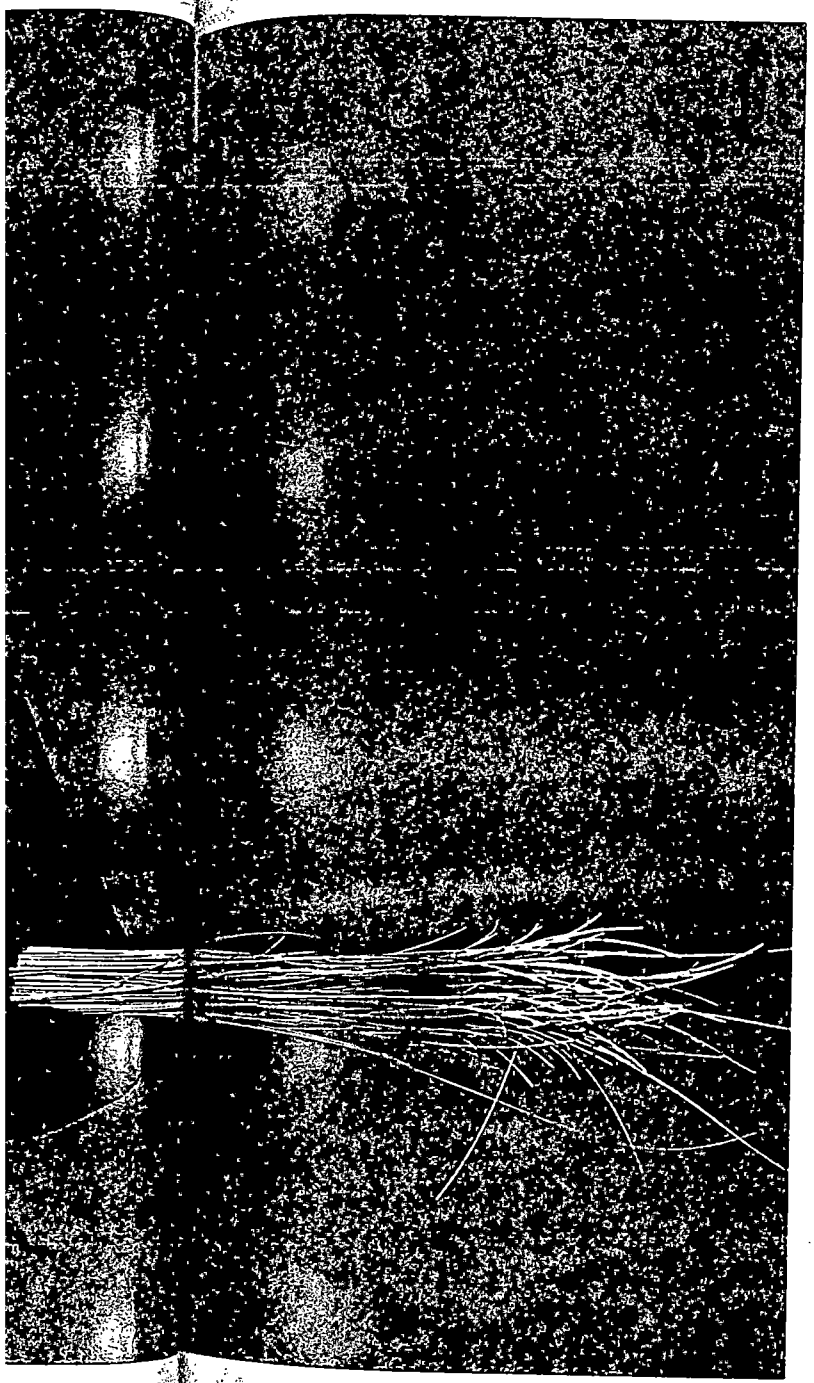
***Death of a clan member**—even by accident—demands swift highlands-style justice, called payback. A Wabia village woman was killed when she jumped from the moving truck of a Yangome villager. He gave her parents money and 22 pigs—prized as status symbols—but now his clan must also account. Wabians bristling with arms **(above)** arrive at a meeting ground near Tari to collect the negotiated payment of 225 pigs. A Yangome leader in a wig **(left)** keeps order in his ranks as Wabians argue over distribution **(below)**. PNG courts encourage pig and cash exchanges in hopes of ending cycles of revenge killings. Perhaps a third of the men in this region prefer Western dress.*





big. Small is beautiful, but big is useful. So we welcomed foreign investment at the Bougainville mine and now at Ok Tedi." A 1.5-billion-dollar project, with participation by PNG and firms from Australia, the United States, and West Germany, Ok Tedi will mine gold and copper in the Star Mountains of Western Province. It is expected to produce a major share of Papua New Guinea's export earnings by the mid-eighties while the Bougainville deposit is declining.

Critics of Sir Julius's approach tend to see it as a repudiation of the program of his predecessor, Michael Somare, PNG's first prime minister. I met Mr. Somare, now leader of the opposition, in his office in Port Moresby. He is not a big man physically, but he is a *bik man* in the eyes of his countrymen. "Chan goes for the quick buck," he said, "the shift to a cash economy, but this hasn't



Face of the future, *12-year-old Fidelis Pukue of eastern New Britain attends a Roman Catholic mission school and harvests coconuts for copra on weekends and holidays. Resting with her broom from after-school chores, she stands as proud as her fledgling nation.*

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improved the life-style of the people. We believe we must build from the ground up. You talk about real development, you're talking about the villages."

Specifically, Mr. Somare is talking about rural development versus industrial development. He wants a more self-reliant economy, down to the humblest village, gradually weaned from imported goods and capital and from Australia's annual grant-in-aid of some 200 million dollars, which currently finances more than a quarter of the national budget.

Many foreign residents in PNG, although aware of the country's serious problems, seem guardedly optimistic about the future. Chris Bryant, director of CUSO (Canadian University Service Overseas) in Port Moresby, told me, "The movement in the last 50 years has been formidable. It used to be that foreigners made all the decisions. Now Papua New Guineans are making their own. They're questioning the status quo. You ought to hear them in parliament."

Significant Changes . . . More to Come

At a morning session of parliament I heard the speaker, Sevese Morea, seated in a high chair on a platform dominating the house, open the proceedings in his sonorous baritone voice: "The chair recognizes the honorable member from Maprik."

The honorable member, Sir Pita Lus, came to his feet. He was wearing a lap-lap, long-sleeved shirt, and large boar-tooth necklace. He launched into an impassioned oration in Tok Pisin, or pidgin, in favor of a motion of no confidence in Police Minister Warren Dutton. The speech was frequently interrupted by shouts of "Hear, hear!" but the motion failed to carry.

Later I asked Mr. Morea about Sir Pita. "He has had little formal education," the speaker said, "yet he's a very effective member, one of the most eloquent orators in the house. Many of our members can't read or write. To you that may be an anomaly. To us it's the way things are, and may be for some time yet."

Governor-General Sir Tore Lokoloko, when I visited him at Government House above the harbor, reconfirmed this national philosophy of patient growth. "We are a happy people. We don't ask too much of others. We just want to go steady and slow." □

THE MAKING OF AMERICA: DEEP SOUTH

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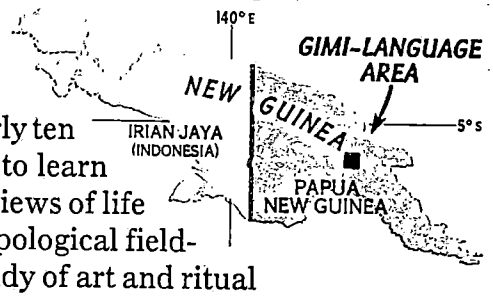
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Living Theater In New Guinea's Highlands

By GILLIAN GILLISON
Photographs by DAVID GILLISON

"HURRY! Light more torches!" shouts Noru behind his enormous mask, a sheet of bark painted with a yellow sun and surrounded by a rainbow of red flowers and luminous leaves (*left*). "We need the light to finish my costume!" The performer is one of some 10,000 Gimi-speaking people in the Eastern Highlands of Papua New Guinea, and the Gimis represent one of more than 700 language groups in the New Guinea archipelago.

My husband, David, and I have come to know the Gimi people, to share their daily lives in a village surrounded by rain forest, remote from the world at large. We first arrived here with our six-year-old daughter, Samantha, nearly ten years ago to study Gimi arts and culture, to learn the Gimi language, to comprehend Gimi views of life and the universe. I was engaged in anthropological fieldwork, and David conducted a separate study of art and ritual (see the July 1977 NATIONAL GEOGRAPHIC). Now we have returned, working together to understand Gimi theater.



Highlanders make few of the elaborately carved ceremonial objects for which New Guinea is famous. Those are—or at least were—produced mainly along the coast or on outlying islands. High in the more densely populated interior, traditions of plastic art seem never to have developed. But the Gimis possess an elaborate performing art, staging short dramas and farces with costumes and props made from feathers, marsupial furs, leaves, flowers, berries, mosses, barks, and colored clays. Though these materials are discarded or dismantled after use, leaving no collectible artifacts, Gimi theater is, to us, an art form as complex and full of interest as the fabulous lowland sculptures now housed in the world's museums.

Leaving Noru and his attendants to put the finishing touches on his costume, I walk through the cool, humid night toward the center of the hamlet. In the flickering light of bamboo torches I see fantastic creatures—men and women who have transformed themselves into trees, birds, mountain spirits—milling near doorways, waiting for the chance to make an entrance. I ease my way through the crowd into a low smoke-filled thatched house.

IT IS WELL PAST midnight. I sit cramped, part of a swaying, chanting crowd. Suddenly four brilliantly decorated, flower-covered dancers (***right***) push their way into our midst, forcing us to clear a "stage" around the central fire, the only source of light in the room.

The intruders begin to pound the hard mud floor with water-filled bamboo poles, making the sounds of turbulent, churning water. "Shush, shush, shush," they chant, imitating the sound of the current surging against the banks. "Look at me, I am the river," they sing, addressing the onlookers as if they were wild sugarcane lining the shore. "I am the swollen torrent, hitting you as I run down, down, down. . . ."

Women give the night's first performances: five- to ten-minute portrayals of rivers, wild taro, bandicoots—fast-moving or abundant things of the forest floor that symbolize the fertility of primordial women.

Before marriage and society existed, Gimi myths say, women had easy access to the rain forest, the source of all reproductive power. They did not need husbands to hunt game or to help bear children. Original women had male qualities, animals once were humanlike, and forest and settlement once were indistinguishable. But men began to fight among themselves, creating divisions in the world. Now the sexes are separate and live in hamlets fenced off from the forest. Now men





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own the game, father children, and dominate their wives.

"Disappear, you frogs, disappear!" men chant as the line of women players exits. "Make way for us birds to fly in!" With this mildly contemptuous song, the men dismiss the women after three or four performances, then announce their own acts.

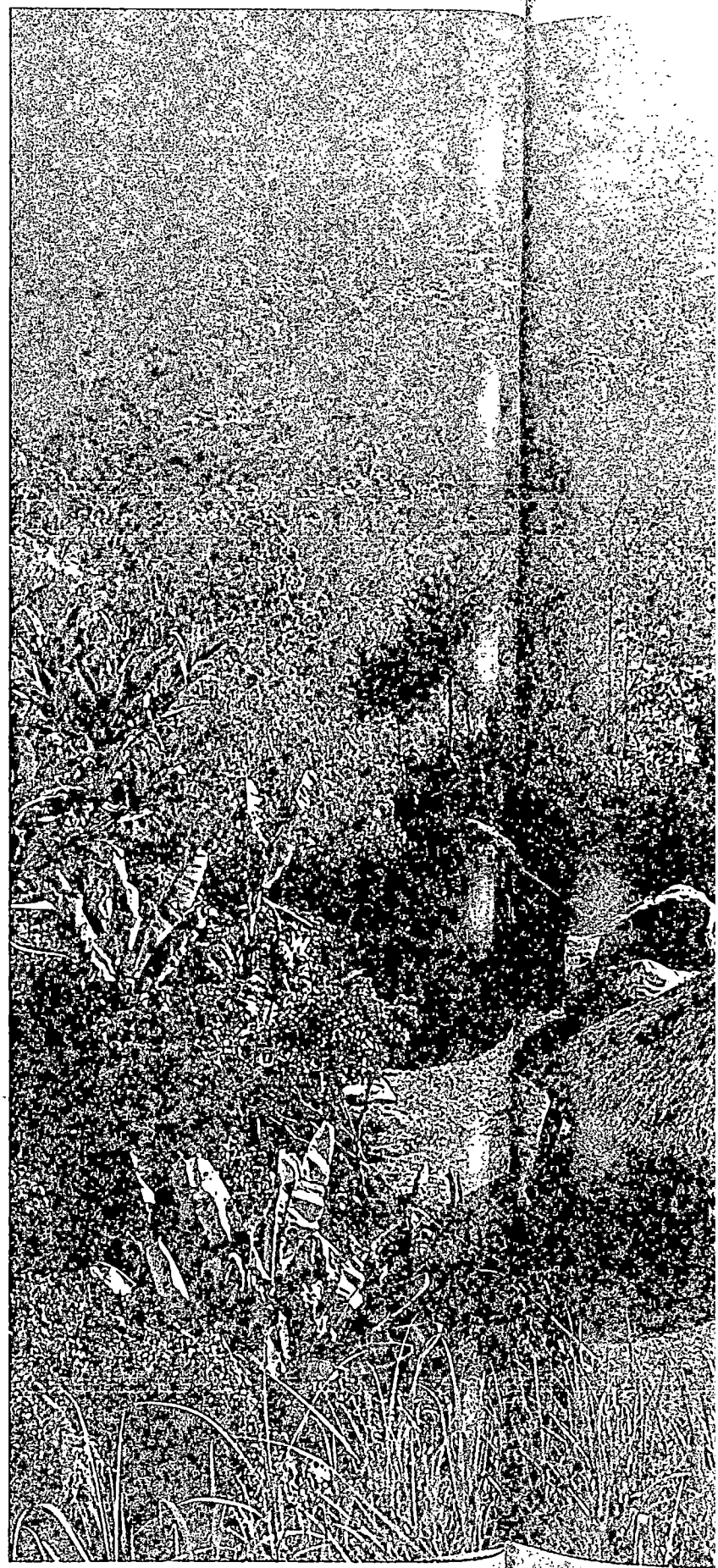
Traditional Gimi society, like most

in the Papua New Guinea highlands, is shaped by antagonism between the sexes. Many of the men and boys of our village still sleep in barracks-like men's houses built at the centers of muddy, fenced compounds (***right***). Mothers, wives, and children are ordinarily forbidden to enter men's houses or even to walk on paths leading to them. They must live in smaller, peripheral houses located at the edge of each compound. But, as performers, the women can break taboos and enter the men's houses.

Some 15 compounds scattered along a mountain shelf make up our village. Surrounding it, in increasingly distant rings, are sweet-potato gardens, dense pandanus orchards, and heavily forested slopes. Here, too, the sexes have separate realms. The men clear the land and build fences; the women do arduous daily garden work, but seldom venture into the orchards or forests where the men hunt birds and small mammals.

Once in five years or more, men of neighboring compounds organize marathon celebrations to initiate sons and marry off daughters. Hundreds of people converge on the host settlement for a week or more.

Men as well as women spectators may congregate in a woman's house to await the dramatic entertainment. Night after night, troupes of actors stop at each house to perform mimes and farces. On a single night in any one house, there may be eight or more performances, each lasting ten minutes or so and separated by intervals of singing. Anyone who can persuade one or two others to join in may organize an afternoon rehearsal in the forest and wait their turn at night in the compounds amid the crush of other expectant players.







"If you reveal these secrets to your mothers, sisters, or younger brothers, we will cut your throats with axes and dump you in the river!"

SAYING THIS, the masked man menacingly runs his tongue along pig teeth glued into the jaws of his gourd mask (*above*). Pig tusks and a bamboo rod that pierces the septum of the mask's nose identify him as a ferocious warrior. He seeks to terrify initiates with mock threats, to fill them with contempt for the world of women, which they have inhabited until now.

Men confine pre-adolescent boys in the men's houses, forcibly separating them from their mothers. Now the youths will live with their fathers, who forbid them to visit women's houses, to take food from mothers' hands, or to eat anything with female associations, such as frogs—which squat like women—or flying foxes, owls, and other birds with short beaks. Gimi men disparage such creatures as having "no noses"—another way of saying they have no penises.

Above all, men warn, the boys must not divulge to women and children what they see and hear inside men's houses.

For nearly a week, as guests assemble in the compounds, men subject the secluded initiates to ordeals of manhood. They seat the boys beside hot fires and withhold food and drink. They deprive the sweating lads of sleep, haranguing them relentlessly about

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the need to avoid women, to heed clan elders, to hunt successfully, and to vanquish the enemy in battle.

This rite of passage, which signals the end of childhood, is a time of exquisite sadness for mothers and sons. Their grief is expressed by enacting a story about a group of boys lost in the rain forest (***above***). Orphaned and forced to flee far into the mountains, they are alone and hungry, wandering in search of small animals to shoot and calling plaintively for their dead parents. Eventually, uncared for, the boys perish and are transformed into pheasant pigeons, birds known for their haunting, humanlike cry.

Like any Gimi theater piece, this one will be remembered and performed again only if it strikes the hearts of the audience.

"CAREFUL! Don't let those creatures near you!" Someone shouts the warning as a pair of grotesque figures grunt and stagger about the dark hut, selecting spectators to intimidate (***following pages***). Wet clay covers their flat masks and clings to dried vines and leaves wrapped round their bodies. Red blossoms protrude from clenched fists to show they have stumbled through dense vegetation from their homes in mountain caves.

Suddenly one figure lurches toward the fire, sending ash into the air. "They see fire but have no fear!" exclaims a man in the audience. The monsters are ancestral spirits—eternally rivalrous brothers—who dramatize the importance of rules of conduct just imposed on initiates and brides.

"It's ugly men that women like, and ugly men they marry!" yells a spectator.

A MAN brandishing bow and arrows bursts into a woman's house. His face is blackened with soot and contorted by vines that press his nose flat against his face. The intruder, I'm told, portrays a villainous husband—"an ugly old man with no nose."

"Where is my wife? Have you seen my wife?" the old man asks one spectator after another, in a voice altered by his disguise. He pokes the floor with the tip of his arrow as if searching for footprints. Suddenly he spies his wife: Another performer, decorated with flowers and holding a digging stick, a symbol of woman's labor, has slipped unnoticed into the hut. She stands demurely beside the fire while her husband jumps for joy and shoots an arrow into the thatched ceiling. "Heh!" complains a woman in the

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front row. "You're so excited over that beautiful girl, you're stepping all over me!" "Watch out for that arrow!" yells another.

The husband moves toward his errant wife, but she backs off so that the two performers reverse positions. They repeat their encounter, giving everyone the chance to see their faces. A man in the audience addresses the ugly husband: "I'd like to marry that lovely girl. You can't have her!" The audience erupts in laughter.

Now a third performer arrives. He is the hero of the play, the woman's kind and handsome lover. Like the husband, he carries weapons and wears a warrior's feather headdress. His face is disfigured by vines too—not to make him ugly, but to hide his identity from the furious cuckold.



At first the rivals are oblivious of each other. Each circles the fire, staring at the floor in search of footprints. "The two of them are crazy about her, crazy about her," someone shouts out of the darkness near the door. "A nice girl like that always marries a bad sort! And look what happens!" adds another.

The unhappy wife stands with her flower-covered head bowed in the shadows beyond the firelight. With a burst, the two male performers collide, trampling several in the audience. The men disengage, and the whole performance is repeated, subdued scenes dramatically alternating with violent ones. In the end neither man wins the lady.

This play is being performed to celebrate the weddings of three young women of the village who are marrying into distant communities. When it is finished, the audience laments the loss of the young women: "Red orchids, fire of our forest," they sing, "we send you far away now. Woe are we!"

The brides have been secluded in this woman's house for days. Older women have kept watch over them, made sure they hardly ate or slept, and railed at them about the need to care well for their husbands and to obey their mothers-in-law.

The brides have sat slumped in an airless corner, listening to songs that compare their virtues to the iridescence of scarab beetles, the sweet taste of mountain streams, the succulence of pandanus fruit. The songs may soothe them, but the theater demonstrates that marriage will soon bring strife.

In other versions of this drama, the main character is an ancestral spirit, the woman is a widow, and the other man is her son. Always the ugly villain wants the woman, but she is torn between him and the hero—whether he be her son or her lover.

If we consider that this play is directed toward girls about to leave home and boys whose fathers have just forced them apart from their mothers, then we may see why the ugly man is always a villain. He may represent the father, who claims the bride's affections or "takes away" the initiate's mother.

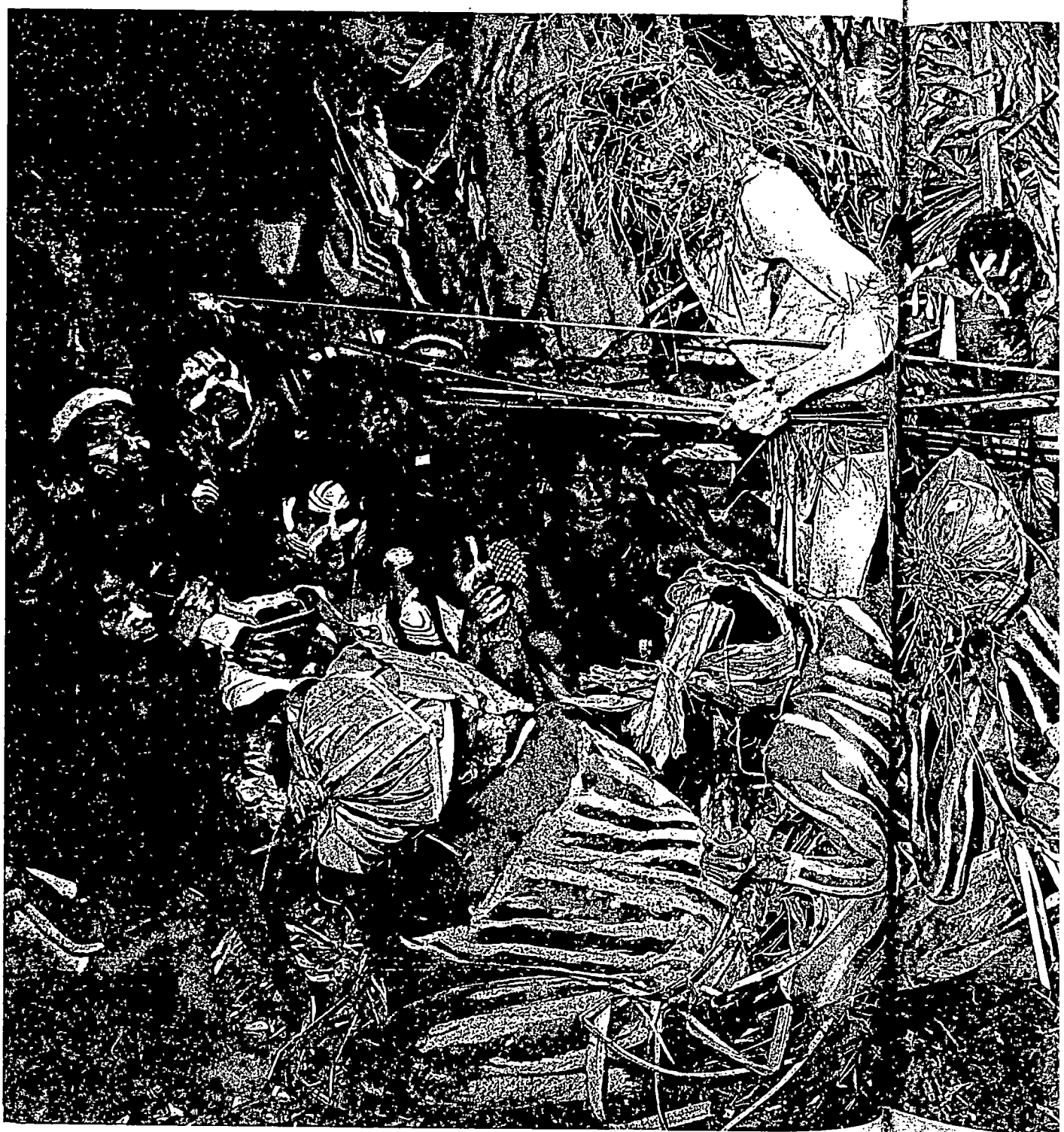
"I shoot at these birds but they do not fear me!" shouts the hunter, a man completely covered in white clay and holding bow and arrows.

HE LOOKS DOWN at his prey, a row of white cockatoos who silently return his gaze. "Why do they look back at me?" he asks.

At the beginning of this drama, the hunter burst into the hut alone, noisily twanging his bow and running around the fire. Then he moved into the crowd the way a hunter

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takes cover the moment he spies his quarry. The cockatoos—men with banana-leaf hats, bamboo masks, and white clay drawn vertically over their bodies—crept soundlessly into the room.

Now the hunter emerges from his hiding place and shoots at the birds. But they only turn their heads. Unnerved, the hunter shoots again. "What is this?" he asks in amazement. And from the audience comes a reply: "You are shooting at your brothers, don't you know?"

The birds embody spirits of the hunter's dead kinsmen, a bond that accounts for their fearlessness. The play dramatizes the idea that hunter and hunted are fated to meet.



"I'm on my way to the river's source to find pure water and a wife," the ugly old man tells the boy.

ON A PATH outside the settlement the two have met, and the boy has asked the old man, who carries a walking stick, where he is going. From their short exchange, repeated four or five times, the audience recognizes the start of a rather complex myth.

In this story the boy's widowed mother goes deep into the forest to the river's source to collect wild foods for her children. The ugly old man follows her upriver, looking for pure water to drink. When he reaches the widow, he accuses her of muddying the water and kills her. Thus he gets neither a wife nor pure water.

The old man returns to the settlement disguised as the widow and attempts to fool her children. He soon kills the widow's son, the boy he met on the path. But the boy's sister discovers his body and realizes that the "mother" is an impostor. She kills the evil old man while he sleeps. Then she runs away, carrying her brother's corpse inside a net bag.

The girl climbs many mountains until she finds the man she will marry. He puts her dead brother inside the hollow trunk of a tree and seals it shut. Soon beautiful sounds emerge from the tree. When the sister—now a bride—strikes the tree, the trunk opens and birds of paradise fly into the world for the first time.

What does the story mean? Why is it enacted during marriages and initiations? Many initiates are actually younger brothers of the brides. In the myth the heroine's marriage makes possible her brother's rebirth as a bird, the Gimi symbol of a full-fledged male. The girl must leave home and find a husband before her younger brother can be initiated, before he can "fly" into adulthood.

This myth is one of a collection of morality tales that are enacted for the benefit of the brides and initiates, separately sequestered in women's and men's houses. The dramatic and often violent stories symbolically foretell the tragic complexities of life as they enter the adult world.

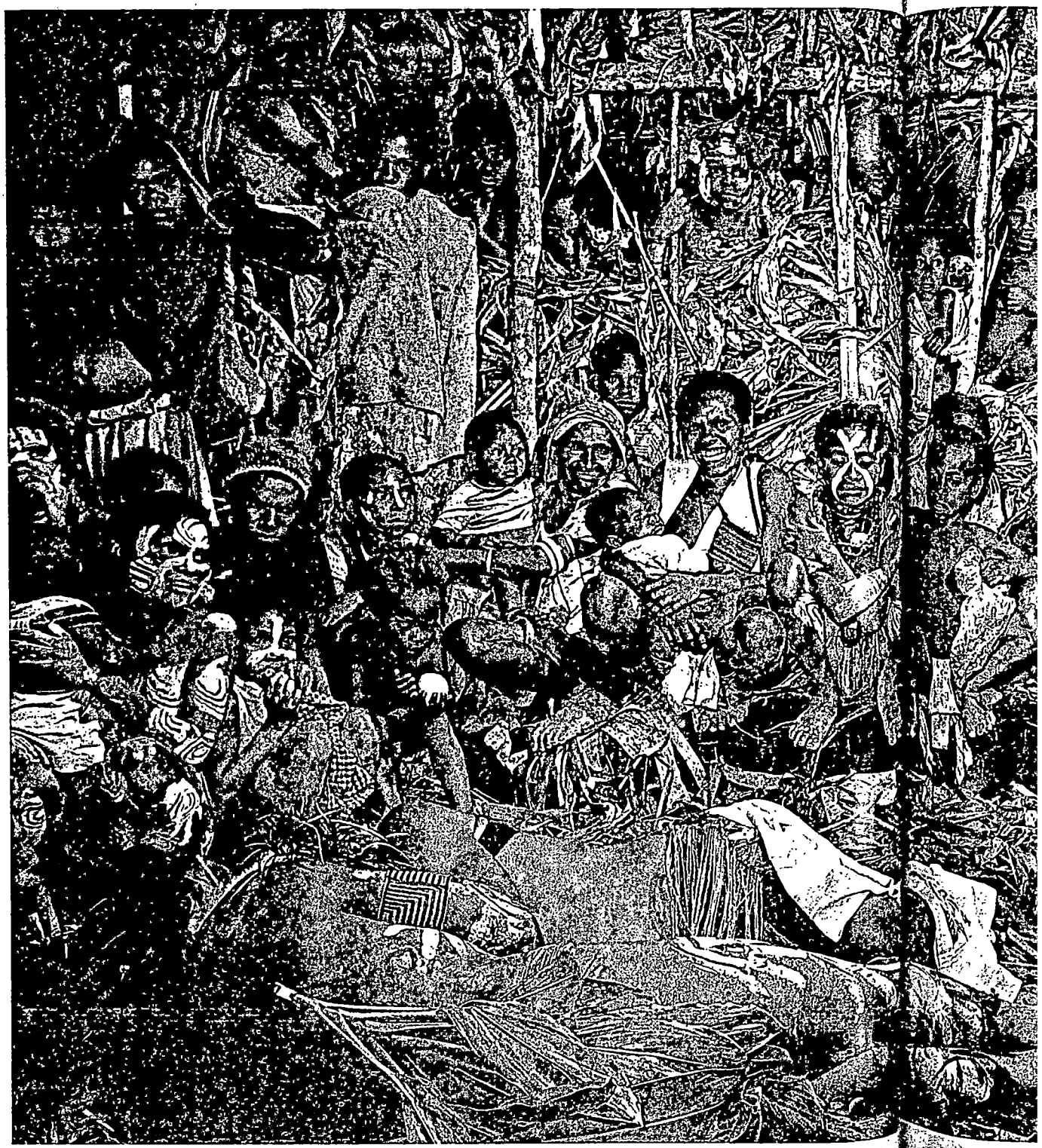


"Wake, brother, wake! See the butterfly that clings to my walking stick!"

THIS PLAY is a sequel to the one featuring the older sister in the previous skit. As the sister and her new husband lie in a garden sharing intimacies, the groom's younger brother arrives on the scene to find out how babies are made. He tries to distract his elder brother by poking the lovers with

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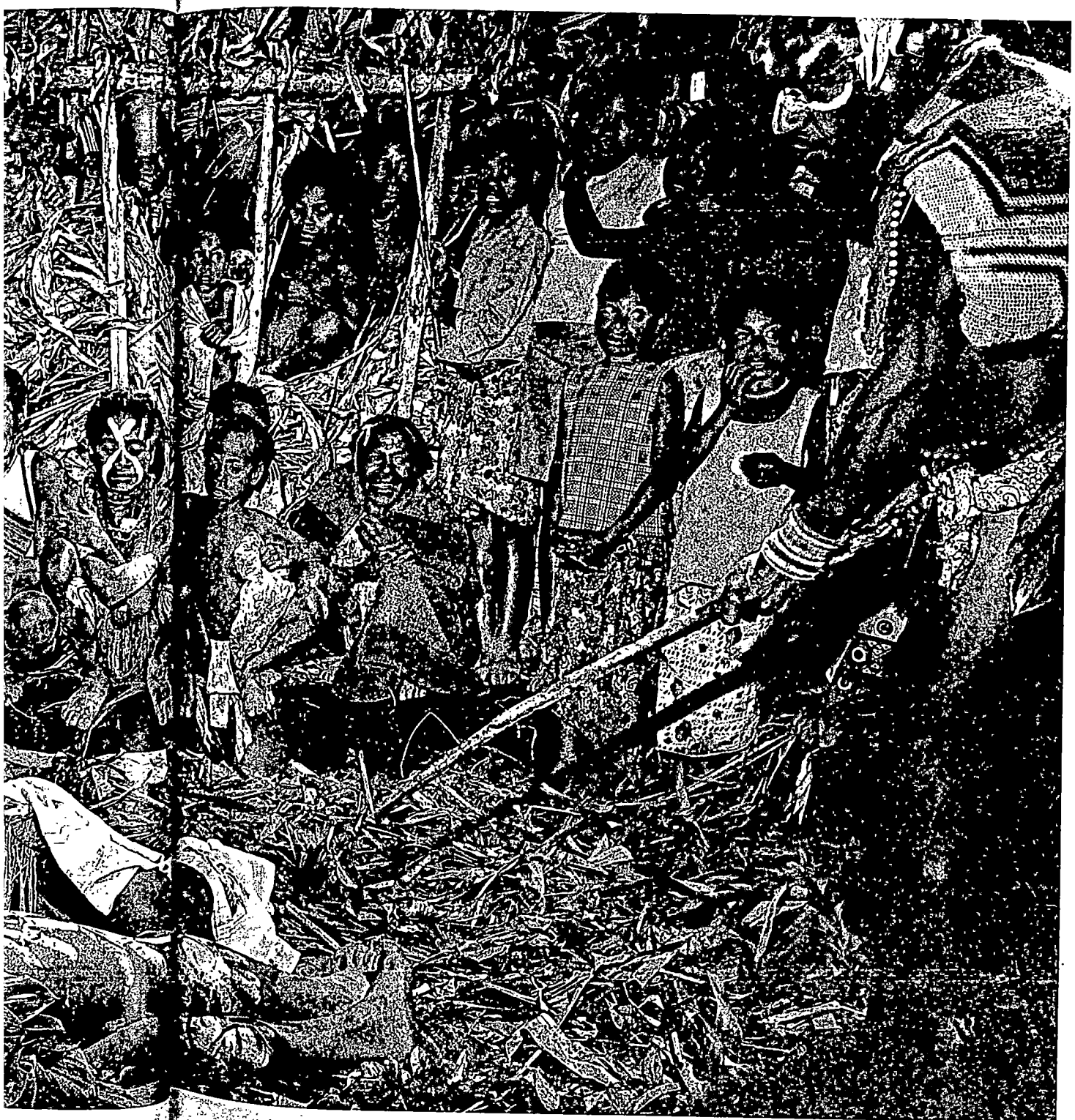


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his walking stick. He dances around the oblivious pair, demanding to have his turn at their "game." Laughter fills the room.

A Gimi theory of procreation holds that the female contributes little to the formation of the fetus. She serves merely as an empty vessel—a hollow tree—into which the male deposits the ingredients to make a child.

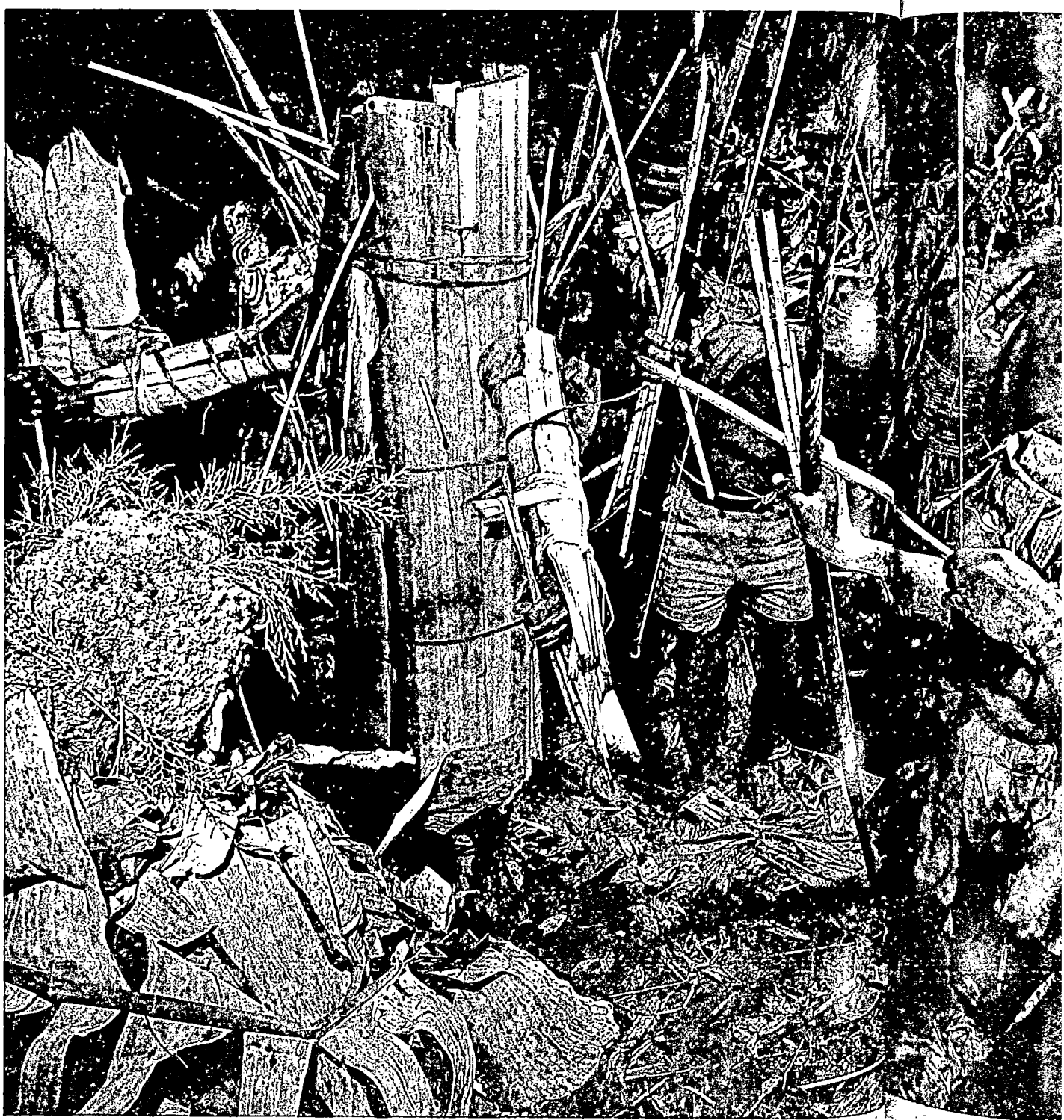
The performers who play the soon-to-be-wed pair are both male. When plays are risqué, the sexes do not act together. But Gimi theater is a place where tabooed subjects can be broached, relations between the sexes ridiculed, and tensions eased.



"Hwa! Hwa! Hwa!" shout the warriors, giving the traditional battle cry as they shoot stage arrows into a well-padded foe.

THE SCENE is war. The enemy—an actor sheathed in protective layers of banana stem—is being shot full of bamboo arrows. In a moment he falls as though mortally wounded, then is lifted by a comrade-in-arms.

But the Gimi warriors continue to shoot at the figure, finally forcing his comrade to



abandon him. The victors then surround the body, chanting the names of clan ancestors and the places those ancestors' spirits inhabit. "To the caves of Mount Hana!" the warriors cry, mentioning one such place.

The object of the chants is to persuade the life-force that is escaping from the dying enemy to fly to the forest. There, stockpiled for the future, the spirits of dead men—both clan members and their victims—can be reused to animate new generations of the clan. In days when the Gimis fought constant wars, enemies' spirits were precious booty.



Until the Australian government pacified the area in the late 1950s, Gimi men raided other villages in the hours before dawn, ambushing the villagers and destroying their gardens. Nearly the whole male population between the ages of 15 and 50 kept themselves perpetually combat ready. To do this, warriors had to be pure, which meant they had to avoid contact with children and women, whom Gimis consider highly polluting because of their association with menstrual blood. If a man tastes food cooked in a fire whose embers were blown alive by a menstruating woman or by a new mother, or if any woman or child merely steps over his legs or hands, he is liable to fumble with his weapons in the heat of battle or fall helpless before the enemy.

For men in their prime to have regular contact with women and children once meant subjecting the entire community to the risk of attack. Since the Australians ended guerrilla wars, some of these taboos have been relaxed. But the fear of women and the ideals of warriorhood still dominate much of Gimi life and its rendering in Gimi theater.

Many in present-day audiences were once enemies. Merely by attending the celebration, they now peaceably relinquish a part of what their hosts once tried to take by force: their vital energy. The songs that the guests must sing loudly until dawn are more than an entertaining way to pass the long night hours. "Songs are our spirits," Gimis say.

By singing, the revelers release their spirits into the rafters. The owners of the houses thus acquire these spirits, and so regain some of the life-force they themselves have expended by staging the rituals.

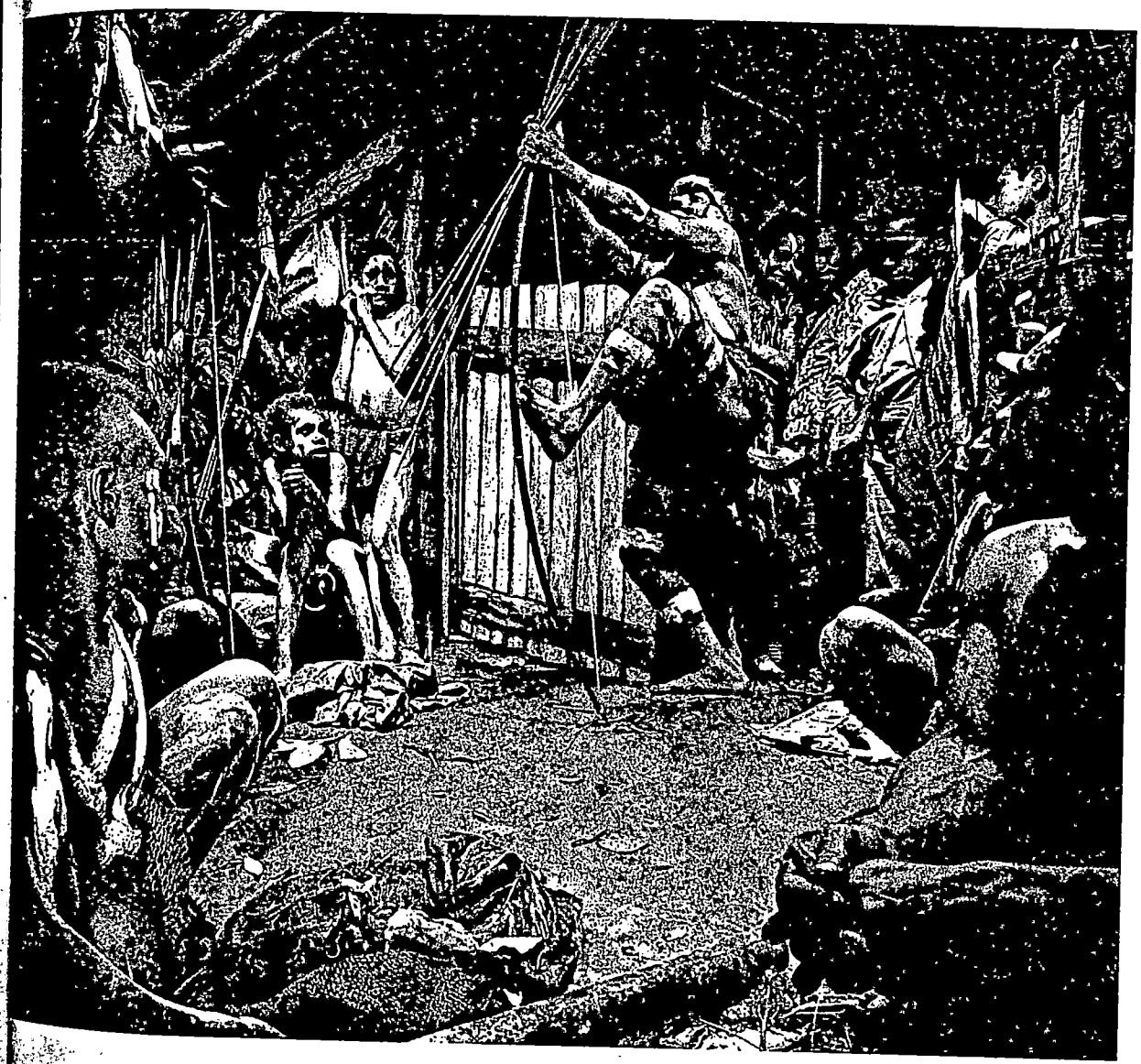
In the Gimi way of thinking, a host community that entertains others thereby gives up part of its own life-force—part of what collectively enables the community to bring forth new life, to bear and raise future brides and initiates, to herd more pigs, to raise new crops. When members of other settlements and clans come together to sing all night long, they help replenish the hosts' precious supply of life-force.

"Hey! Brave man!" yells a spectator, "she put something in your food!"

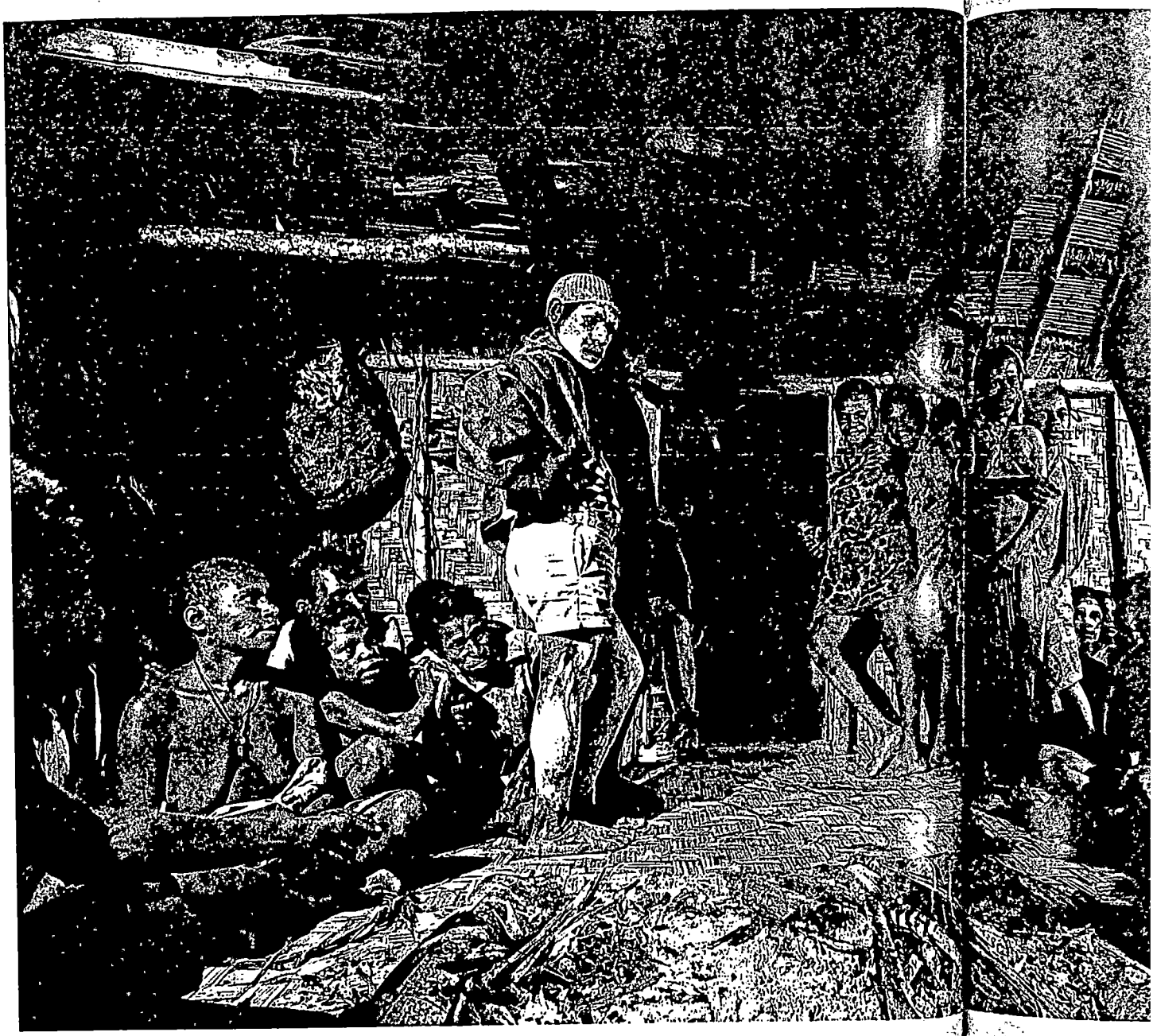
THE "SHE," a boy streaked in white clay, crouches in the foreground near the fire (***left***). He plays the part of a wife preparing a meal by rotating a bamboo tube filled with vegetables in the hot ashes. The husband arrives shouting, "I will not eat! I must be ready for trouble whenever it comes!" But his wife implores him, and finally he sits down beside her to eat.

Finishing his meal, the husband reaches for his weapons. He tries to string his bow but cannot. Again and again he tries to pull the ends of the palm bow close enough to slip on the bowstring (***below***). Each time he fails, the audience laughs wildly.

Strewn over the wife's net bag are brilliant red poinsettia petals, symbolic of menstrual blood. Seeing these, the audience knows the husband is poisoned. He collapses, then gets up to begin the play again.



The farce is Gimi men's version of how women get the better of them. It says to brides: "We see your treachery." And to initiates: "Be ever wary of your wives." The gales of laughter from the audience do not mean that the Gimis take menstrual pollution lightly, but that humor releases the tension such a topic creates.



"We know why you've come, you've come to see your home again!"

TWO SPIRITS of the dead meet—one an Australian patrol officer, the other a Gimi ghost—in a dramatization of one of the first encounters with white men. Gimis once believed that all whites were reembodied spirits of dead kinsmen. In this scene the man in Western clothes, his face and lower legs covered in white clay, plays a government officer arriving in the village on an early patrol. While he explains his government's business and announces a census, his ghostly Gimi counterpart—shrouded in a blanket in the right foreground—arises from the grave to welcome him.

New versions of plays are often introduced by visitors to the festival. As soon as this performance ended, men who had walked four days to reach our village quietly left the house. They returned hours later, disguised in costumes of dried banana leaves and speaking a Papuan coastal language. They were portraying Papuan shell traders

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of generations ago. The traders appeared incredulous at the sight of tall white figures in boats who, the traders imagined, were ancestors sailing home from some strange and distant netherworld.

Some playlets are much repeated classics about the origins and history of Gimi society. Others are satires of everyday events, such as suspected infidelities or family feuds, created for one occasion and not performed again unless they are instant hits.

When a play is successful, spectators reach out to place plumages, pearl shells, or, nowadays, cash in the hands of performers. By doing this, they acknowledge that they are utterly overwhelmed, that parts of themselves have "died"—simply left their bodies and gone into the performers. The day after the performance, players must return twice the quantity of feathers or money received. They must compensate the "victims" of their art or else risk ridicule.

Some young men see in theater an opportunity to break through the confining world of bride payments and arranged marriages. By the skill or daring of his performance a man can "strike" a woman in the audience—that is, drive her to flout convention and elope with him. This is a way for someone of low social status to win a desirable mate.

After the last performance, slow, resonant singing begins again and continues until the crowing of roosters signals first light. Inside separate houses, brides and initiates sleep undisturbed by their chaperones for the first time in more than a day. Hunger moves the rest of us, and, one by one, we leave the stale warmth of the hut.

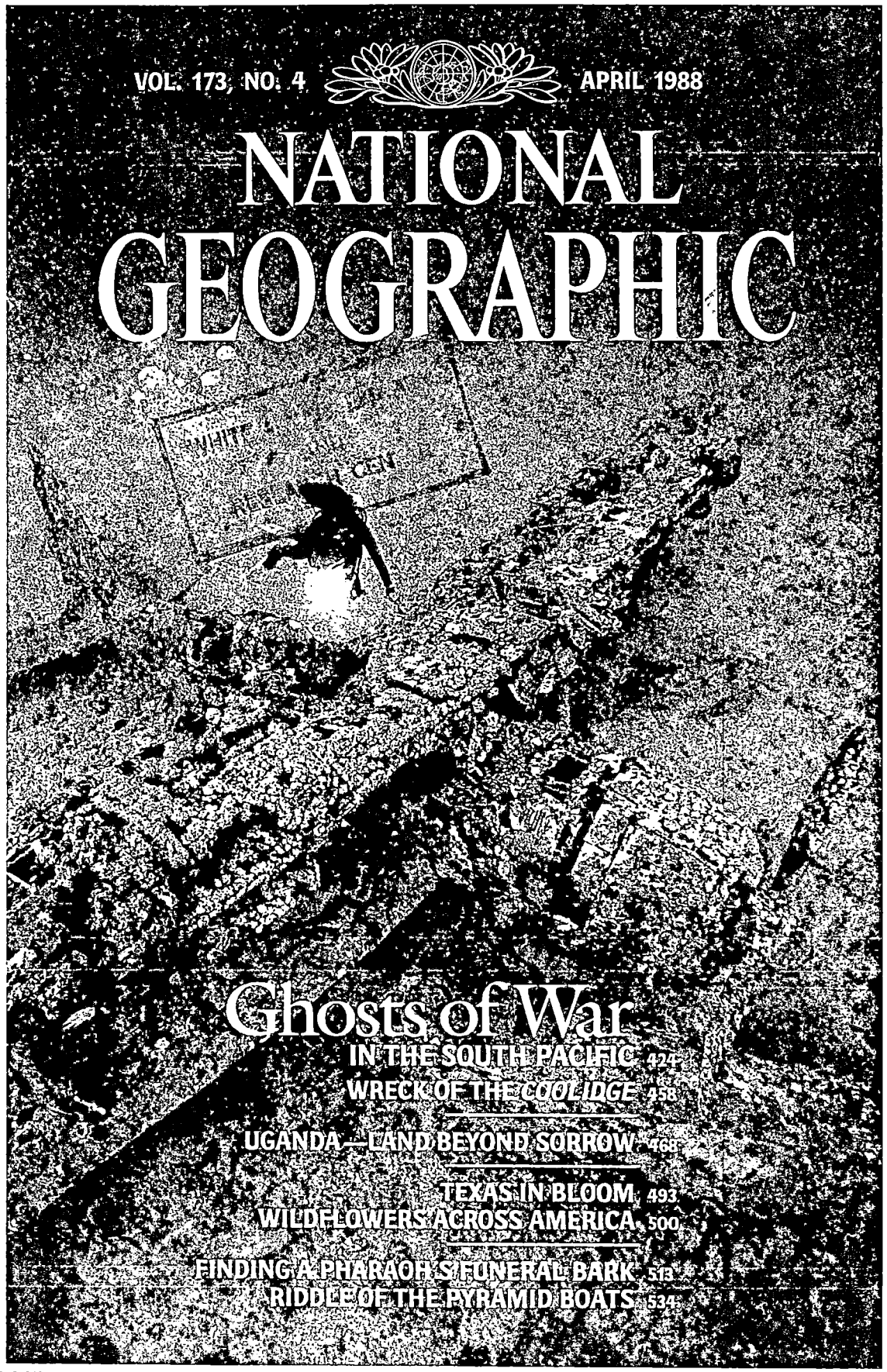
I stumble into the cold, misty dawn, aching with tiredness, and walk toward our house in the next compound. Before I reach the fence, I hear frantic squeals of pigs being clubbed. The daytime routine of the festival has already begun. Men will slaughter most of their herds in order to provide lavishly for their guests and implicitly to challenge them to make an equal return someday.

On the narrow, muddy path I exchange greetings with women and children on their way to the gardens. By late afternoon great quantities of food will be ready for visitors.

Tonight, and for the next four or five nights, houses will be jammed with people singing. As the nights wear on, weariness will overtake the singers, and their voices will fade to a low, monotonous drone. Into the midst of the crowd will come provocatively swaying dancers, cruel husbands, melancholy birds, or monstrous ancestors—all to startle and delight the spectators.

As I reach our house, I see David waiting for me in the doorway. Above us, hidden in the crown of a fig tree, a bird of paradise calls loudly to its companions across the valley. As the sun breaks through the heavy morning mist, David splits firewood to cook our breakfast. □

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NATIONAL GEOGRAPHIC

Ghosts of War

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SEE "MYSTERIES OF MANKIND" WEDNESDAY, APRIL 20, ON PBS TV

Wreck of the Co



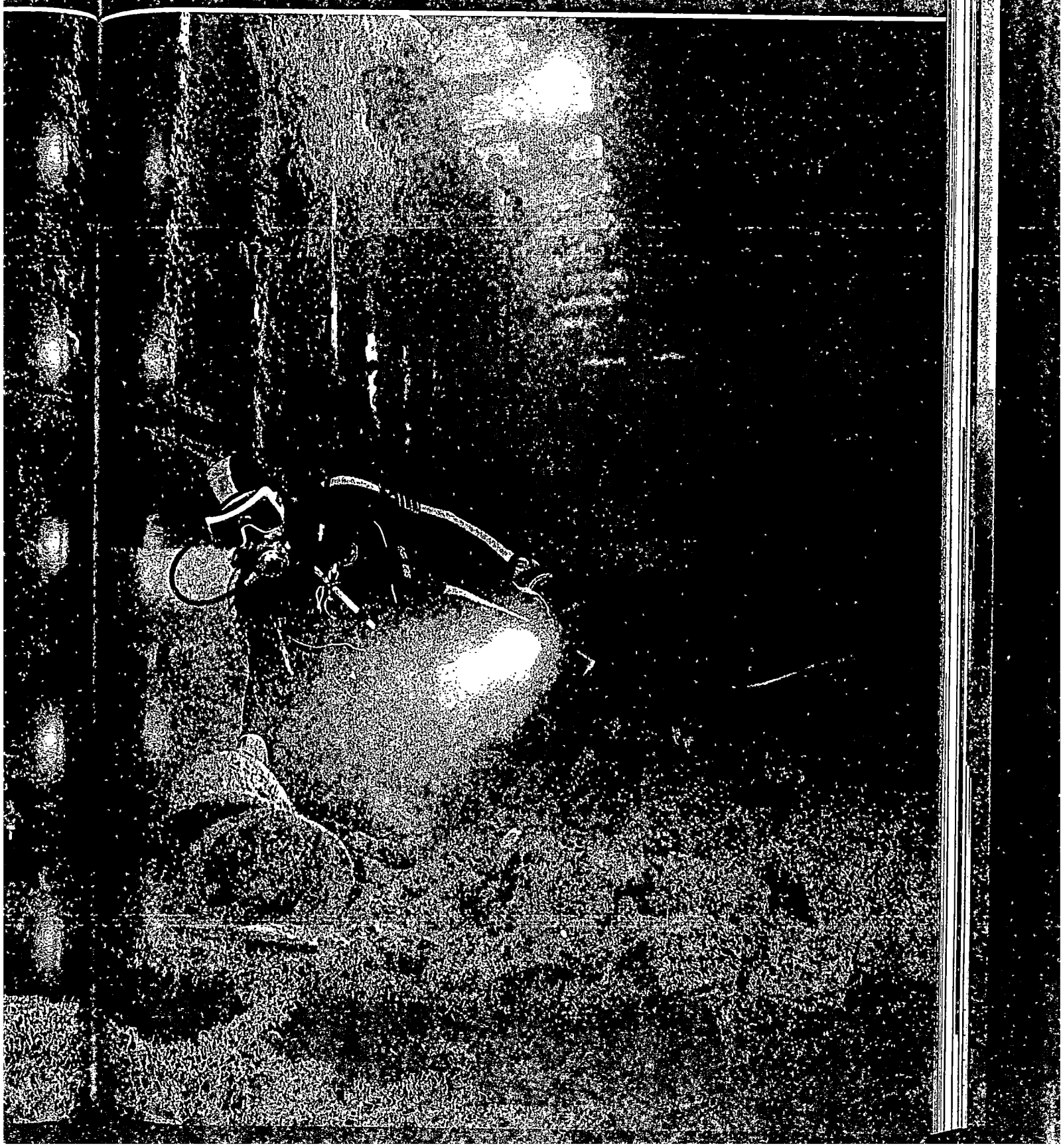
LIGHT SEEPS DIM and blue from the surface of the southwest Pacific 135 feet above us. We are diving on the *President Coolidge,* and the promenade deck is littered with equipment discarded in mortal haste by the ship's last passengers: rifles, gas masks, metal boarding ladders. My diving partner Kev Deacon, an Australian underwater cinematographer, examines steel helmets (right). Kev's wife, Chris, acting as safety diver, hovers above us. The sea has coated the ship with marine growth and has spread a veil of wet, brown-green dust over everything.

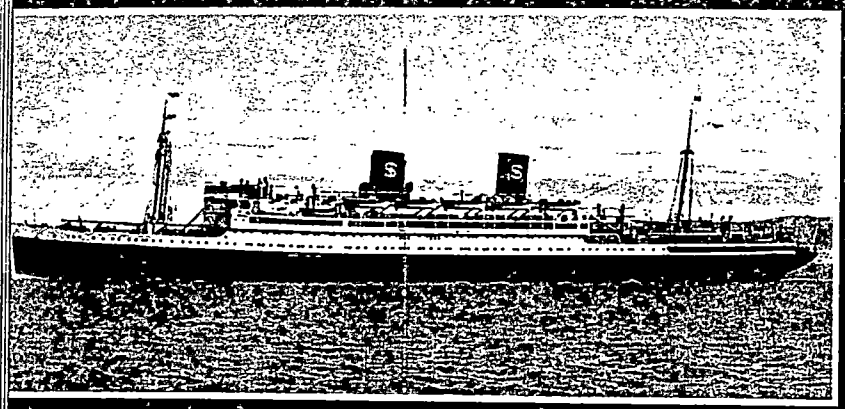
The *Coolidge* was a luxury liner converted into a troop transport for service in World War II. During her seventh military mission, on October 26, 1942, as she entered the harbor of Espiritu Santo in the New Hebrides Islands (now Vanuatu), the ship struck two U. S. mines and sank.

Today, nearly half a century later, her hulk seems full of voices, shouted orders, curses, the clump of boots.

Coolidge

Text and photographs
by DAVID DOUBILET





"SHE WAS a grand ship," notes Allan Power, an Aussie diver who fell under the spell of the *Coolidge* 19 years ago and stayed on as a kind of keeper of the wreck.

The 22,000-ton luxury ship was built to sail from San Francisco to the Orient. Her interiors were paneled in rare woods, draped in silk, lit by skylights of cathedral glass. When she went to war, the finery was ripped out—"all but the 'lady,' " notes Allan. "I'll show her to you."

We swim into what was the main smoking lounge (below). The lady is an Elizabethan figure with a unicorn (right) atop a marble fireplace. The rare woods have been eaten by teredo worms.

Survivors of the *Coolidge* remember that bright October morning. With 5,440 men, mostly from the 43rd Infantry Division, plus arms and equipment, the ship had crossed the Pacific in 14 days and was now entering Espiritu Santo, staging base for hard-pressed Allied troops on Guadalcanal.

First Lt. Web Thompson was near the bow, admiring the harbor. "I saw a blinker light flashing on shore," he says, "but the code was too fast for me to read." Others missed the same message: a warning that the *Coolidge* was headed straight for a minefield. The fog of war, some call it. Someone didn't get the word.

"I heard an explosion—and then another," says surgeon Henry M. Farmer. "The ship began listing at once." The time was 9:30, and the second mine killed fireman Robert Reid.

Engines stopped. Belowdecks, lights and communications went out. An oil slick began spreading on the water. "But the first word we got was that the ship wouldn't sink," remembers Bill Stebbins, then a major. "We were ordered to our duty stations."

Web Thompson returned to his station belowdecks. "I had 200 men to take care of—in the dark with water coming in."



FROM KEY DEACON (TOP AND ABOVE)

THE CAPTAIN of the *Coolidge* promptly ran the ship aground, but she listed dangerously to port. "It was about 20 minutes later when we got the word to abandon ship," says Bill Stebbins. "We passed the word belowdecks, and men got life jackets and started using the rope and metal ladders. Fortunately we'd had two months' training in amphibious operations. Discipline was excellent."

The list to port complicated things. Starboard ladders didn't reach the water, and some life rafts, already lowered, began drifting away.

On D deck, Capt. Warren K. Covill and mess officer Capt. Elwood Euart found a rope. "Euart held one end and I held the other, so the men could pull themselves along it," says Covill (far right, as he is today).

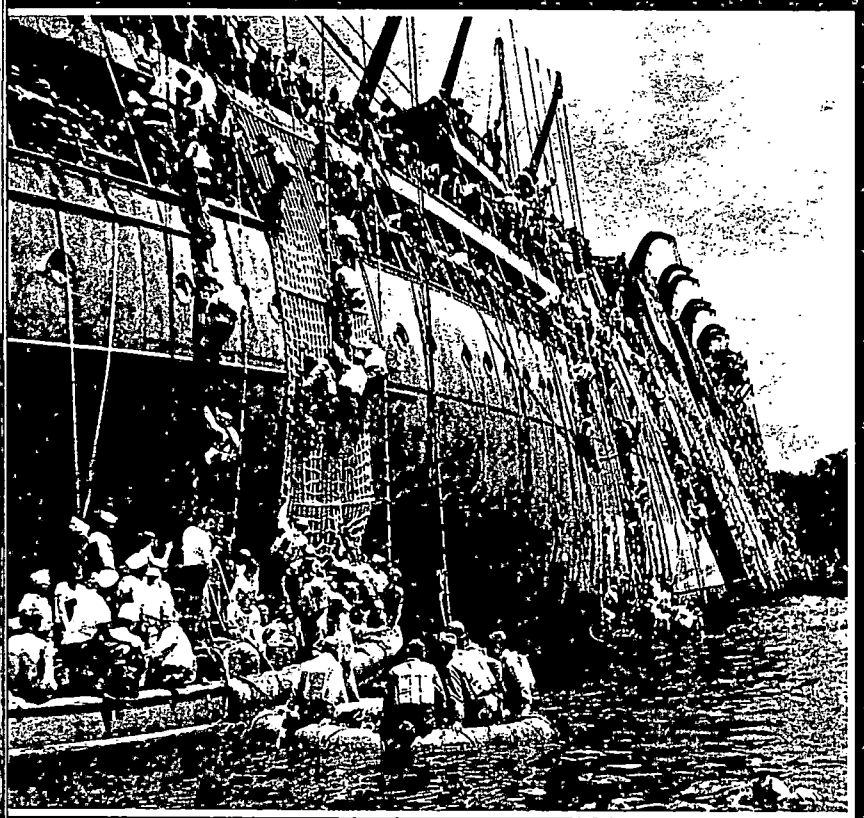
Belowdecks near the head, Web Thompson could hear "water rushing in through the toilets and guns sliding around—but no panic."

"The ship was tipping over more all the time," says Joseph Parsons, then a staff sergeant. "Finally, I was able to walk down the starboard side and jump into water that was covered with oil." He swam toward shore.

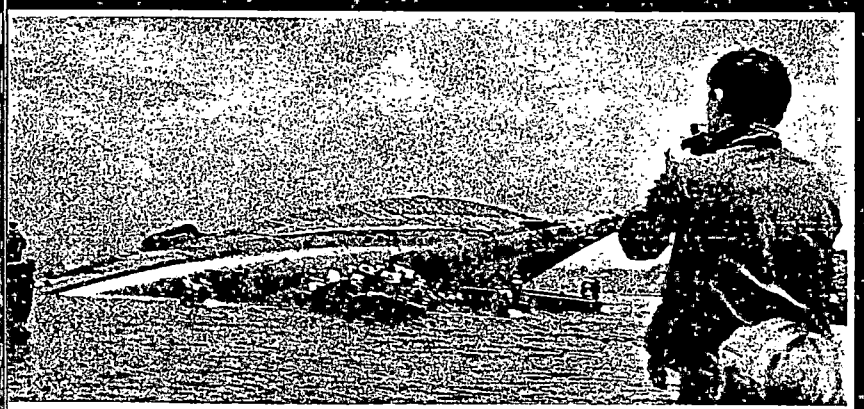
Stebbins recalls that "most of the men got off the ship in the last 20 minutes. I climbed into one of the last boats from a bow rope ladder."

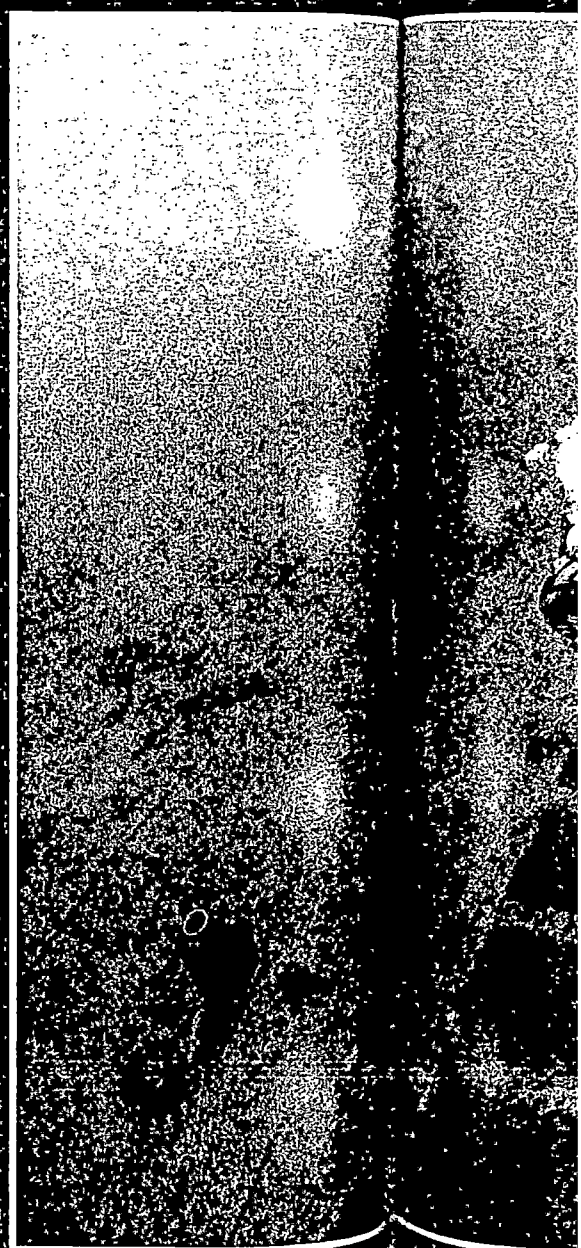
Dr. Farmer also crawled down a net and into a boat.

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NATIONAL ARCHIVES (ABOVE AND BELOW)





Web Thompson and two noncoms slid down a rope off the fantail—and into an empty raft. "When I got ashore, I still had a crease in my pants," he recalls.

On D deck, having pulled all their men to safety, Captains Euart and Covill scrambled toward the exit. "I thought Euart was right behind me. Everyone else had jumped off. I was still on board when the ship slid off the reef and went down stern first. I was underwater. But in a minute I came up. They told me later I had been in an air bubble."

Captain Euart went down with the ship; he was posthumously awarded the Distinguished Service Cross.

At 10:55, just one hour and 25 minutes after hitting the mines, the *Coolidge* settled onto the channel floor, with empty lifeboat davits reaching upward as they do today—sprouting growths of black coral like strange tufts of hair (below).



BRETON LITTLEHALES.

HARBOR BOATS picked up the oil-soaked men swimming toward shore. Amazingly only five lives were lost, fireman Reid and four soldiers—5,435 were saved. Dr. Farmer treated the injured, "mostly cuts and scratches when they jumped from the ship. But more serious was the Atabrine we lost. The ship was carrying all the medicine available for malaria on Guadalcanal."

In fact, the stranded men needed everything. "We had 900 men with nine rifles," says Web Thompson. "We borrowed a hundred mess kits from the Seabees stationed ashore."

Next day Bill Stebbins flew out of Espiritu Santo "to scrounge supplies—enough for a couple of months." But reequipping the troops for battle took much longer. "We didn't get to Guadalcanal until March of 1943," notes Dr. Farmer. Loss of the *Coolidge* delayed Allied operations by weeks.

The much needed equipment still lies in that silent hulk of history. Allan Power and I float into enormous holds, where we see a jumble of crushed jeeps (left) mixed in with piles of tires and the body parts of trucks, artillery pieces, and typewriters.

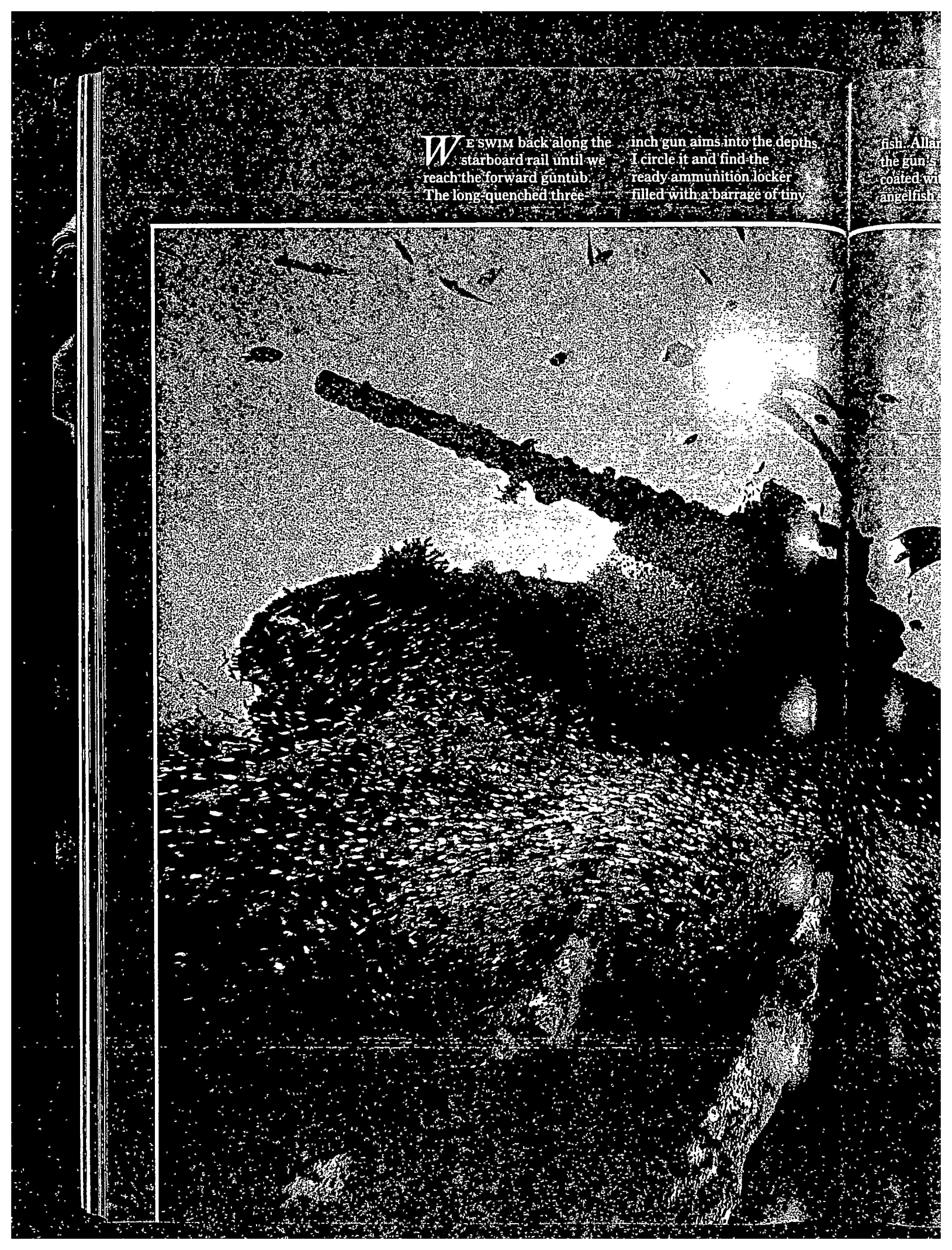
Allan finds a Thompson submachine gun, its cleaning rod still in the barrel. Marine growth makes the gun resemble a plush toy (top right).

Off the promenade deck again, Allan beckons me into another compartment, the enlisted men's starboard head. Ranks of toilets line the walls. Marine animals are not growing on the porcelain, yet the toilets are filled with the ocean's detritus, an abysmal vision of ultimate gas station grime (right).





We swim back along the starboard rail until we reach the forward guntub. The long-quenched three-inch gun aims into the depths. I circle it and find the ready ammunition locker filled with a barrage of tiny



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fish. Allan turns his light on the gun's breech, which is coated with red sponge. An angelfish swims between Allan and Kev and plays in the bubbles from our tanks. We rise and the ship fades, bathed with a blue light. The *Coolidge*, once a luxury liner and then a warship, has become a museum of war's great waste. □

