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HAWAII ARCHITECT

October 1985

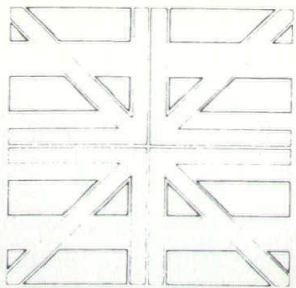
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Cover: Shangri-La Hotel. The design intent was to create a garden environment in an urban context, to project a "Shangri-La" or paradise image for the hotel with a relaxed and informal atmosphere, an oasis within the hectic urban environment of Singapore. (Architect: Wimberly Whisenand Allison Tong & Goo. Landscape Architect: Belt, Collins & Associates)



Tanjong Jara Beach Hotel is built on a curve of white sand beach on the eastern coast of West Malaysia. Extensive research into the architecture of the area resulted in buildings patterned after istanas, wooden palaces of early sultans. Buildings are three to five feet above the ground for purposes of security, flood protection and air circulation.

EXPORTING ARCHITECTURAL SERVICES

by Wimberly Whisenand Allison Tong & Goo

Wimberly Whisenand Allison Tong & Goo Architects, Ltd. is a 40-year-old, 90-member architectural and planning firm with offices in Honolulu, Hawaii and Newport Beach, California, active "overseas" west of Hawaii throughout the Pacific Rim countries and as far east of Hawaii

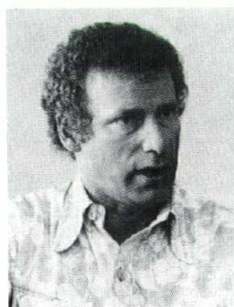
as Turkey. Executives of the firm recently participated in an informal dialogue about the practice of architecture overseas. Present in the Honolulu office were:

Gregory M.B. Tong, Chairman of the Board and Financial Planning Officer, WWAT&G;

Larry E. Helber, President, Helber Hastert Van Horn & Kimura, Planners, a division of WWAT&G, and Vice President, WWAT&G;

Donald W.Y. Goo, President and Chief Executive Officer, WWAT&G;

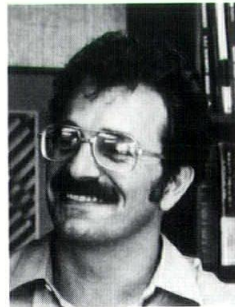
Sidney C.L. Char, Vice President



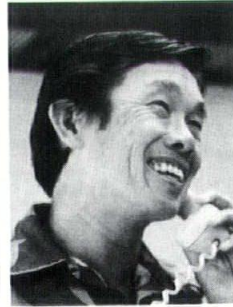
Helber



Tong



Berean



Goo



Char

and Secretary, WWAT&G.

George S. Berean, Vice President, WWAT&G and design architect in the Honolulu office, participated via telephone from Australia.

Tong: What we're gonna do, George, is talk about WWAT&G's involvement in overseas architecture—trying all the while to answer the questions we are most frequently asked about our overseas practice. George, why don't you tell us what you're doing right now.

Berean: Well, at the moment, it's 6:30 in the morning here in Sydney. I'm in a hotel room looking at papers, thinking about a grueling meeting yesterday, a management session with about 15 different consultants. They came up with some 390 action items to be taken on the project. You know, very often we think of ourselves—especially when we're in a developing country—as transferring technology. Let me assure you, I've had a real dose of technology transferred to me in these last three days. We're in sort of dynamic management sessions where they try to brainstorm a project, optimize it in all of its various operations; so the technology transfer is a two-way operation.

Goo: Greg, will you tell us something about how WWAT&G began doing foreign work?

Tong: Let's go way back to the firm's beginning in 1945. Pete (Wimberly) and Howard Cook established a partnership and did design work for the remodeling of the Royal Hawaiian Hotel—to return it to civilian use after World War II. Right away Pete saw the handwriting on the wall: the war was over; Hawaii had an established travel industry which would be renewed; and that industry was going to expand beyond Hawaii to the, then, war-torn Pacific nations looking for ways to build or rebuild economies. For the travel industry to resume, and further, to fulfill its promise, hotels and other recreational facilities would have



The 209-room Hayashida Kagoshima Hotel is a recycled bowling alley and office building. The roof of the old bowling alley is now the floor of a garden courtyard surrounded on four sides by six stories of guest rooms to form a glittering atrium.

to be built. Pete was attracted to the challenges. It was his conviction that we should be looking at tourism and not necessarily tourism confined to Hawaii. Very early a policy commitment was made to concentrate on hotel and other

resort projects and to become an integral part of the expanding Pacific area travel industry, both in Hawaii and beyond . . . One of our very first overseas projects was the Hotel de Tahiti, for Spence Weaver. By sheer coincidence Spence is coming in tomorrow to talk about possible remodeling and upgrading the same project—

Goo: Same client, same project—after all these years.

Tong: Yes, and this is probably indicative of a future pattern: first we create new projects and then

20 to 35 years later restore, remodel.

Helber: Greg, would it be correct to say the firm's initial involvement in overseas projects developed through Hawaii-based clients?

Tong: Exactly.

Helber: When did we first start getting the overseas client? Those based outside of Hawaii? And was it through word of mouth in foreign countries?

Tong: No. I think it was an outgrowth of Hawaii's being a sort of living laboratory—the place to see what was current in the visitor industry. The reason we have been successful in exporting services has a lot to do with the

fact that the expertise we provide happens to be lacking in many places overseas . . . In doing work overseas, one guiding principle is: fill a niche that is lacking rather than trying to sell something already available.

Helber: Would you agree, Greg, that in overseas architecture the principal contribution of WWAT&G deals with concepts, ideas, the very original focus of the project? That, typically, WWAT&G doesn't do the entire project from beginning to end?

Tong: In general, what you're saying is correct—with exceptions. In countries without the necessary local expertise—specifically some of the South Pacific nations—we

provide full service, both conceptual and technical expertise. In countries already steeped in the technical aspects of architecture—SouthEast Asia and Australia, for example—our contribution is typically limited to the design concept and preliminaries.

Go: Another contribution we make has to do primarily with people—helping put together the project teams that consist of financial institutions, developers, and various consultants who can put a project together very quickly and knowledgeably so that our overseas client can accelerate the development schedule. Sid, you've been doing a lot of work overseas, particularly in Korea, have you some observations—?

Char: In doing projects overseas, the client is sensitive to the fact that because we do not maintain an office in his country, we have to try that much harder to produce within a short time span in order to be competitive with their local architects. The concept that time is money does not change because we're doing it overseas at long distances. The client is just as concerned that we can perform within their project deadline as if we had our office down the street. I feel foreign clients look to us to bring new ideas . . . Sometimes we don't necessarily have to perform according to the same rules of business as their local professionals. They feel we bring something special to the project and so they may establish a separate fee schedule from the local—

Go: So our fees are additional to the fees paid to the local design consultant?

Char: Yes, in some instances. In some cases, we work directly under the local architect and

Rantau Abang Visitor Center, with its sea life museum, depicts the strong traditional link between Malaysians and the sea. It serves to protect the giant sea turtle during one stop of its migratory life. Buildings, entirely of native hardwoods from nearby forests, are built in the centuries-old tradition of Malaysian construction by carpenters and craftsmen of the area.



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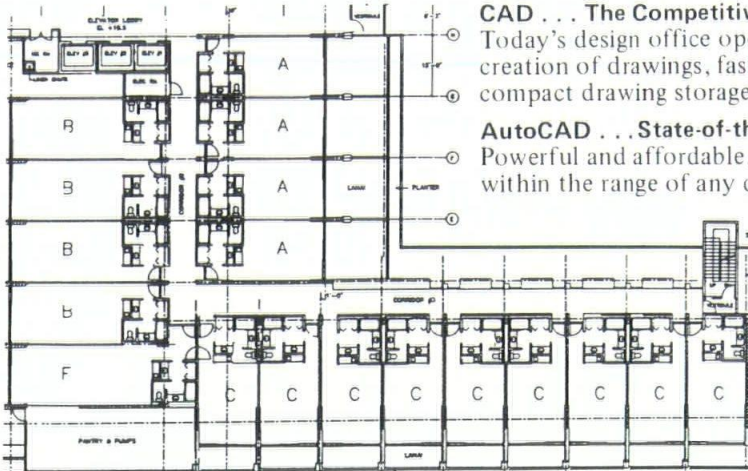
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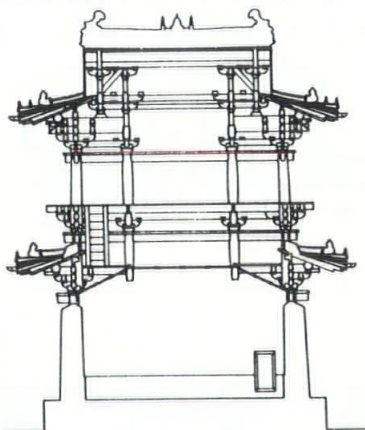
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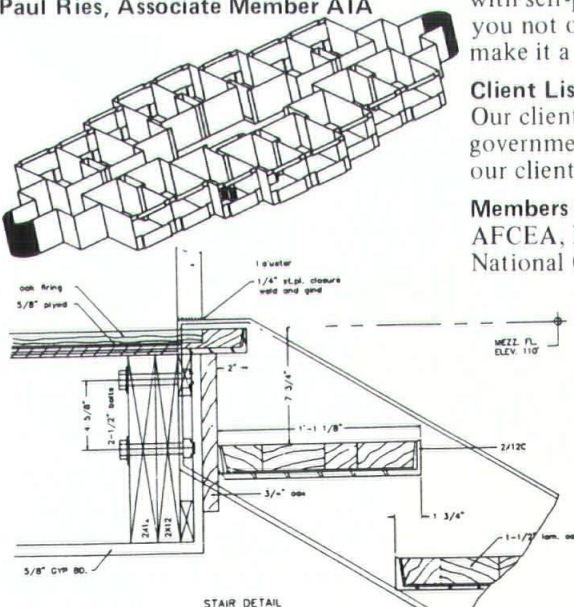
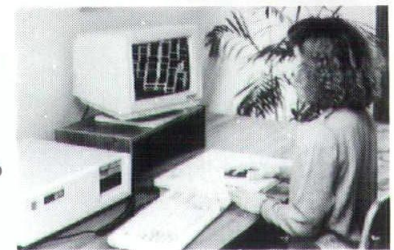
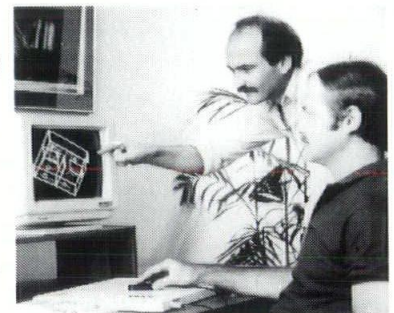
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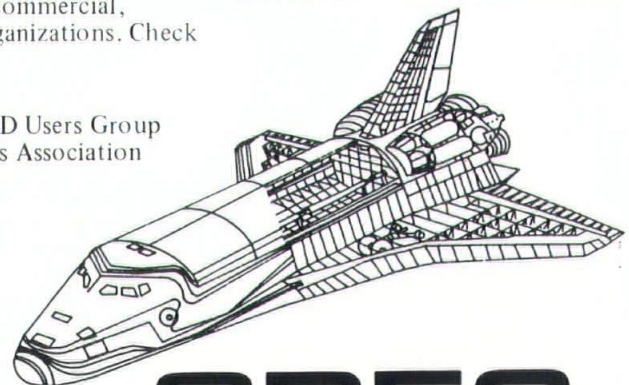
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get paid out of his fee—that makes it more sensitive. In that case we have to earn our keep with the local architect.

Tong: I think we should always strive to keep ourselves on a separate fee basis and not impinge on the local architect's fee. It behooves us to impress on the client that if he wishes to hire us, our service is over and above the overseas architect's normal fee. Success in establishing this arrangement tends to create a pleasant cooperative working relationship with the local architect.

Goo: Basically we are specialists; therefore our fees are in addition to the basic architectural fees.

Tong: Sid, can you explain the system we use on overseas projects—bringing the overseas architect and his consultants to work in our office in the early stages and how we make the transition from concept design—which we do—to contract documentation—which our overseas associate architect does?

Char: Once we are brought on board as design consultant, we prepare the initial concept and usually do several alternatives which we present to the client. The selected theme is then developed into a schematic to fulfill the functional requirements of the program. Once the schematic is approved we move into design development for the actual architecture and constructability of the building. During design development, the overseas architect and his consulting engineers meet and work with us in our Honolulu office establishing basic parameters to satisfy their local practices.

Tong: George, people might be interested in hearing about the Manly (Australia) project that you're working on now.

Berean: Well, Manly is a community in Sydney, a 30-minute ferry and 15-minute hydrofoil ride from the Opera House. The project is a mixed use development. Includes a hotel, holiday apartments, professional

offices, library, and a shopping complex plus a church that's already there. It's a one-in-a-million kind of project in that it has so many kinds of ingredients that require solution: the mixed uses, various transportation modes, historic preservation. Manly residents are very concerned about keeping their community intact. And although the project has major domestic and international tourist facilities, it is mainly for Manly and Sydney residents.

Tong: Could we say the Manly project is a smaller Ala Moana Center with Ala Moana Americana Hotel and the office building included and all of it with a strong local flavor?

Berean: Right. All of the above, with Chinatown thrown in—preserving existing architectural character, safeguarding its special character, with all those activities pressed in a 1890-1930 kind of architectural setting.

Helber: From the planning point of view, it is also a project which

had to be carefully integrated into the Sydney Metropolitan regional and tourism development strategy plans. We, the planners, had a significant early role assisting the client in addressing these broad issues and aspects.

Tong: Moving on . . . One question often asked us is, "Why do we *not* maintain any offices in foreign countries?"

Berean: I think one very basic reason is that most of us want to stay in Honolulu. Another issue of course involves the market—any foreign branch would need to be in an area where there is enough continual economic demand for our services to justify the brain drain—or however you want to refer to the pool of information we have on tap in Honolulu—

Char: One more thing about establishing overseas offices—if you *do*, you can hardly transfer enough of your staff, physically move them. But if you *don't* take a full staff with you, you end up hiring locals to staff your office, in which case you *don't* have that

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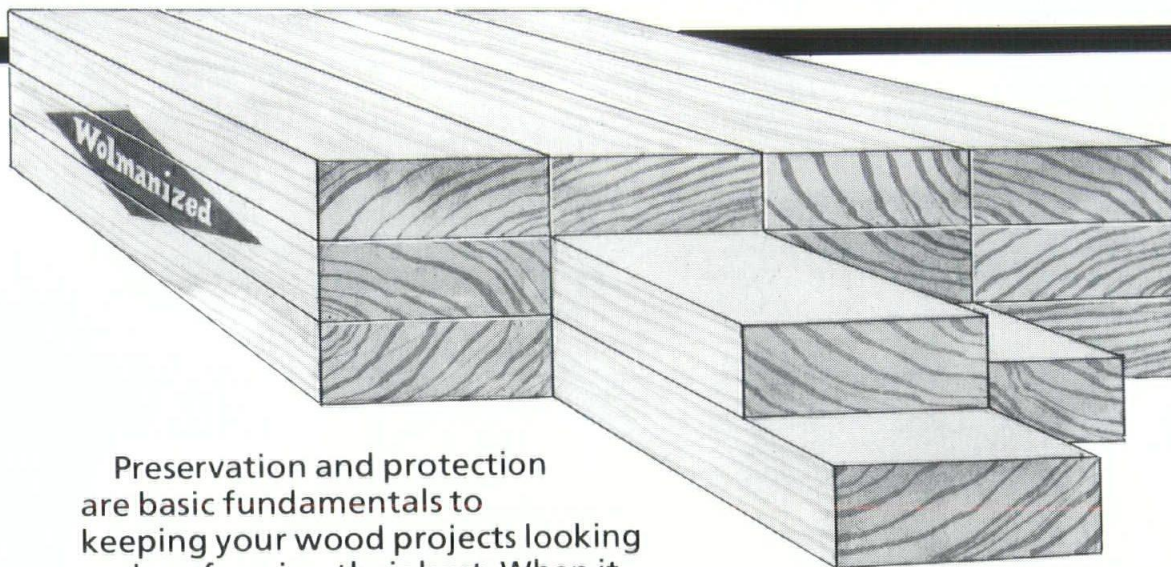
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special expertise of your firm. You have essentially transferred your name to the locale but not the resource the client is expecting and has contracted for. You're also then in direct competition with all the local overseas firms. Rather than being an outside consultant who can assist them with the project, you are taking bread out of their mouths.

Tong: That brings us to the matter of associate architects. As a regular practice we associate with local architects in the host country. We do this essentially because we do not have the technical expertise of that particular area to provide that service.

Char: For example—the nuances of interpreting their codes, knowing the availability of local materials, knowing the construction methods and techniques of that area and the politics. For us to operate in overseas areas without a local associate would be to operate out of weakness rather than a strength. We bring what we can contribute best; the local associate contributes his local expertise, making a strong combination.

Tong: One important concern that we look to our local associates for help on is the matter of cultural traditions and taboos. If you don't have a thorough knowledge of local customs you can very easily commit a serious cultural *faux pas* that would have far-reaching effects on your success.

Char: Specifically, what the foreign architect does when we are not there is: he coordinates the drawings with the local construction systems; and since he has done the construction drawings, represents the owner and provides contact administration service. In the Orient, the local architect plays an even larger role than we would as architects here. There, general contractors often don't handle all the coordination between the subcontractors. Many times the overseas architect's role is to coordinate all the different subcontractor's work. The local

architect is in charge of overall supervision of the project. He is definitely what we would consider the architect of record—or the project architect. WWAT&G's role is that of design consultant.

Tong: Sometime there's another entity called project manager who will oversee the project; he works directly for the owner. We are not part of that service.

Goo: Basically all services except special design services are done in the local area by local people—except when local expertise is not available.

Tong: An example of that was the Pago Pago Hotel in American Samoa. We did virtually the whole thing. Tahara's Hotel in Tahiti was almost the same situation.

Goo: George, since we're known for our design, what can you tell us about what the foreign client wants in the way of design? Does he most often want an American style of architecture, or something reflecting the culture of his particular country?

Berean: I have very rarely run

into a client who wanted my architectural style; he wants the American sort of impressive problem-solving technology. When we go in, we don't fool around; we solve the problem in terms of the site, the culture and the society, etc., etc., with no preconceptions of what we think is good, in a very straight forward business-like manner. They like our technology but they're not necessarily after our architectural style.

Helber: We don't want to give the impression that architects and planners are doing it all. Other consultants, excellent talents, both in Hawaii and on the mainland—landscape architects, interior designers, structural, mechanical, electrical engineers, etc., all are part of the team. Landscape architects, for instance, often provide conceptual design services very much the same way WWAT&G does and associate with their overseas counterpart. In other words, we run a parallel course.

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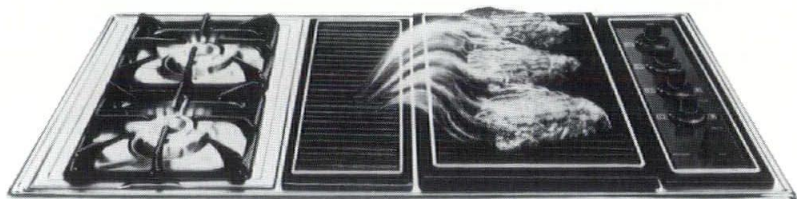
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The Legislative Chamber's distinctive pyramidal skylit double roof allows for ventilation and natural lighting. A circular courtroom and offices will be housed in the Judicial Building to the right.
Renderings by Henri J. Dessiaume.

A NEW BEGINNING FOR MICRONESIA

*by Lloyd T. Arakaki, AIA
Architects Hawaii Ltd.*

It has been two-and-a-half years since we first sat in the traditional polynesian structure which serves as the Village Hotel's restaurant, lobby, kitchen, and offices. The sun sets over Sokehs Rock, Pohnpei's equivalent of Diamond Head, and little has changed since our first visit. Yet, diverse actions in Saipan, Washington, D.C. and New York would forever change the political status of this island and others stretched out over two million square miles of the U.S. Trust Territory. It has been a long road to independence for this

soon-to-be-independent country of 75,000 people.

In May, 1983, the Federated States of Micronesia (FSM) selected Architects Hawaii, Ltd. to provide construction documents and construction administration for a new Capitol Complex in anticipation of these events. The challenge was formidable to provide a complex with diverse functions housing the Executive, Legislative and Judicial branches of government in a single complex which reflected the traditions and culture of the four states of Yap, Truk, Pohnpei and Kosrae that

comprise the FSM. Plans have been completed and construction is expected to begin in early 1986.

Located about seven degrees north latitude, the island of Pohnpei was selected as the capitol island. Since no single adequate piece of government land existed in the main town of Kolonia, a 200-acre site was selected six miles outside of town in the Palikir Valley. An existing potholed coral road leads to the site, once a Japanese airfield heavily bombed in World War II. The 190-inches average annual rainfall keeps most of the bomb



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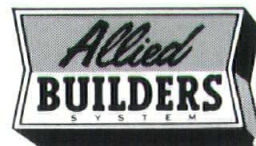
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Nine structures are grouped around two large open plazas. Long, narrow buildings are arranged to take advantage of the tradewinds.

craters filled with water and the relatively flat airstrip is often marshy. Since the valley is undeveloped like most of the island, all infrastructures had to be provided including a sewage treatment system designed for a future population of 3,000.

One of the most striking physical impressions of Palikir Valley is its broad vistas, especially to the sea in the west and Ant Atoll several miles offshore framed by two parallel ridges. This broad and open valley and the Micronesian concept of space provides the aesthetic basis for the site plan. Stretched out and following the natural contours of the site, the buildings flow along the high ground adjacent to the airstrip taking advantage of the dramatic view of 900-foot-high Mt. Tamatamansakir and the vistas down the open areas of the valley.

Like traditional homesites in

which the *nas* or open living space, sleeping quarters and cooking area are clustered around an open area, a potentially large 100,000-square-foot building has been broken up and separated into nine structures grouped around two large open public spaces or plazas. The office spaces, Legislative Chamber, and courtroom are naturally ventilated, except where air conditioning is required for equipment, materials and books. Long, narrow buildings were arranged to take maximum advantage of the gentle northeasterly tradewinds. Ceiling fans augment the trades.

Some differentiation of the various branches of government was also required. Thus, the complex was separated into two groups—the Executive Branch, involved with the day-to-day administration of government on the west, and the more public and

ceremonial functions of the Legislative and Judicial Branches on the east. The grander and more prominent east section is crowned by the pyramidal skylit roof of the Legislative Chamber and shares the plaza with the Judicial Building, which exhibits a circular walled courtroom, and the more typical structure of the library and central facilities building.

The interior of the Legislative Chamber is circular in plan which not only symbolizes the consensus nature of the elective body but also reflects the traditional leaders' seating arrangement. Similarly, that theme was reflected in the Judicial courtroom. It is interesting to note that the constitution and laws of the government from national to municipal levels incorporate traditional laws and customs. Traditional leaders share in the legislative processes at the municipal and state level with the

greatest degree of participation exhibited in the state of Yap where traditional leaders make up a fourth branch of the state government.

Another interesting local feature of Pohnpei is the abundance of basaltic crystals which occur in "logs" of various lengths up to 20 feet, roughly hexagonal or pentagonal in section. These crystals are also of great historical and cultural significance and were used to build

structures. The best evidence of this is the 700-year-old ruins of Nan Madol on the eastern end of the island. Like Venice, it was a city of 80 artificial islands and structures built of these crystals. By simulating these logs in precast glassfiber reinforced concrete shells, the colonnade of the walkways and main support columns of the chamber again use this unique element. Natural basaltic crystals quarried from the island will also be used as a veneer

on the sills of first floor windows to reflect the traditional stone bases of Micronesian structures. The Legislative Chamber roof, which appears to be supported only at its massive corner walls, is also veneered in basaltic crystals arranged in log cabin fashion mimicking the style of architecture at Nan Madol.

Since long, one-story structures with steeply pitched roofs are traditional forms, an unusual double roof was used for the two-story building to give the impression of a lower structure. Broad walkway roofs on stout simulated basaltic crystals create a platform structure recalling another traditional form. Concrete tiled roofs steeply pitched and canted outwards at the ends, combine several different traditional roof styles.

The usual problems of cost and maintenance were exacerbated by the annual average temperature of 80°-85°F and 80 percent humidity. Voracious termites and salt air aggravated an already complex environmental problem. Add the fact that no large-scale construction has ever been done here and that the nearest major source of materials is 900 miles away on Guam with shipments now improved to once every four to six weeks.

All conceivable structural and modular construction systems were analyzed in light of the previously mentioned factors, program requirements, and aesthetic elements, and combined precast and cast-in-place construction was decided upon. Durability was assured and the technology was familiar to local craftsmen who use locally made CMU and concrete. Furthermore, sand and aggregate are available. However, for a project of this scale, a crusher, pre-mix, and asphalt plant will be imported and possibly dedicated to the FSM for future work.

Finishes and fixtures were selected which were economical and relatively maintenance free. Simplicity of design and function were crucial. Natural ventilation

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and flexibility for a growing and ever-changing new government dictated large open office spaces with minimal permanent partitions. The same applied to the air conditioning units. Although inherently inefficient, window units are specified for their ability to be easily replaced and used for small, widely spaced areas.

A certain amount of sophistication was required for the computer center which is quickly becoming an integral part of the government. The existing equipment will be relocated in the new facilities along with its uninterrupted power supply. Standby generators are also provided at various locations of critical importance, such as the disaster control offices.

Since power outages and brown-outs are frequent, natural lighting was incorporated as much as possible. Covered walkways, required due to the frequent rains, and deep roof overhangs wrap around the structures and combine to provide shelter from direct sunlight and rain but allow enough light to penetrate the interior. The light-colored walkway roof also acts as a light shelf reflecting light into the clerestory windows of the first floor. Building orientation along an east-west axis with wood slat shading at the ends also minimizes solar problems. Careful placement of canopy and medium height tress augment this protection of interior spaces from direct sunlight and channel the tradewinds to the structures.

Since the entire complex is isolated from the infrastructure in Kolonia, a self-sufficient system had to be provided. The first deep water wells ever drilled on Pohnpei have been completed, and sufficient quantities of fresh, high quality water have been obtained for the capitol complex and future development of the valley. Also, a facultative oxidation sewage treatment system will be built two miles away designed with enough capacity for future development. The six miles of road to Kolonia will be paved with drainage

improvements and existing electric transmission lines will be extended to the site.

Telecommunication services will be provided via a microwave relay system. Sewer and water lines will be extended to an adjacent site where the new Community College of Micronesia will be built, for which Architects Hawaii also provided design services.

The past two-and-a-half years have truly been an interesting and very challenging experience for all members of the A&E team, the

staff of the government of FSM, and the people of Pohnpei. Numerous community and traditional leaders as well as various agencies of the state and municipal governments were consulted with in a truly cooperative endeavor. The enthusiasm and dedication of the people was inspiring, and it is the hope of everyone involved that the Capitol Complex exemplifies the life and hopes of the people of FSM—a symbol of a new path into the future.

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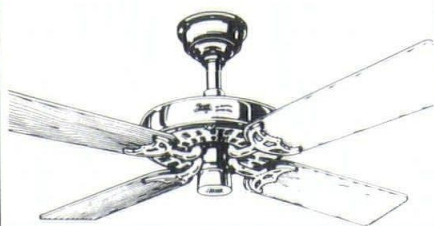


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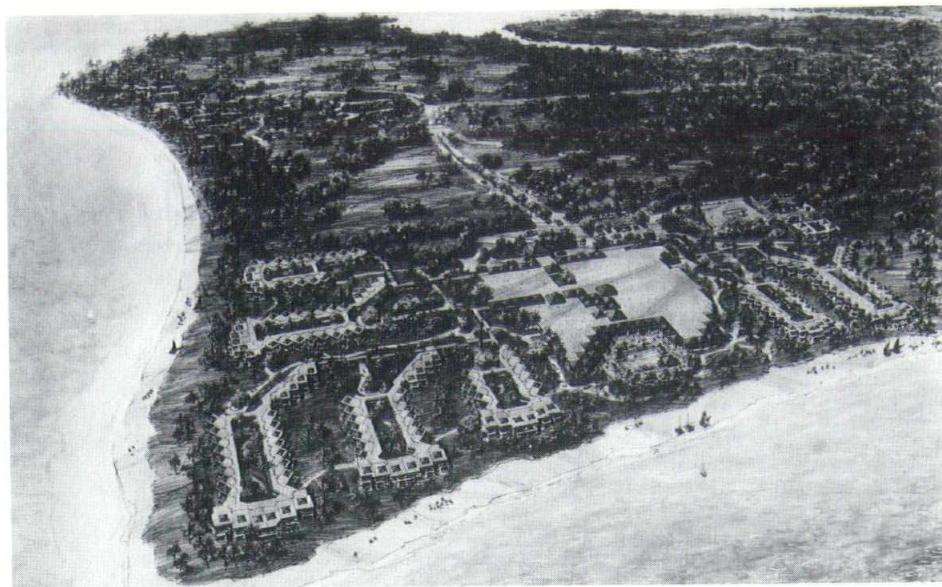
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Pacific Destinations

Media Five Limited



FIJI. Media Five Limited, earlier retained for architectural design of the Sheraton Fiji, has also been selected to create the landscape and interior design for the resort hotel. The major task at this point is to fill the site, as all buildings will be 3.2 meters above sea level. Landscaping will include seven courtyards, each landscaped by theme. Guestrooms will feature individual trellised lanais, marble floors, built in bars, and ceiling fans in addition to air conditioning.



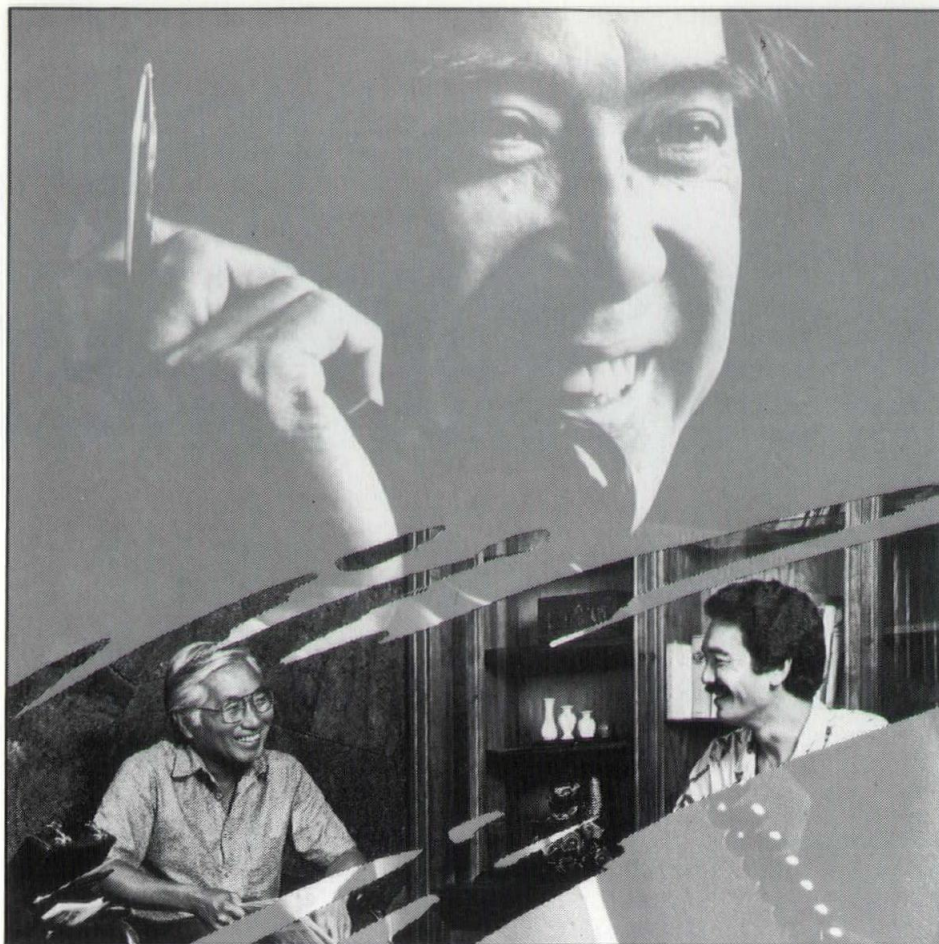
OKINAWA. The Regent Okinawa Hotel, due to open in 1986, is a 150-room structure which overlooks the city of Naha. Facilities include three restaurants, with a Japanese tea house and an area for multiple Japanese wedding ceremonies.

AUSTRALIA. Media Five has been retained to design two hotels in Australia. The firm is designing the Sheraton Breakwater Hotel and Casino in Townsville and the Gold Coast International Hotel in Surfer's Paradise.

Sheraton's Breakwater Island Hotel and Casino is a 12-story structure with 200 guest rooms in the first phase and 100 more scheduled for construction. It includes full cabaret and casino facilities, convention capabilities, and three restaurants. Media Five is handling architecture, interior, and graphic design services. The project is expected to be completed in 1986.

Also due for a 1986 completion is the 30-story Gold Coast International Hotel. This is a fully equipped, international hotel with tennis courts, six restaurants and convention facilities.

Media Five's Australia office has grown to a staff of 31 to accommodate the demand for services. Media Five has also been retained in New Zealand to design a 200-unit retirement village and two office buildings, one of which will be the tallest building in New Zealand. The firm is also under contract to design a hotel in Vanuatu, formerly known as New Hebrides, as well as a townhouse development and other projects in Melbourne, Australia.



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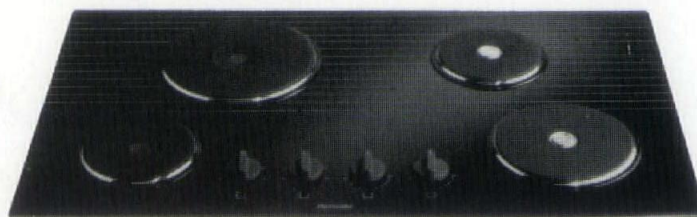
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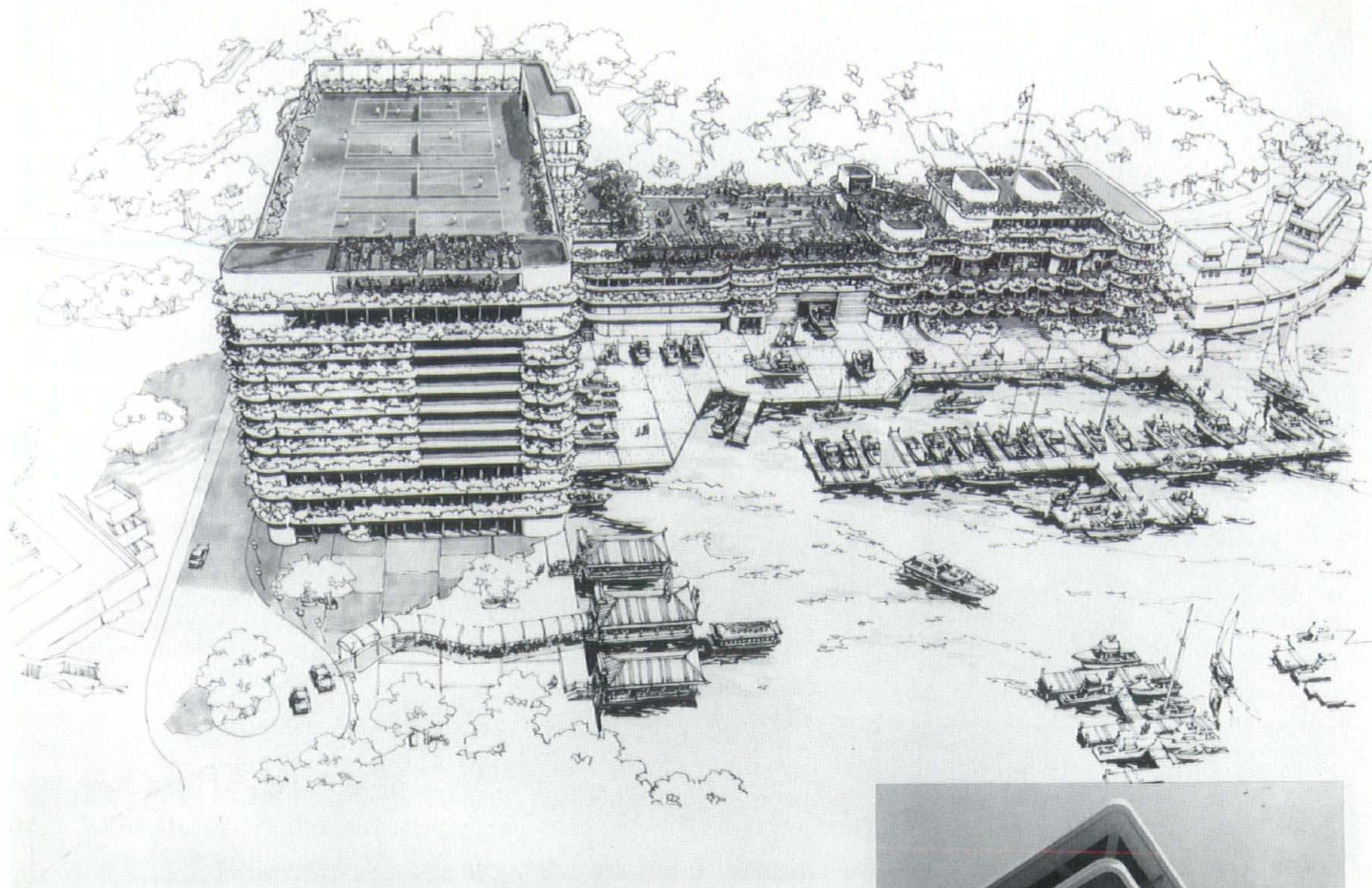
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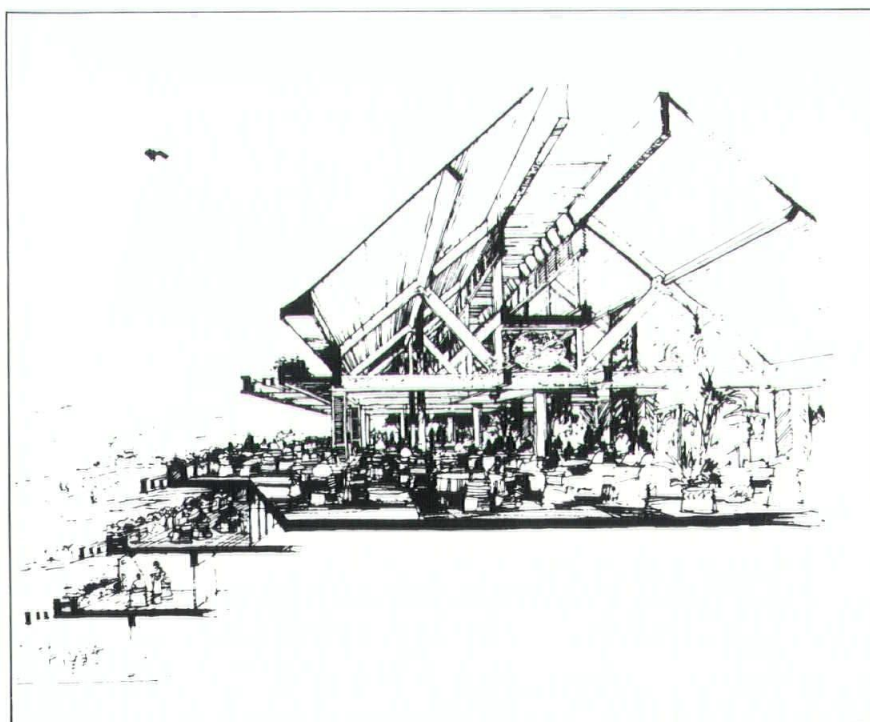
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Hong Kong's Aberdeen Marina Club is an international class yacht club with 300 berths, 300 dry storage spaces and full marina facilities. Extensive club recreation facilities include a 25-meter swimming pool, squash and tennis courts and health clubs.



The Taj Samudra Hotel in Sri Lanka (above) was designed to blend with surrounding structures. Curved forms were developed to reflect the form of the Colombo Club which was a two-story colonial structure built in 1872. Dining facilities at the Awana Golf Club and Condominium in Kuala Lumpur (left) include a 700-seat main dining room, pool side dining, banquet rooms, private club dining, lounges and game rooms. The golf club and condominium units terrace down eight floors to the golf course.



A CHALLENGING MARKET

by Robert M. Fox, AIA
Fox Hawaii

Fox Hawaii has been involved in international architectural and planning projects since 1974. Some of the countries in which we have worked are Egypt, Nigeria, Sri Lanka, India, Thailand, Malaysia, Singapore, Macau, China, Hong Kong, Japan and New Zealand. The projects have varied in size and scope but generally have been related to commercial, residential, resort and leisure activities. This also includes a number of land planning projects from 10 to 10,000 acres with uses similar to the above.

As a Hawaii-based architectural firm, our primary involvement has been providing strong design background as a key member of architectural and planning teams. In all our projects we work with a diverse team of professionals often from different countries and cultures. For instance, one project in which we were involved was a 325-acre resort on the Mediterranean Sea in Alexandria, Egypt. The project was to master plan and develop the architectural concept for a total resort destination area in conjunction with the Egyptian government.

Fox Hawaii was the architect and planner. The client was a hotel group based in Bombay, India. Our counterpart was the Thyssen Engineering and Construction firm from Dusseldorf, Germany. Financing was being provided by the Dubai branch of Hong Kong-Shanghai Bank. This all made for some interesting meetings in Honolulu,

Hong Kong, Bombay, Dubai, Dusseldorf and Cairo!

Such diverse projects provide the architect a unique opportunity to develop creative and innovative design solutions which satisfy requirements of the project and the specific location. Often this requires extensive research into the architecture and available technology of a particular country. On one hotel project in India there were 2,000 construction workers on a five-acre site and 1,500 of the workers actually lived on the site. Except for a modern concrete bath plant, all work was done by hand. This mass availability of hand labor dictates a different approach to design which can be challenging and rewarding.

The following are three projects for which Fox Hawaii was the design architect and Belt Collins Associates the landscape architects.

Aberdeen Marina Club - Hong Kong

The Aberdeen Marina Club was a Hong Kong Crown Land tender project. Our design was selected from several that were proposed. The project site consisted of approximately 10 feet of "L"-shaped land. The remainder was in the water. The area that could be filled for a basement, sea wall and hardstand was very restricted. The tender requirements called for an international class yacht club with full marina facilities—repair yard, dry storage for 300 boats and 300 slips from 10 to 25 meters in length.

Also included were extensive

public restaurant and commercial space, 600 parking spaces and a full service area. Extensive club recreation facilities including a 25-meter swimming pool, squash and tennis courts, health clubs and roof garden were incorporated into the design. The finished building is approximately 500,000 square feet. It was a challenging and rewarding project which was completed in June of 1984.

The Awana Golf Club and Condominium - Kuala Lumpur, Malaysia

The project consists of a golf club and 320 condominium units all fronting a golf course. The design concept was for the building to only be one story high from the entry with the golf club and condominium units terracing down eight floors to the golf course. The club is quite extensive and provides full indoor and outdoor recreation facilities including tennis, squash, water recreation, lapping pools, slides, jacuzzis, extensive sunning areas and roof gardens. A wide variety of dining experiences was also incorporated into the club—a 700-seat main dining room, pool side dining, banquet rooms, private club dining, lounges and game rooms.

The condominiums consist of one- and two-bedroom units. Single-bedroom units are in the main eight story block which also houses club facilities. Two-bedroom units are in two adjacent wings which extend from the main block with each block three

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stories high and terraced, similar to the main block.

Balcony planters will provide a terraced garden image as an extension of the golf course landscaping.

The project is in the final stages of construction and will be completed in November.

Taj Samudra Hotel - Sri Lanka, Colombo

The hotel was completed in November 1984 during a period of social unrest in Sri Lanka. It was designed to eventually be a 550-room hotel with the first 350 rooms being built in three wings. The design intent was to integrate the building with the surrounding structures by use of a vocabulary of similar materials, primarily stucco walls and a high pitched red tile roof. The curved form of the building was developed to reflect the form of the Colombo Club which was a two-story colonial structure built in 1872. The club has been restored and adapted for banquet facilities for the hotel.

The nine-story central structure houses the main restaurant on the top floor. A full array of five-star facilities and services has also been incorporated into the design of the building including tennis and squash courts, olympic size swimming pool and health club. Since construction is labor intensive in Sri Lanka, the building was virtually hand constructed and the interiors done by the Interior Design Department of the Taj Hotel Group. It is mainly of timber and batiks, utilizing designs and details which recall the culture of Sri Lanka.

The experience of working in a number of countries with diverse cultures has provided an interesting global perspective which involves not only architecture and construction, but also political, economic, social, cultural and technological aspects of various countries. This experience has been valuable in continuing work with ongoing clients and developing an insight into emerging markets.

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AN EDUCATED PUBLIC

A report of the national AIA Public Education Committee by Frank S. Haines, FAIA, a member of the committee for the past five years.

National AIA has included education of the public on environmental matters as a major priority for many years. It came into particular focus when the "Directions '80" goals were set up. Architects have increasingly become aware of the public's woeful lack of knowledge and concern for the built environment. The manifestations of this

ignorance range from littering to intelligently voting on environmental issues or for specific platforms which apply to planning, zoning and other significant issues.

There is no doubt that the public has rapidly increasing opportunities to be involved with the issues of what should be built and where. In other words, the very survival of the architectural

profession could depend on the informed decisionmaking of people as they sit on neighborhood boards, attend public hearings, vote for candidates who make decisions for them, or even recognize and demand outstanding architecture.

The AIA has always perceived itself as the catalyst in built environment education for the public, with the intent of strategizing the goals and objectives and encouraging others to implement them. At an early date, it was agreed that the secondary school system (grades K thru 12) should be a prime target due to its accessibility. The future decisionmakers are in the classroom today.

The national AIA Public Education Committee started its major thrust in the schools in 1979-80 by assessing established interest and perceived needs throughout the entire U.S. school system. Questionnaires asked what was being done, what were the results, where the enthusiasm lay, and what was needed to nourish the efforts. Loud and clear from hundreds of replies came the demand for tools to teach the built environment and training for teachers to do so.

Since there were many suitable teaching resources and the initiation of new ones would be very time-consuming, AIA responded by publishing the "Sourcebook." It is a compendium, in exciting graphic form, of published proven teaching strategies selected from the many available by a team of educators and architects. The "Sourcebook" contains a description of each teaching resource and a sample classroom activity which allows

FROM ACOUSTICS TO SAND CASTLES

by Glenn Miura, AIA

In the two years I have been associated with the Hawaii Society/AIA Public Education Committee under the excellent leadership of Gordon Ogata, I have seen the committee make a tremendous impact on the student and teacher participants of the public education system. A total of nine architects, nine teachers and approximately 200 elementary grade level students participated in last year's program, ranging from sand sculpting at Kailua Beach to building scale models of their own schools and the colosseum and temples of Rome. Even a lecture on "Architecture and Acoustics" was given to a class prior to their visit to hear the Honolulu Symphony.

Since then the committee has doubled in size to include a list of 16 architects for this school year and the request from educators for more architects is still growing. Although still small for

the large task in store for the committee, it is a highly motivated, high-energy group of architects who are really making a difference in our children's education and having a good time doing it.

Public Education Committee members are Frank Haines, FAIA; Lorrin Matsunaga, AIA; David Tsuchida, AIA; Gordon Ogata, AIA; Tim Leong, AIA; Ben Torigoe, AIA and Steven Kutaka, Patrick Seguirant, Ann Suetsugu, Kendra Kurosawa, Rodney Hirata, Brian Takahashi, Jeff Corbett and Kathy Saito.

For this month's regularly scheduled HS/AIA dinner meeting, the committee has put together a presentation of exhibits, demonstrations and a slide show to illustrate what this high-energy group of architects is teaching the children of Hawaii. We look forward to your attendance and input.

the teacher to try out the material before committing to the purchase. Complete ordering information is included for each item. The book was self-financing as far as the AIA was concerned, sold for \$35 per copy and has been supplemented since. Many copies are in the Hawaii school system, ordered by individual teachers, principals or school librarians or donated by local architects.

The exciting activities described range from built-environment walks followed by group observations and reporting to individual projects with sophisticated results such as space frames constructed of match sticks. A typical goal is understanding the neighborhood, followed by stewardship of it.

We have responded to the request for teacher training by conducting workshops at many locations throughout the country. Over several days, in a retreat atmosphere, teachers and architects work together to

develop specific, locally oriented, curriculum guidelines and activities. The expectation is that after a nationally sponsored AIA workshop bringing local educators and architects together, the enthusiasm will have been kindled and the program will continue under local guidance.

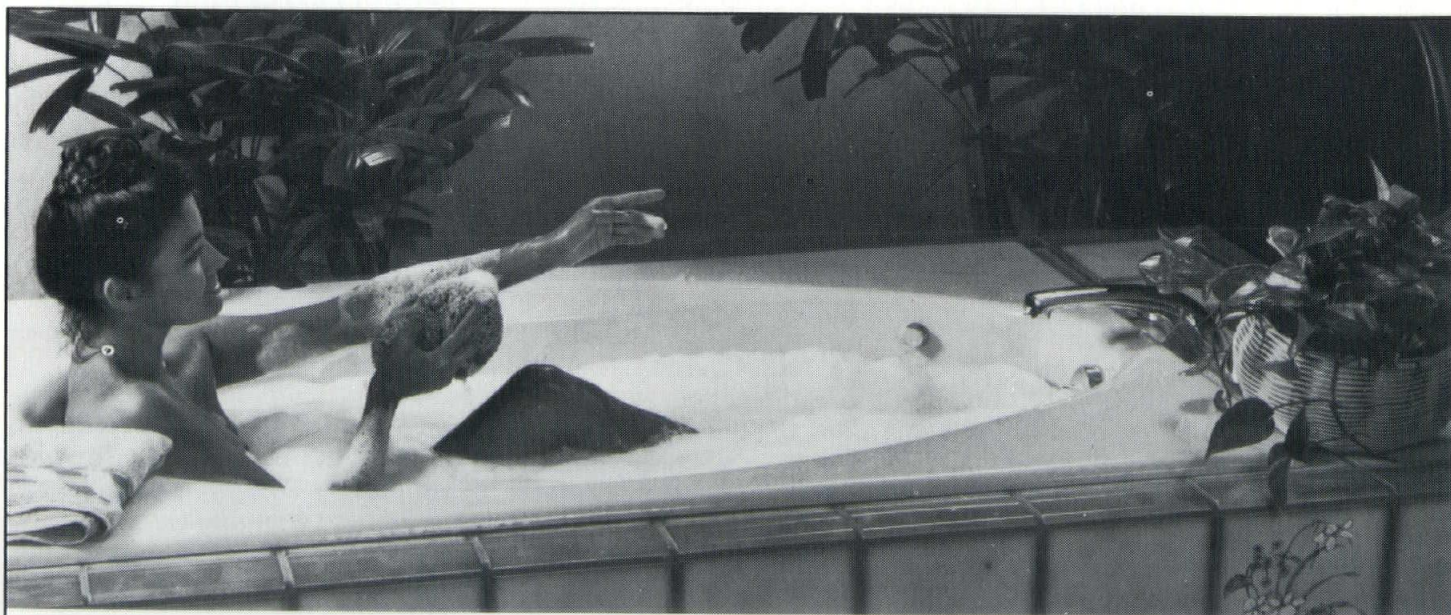
For the last two years, regional coordinators have been initiated to serve as both a resource and a clearing house for the local AIA societies. These volunteers were originally indoctrinated in Washington and meet annually to discuss progress and exchange ideas. Unfortunately for Hawaii, the coordinators are assigned on the AIA regional basis and our remote connection to the Northwest Region doesn't provide us much assistance, but we have done pretty well on our own.

It should be pointed out that the AIA "Learning by Design" program is a comprehensive educational effort. It is not, and should not be, a new curriculum subject area, but rather a more

thoughtful and comprehensive attitude toward the environment fitted into each day's learning activity.

Furthermore, we are not selling architectural services and we are not encouraging young people to become architects or to imagine themselves as "amateur" professionals. Public relations, job promotion and architectural education are legitimate efforts undertaken by other AIA committees, along with the many other programs which strive to improve the quality of design and the competence of the practitioner.

The national AIA has not been neglectful of the more basic general public sector, serving as the catalyst for various national television programs. The most exciting current potential is the \$300,000 AIA pledge to station WETA to make up a part of the \$2,000,000 which will be needed to produce an in-depth educational television series on architecture, scheduled for release in 1986. **HA**



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STUDENT AWARDS

Twenty University of Hawaii School of Architecture students have been named recipients of the Hawaii Society of The American Institute of Architects' 1985 Student Awards. The students were recognized for their achievements in academics and design at a Hawaii Society/AIA meeting on September 19.

Six students have won Academic Achievement Awards for having the best cumulative grade point averages in their class levels through the previous spring semester. They were also selected for their outstanding personal character. These students are Linda L. Chung, 200 level; John Curran, 100 level; Toni A. Fasi, 400 level; Mark R. Heyd, 300 level; Amy Sanderson, 400 level; and Lawrence O.T. Ho, 400 level.

Six U.H. architecture students have received Design Achievement Awards for outstanding work on projects they completed in their design studios last semester. Recipients of this award are Michael Gentry, studio 401; Lawrence O.T. Ho, studio 401; Mark F. Nakahira, studio 401; Leonora F. Obispo, studio 101; JoAnne R. Taira, studio 401; and Michael N. Ueunten, studio 201.

In addition, the Hawaii Society/AIA has presented eight U.H. architecture students with Honorable Mention Awards for architectural design projects created as part of classroom work in architecture studios. Recipients of these awards are Linda L. Chung, studio 201; Gail E. Gronau, studio 201; Janil C. Mateo, studio 361; Janna C. Mihara, studio 101; Kirk B. Nakahira, studio 301; Laureen E. Ogawa, studio 101; Susan Y. Tasaki, studio 461; and Kim Hsin Hsin Wu, studio 461.

Jurors for the awards program were Ronald L. Baers, AIA; Owen Chock, AIA; Dee Crowell, AIA; Dennis Daniel, AIA; Pravin Desai, AIA; Theodore E. Garduque, AIA; Norman G.Y. Hong, AIA; Darshan Lal Khurana, AIA; Benjamin B. Lee, AIA; Ronald Lee, AIA; Gerald Lum, AIA; Glenn E. Mason, AIA; Lorrin Matsunaga, AIA; Kurt Mitchell, AIA; Virginia Murison, AIA; Joyce Noe, AIA; Patricia T. Shimazu, AIA; Timothy P. Teefey, AIA; Cliff Terry, AIA; and Darrell G. Welch, AIA.

The purpose of the Hawaii Society/AIA's annual Student Awards Program is to enable the architectural profession to offer assistance and guidance to architectural students in their creative endeavors, thereby bridging the gap between the academic environment and the professional practice of architecture.

ASLA Awards

Winners of the 1985 Hawaii Chapter ASLA Awards Competition have been announced. Phillips, Brandt, Reddick & Associates (PBR Hawaii) won the Landscape, Planning and Analysis category for the Honolulu Zoo Master Plan. Belt, Collins & Associates (BCA) won the Commercial Design category for the Shangri-La Hotel in Singapore and Belt, Collins also won the Communication Category for the Landscape Improvement Program for the Outrigger Canoe Club.

The entries were judged by a jury of nine members from the Washington State ASLA Chapter. The panel reportedly was impressed with the type and style

of work submitted which differed dramatically from the nature of work done by the Washington State Landscape Architects.

Jury Comments

Honolulu Zoo Master Plan

A thorough, professional and practical project—good example of this kind of study.

Shangri-La Hotel

A complex, interesting place—very bold landscape design, true to its own goals.

Outrigger Canoe Club

Useful report for club members and specific recommendations on how to maintain the club grounds.

Pumpkin Party Scheduled

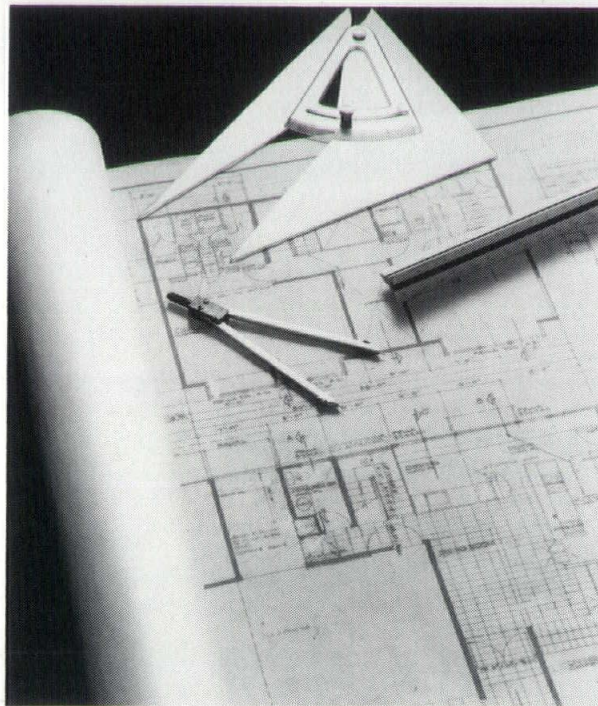
The third annual Great Hawaiian Pumpkin Party, a special event for the School of Architecture at the University of Hawaii at Manoa and the U.H. Foundation, is slated for Sunday, Oct. 27 from 7 to 10:30 p.m. in the Grand Ballroom of the Pacific Beach Hotel.

The colorful and creative costume party will include an exhibit of pumpkins carved and sculpted by U.H. architecture students, a costume parade and contest with prizes to be awarded to winners in several categories, dancing to live music, and pupus and beverages.

Admission will be \$12 a person, but the event will be free to children under 80 pounds who are accompanied by an adult.

Tickets may be purchased from U.H. architecture students, the U.H. School of Architecture and the U.H. Foundation. Phone 948-7225 or 948-6039 for more information.

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Haiku Gardens' lily pond enhances the setting for many Hawaiian weddings. The pond has been in continuous use for 100 years. Photos by Ted Green.

WATER FEATURES

by Ted Green, ASLA

Water in the landscape introduces a moving medium, has a cooling effect, adds sound, facilitates mental therapy and encourages noncompetitive sports. A water feature on a project that is far from public water can be a reservoir in case of fire or a surge basin for the irrigation system.

There are many outstanding water features in Hawaii. Some examples are the water trap on the third hole at Princeville, gardens at the Honolulu airport, the Pagoda Restaurant koi pool, Kahanamoku Lagoon, the Haiku lily pond, McCoy Pavilion pool, the artificial tide pool fountain of the Financial Plaza of the Pacific and about 50 other swimming pools, spas, stream and oceanside developments and reflective pools. Olympic-type athletic pools are

purely functional and usually cannot be considered aesthetic.

Pools or other water features can be a great liability—an attractive nuisance which if the cost/benefit ratio were understood or even considered, may never be built. Despite the fact that we have some very attractive man-made water features here in Hawaii, we also have some that have failed, for one reason or another. For instance, the reflecting pools at the state capitol, drainage canals and tide ponds at Ala Moana Park and fountains in front of the Ilikai Hotel, at the top of Fort Street Mall, at Aala Park or the airport entrance. Failure may be due to brackish water with no periodic flushing, super-saline water, unprojected expense, habitual vandalism, or poor design for the

setting. In the past 15 years an estimated three-quarters of a million dollars in water features have been destroyed, altered or abandoned.

Success over the years means good design, quality construction, continuing funds for maintenance and concern for upkeep. There are several beautiful new water features that can't be evaluated for they haven't been time tested.

Annual maintenance is seldom recognized as the great pitfall. It is about equal to 10 percent of the construction cost and is highest for spas and swimming pools with their high quality filtration and lowest for koi and lily ponds that are "balanced." Plaster in a spa might have to be redone every two years or in a swimming pool every five years.

There are many controls by agencies that add to the construction and maintenance costs of swimming pools and spas and yet the controls are not equal for they do not control the ornamental pond, pool or stream. The greatest controls are those of the State Health Department in dealing with public swimming pools and spas—all in the name of health, safety and welfare. Shouldn't standards be the same for private as for public when health and safety are involved? The swimming pool that utilizes salt water or a continual change of water is ignored.

A loud cry might come from the homeowner who would have to build to the very restrictive standards of the Health Department. Why not change the rules to allow:

- dark plaster for the natural

effect;

- a non-continuous walk at the edge of the pool to allow for landscaping, waterfalls, bars, artificial beaches, and water slides. (Trivia question: Name 12 resorts with illegal pools, one that has won all kinds of awards);
- the elimination of most signage; and
- a filtration system of any design and with no set turnover rate, providing it does the job.

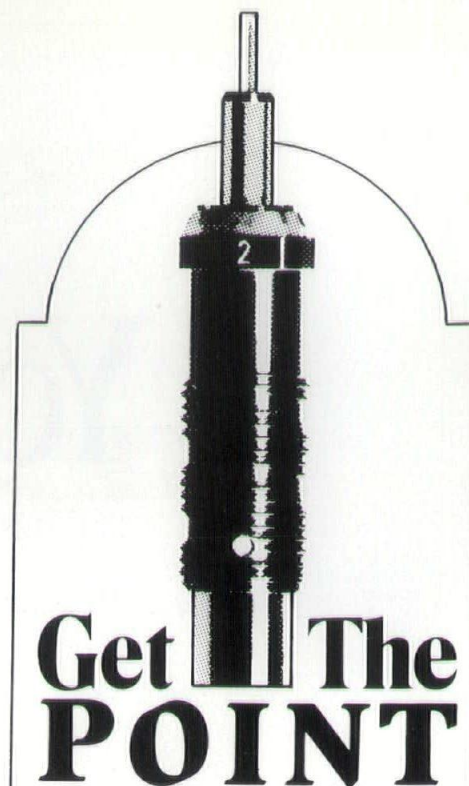
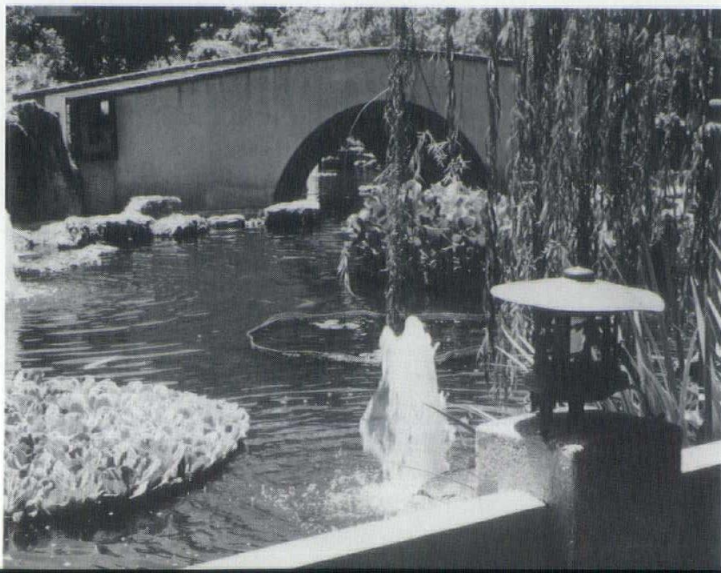
Why not insist on:

- a decorative security fence or barrier with self-locking gates;
- noise abatement of equipment;
- conservation of energy; and
- mosquito control.

This would be a good beginning and something everyone can live with. It would also make for better design—and make quite a few water features in the state legal.



Gardens at Honolulu Airport are among Hawaii's many outstanding water features. Richard Tongg, FASLA, designed the gardens, a soothing blend of natural and man-made materials.



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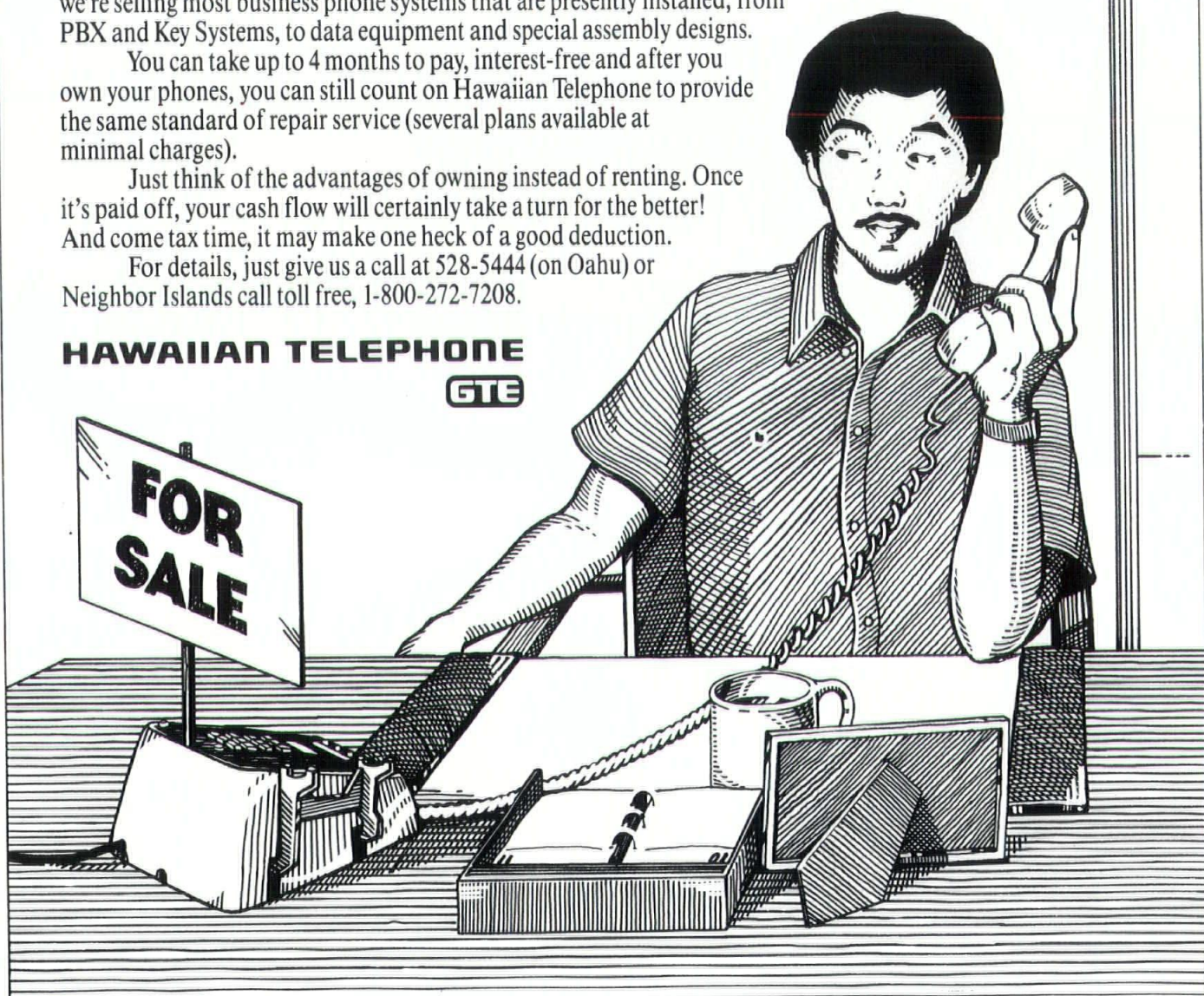
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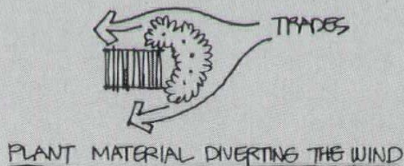
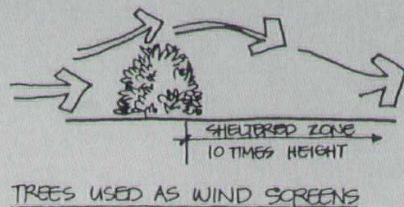
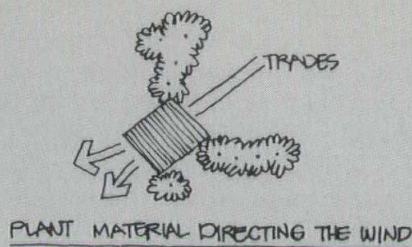
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THE VALUE OF LANDSCAPING

by Lester Inouye, ASLA

Landscape is forever. It has always been with us—comforting, clothing and sheltering us. We as designers use plant material in drawings to capture an ambiance for our buildings. These renderings sell a project to the client, processing agency, and general public as well. Why then is landscape always the last thing thought of and first thing dropped from projects?

The value of landscape can be measured by the multitude of functions it serves. Plants serve architectural, engineering, and climatological functions.

Architectural uses are abundant because of the varied height, texture, density, color, form and patterns in which plants can be arranged. Walls are formed with hedges or tall vertical trees. Double rows of trees form a tunnel with a tree-lined canopy or a single tree can form an overhead shelter. These "walls" can be manipulated to define spaces with "ceiling" and "floor" textures of plant material.

Architectural designs can be reinforced with plant material defining the hierarchy of spaces or

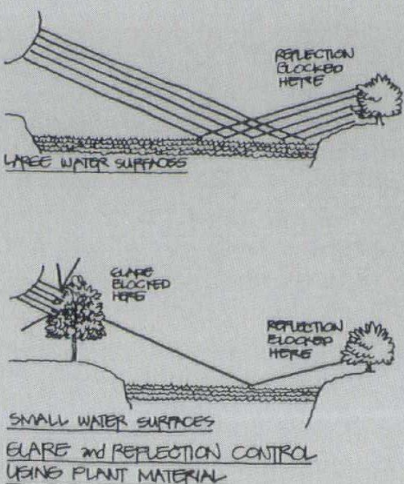
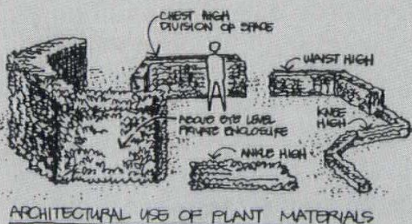
modulating the spaces into smaller, irregular or rhythmically discernible units. Accenting can be done with tall stately trees or spectacular foliage or flower color.

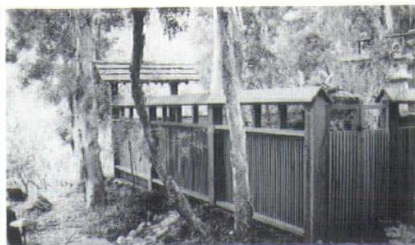
Engineering uses of plant material include erosion, noise, glare, reflection and traffic control. Plants minimize erosion by covering and protecting the soil from rain and wind. Their roots hold the soil in place preventing earth slides.

Sounds are screened out by plant material. Foliage of trees, because of its flexibility and softness, absorbs sound; the trunks and heavier branches deflect sound to the grass and ground cover below.

Plants selected for height and density reduce glare and reflection by stopping sunlight before it strikes a reflective surface or before it reaches the viewer. At night, moving headlights are disruptive to homes along a highway. Well placed trees and shrubs can control glare, reduce highway noise, provide privacy and present a pleasant community image.

Control of pedestrian traffic is achieved by selecting and spacing





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plant material. Low shrubs present a psychological edge to pathways while taller shrubs or trees, with or without thorns, present a formidable barrier to pedestrian movement. Roses have been tested as an effective vehicle barrier on freeways, cushioning the impact of a crash.

Climatological uses of plant material are abundant. Trees, shrubs, ground cover and turf, or a combination of these, are effective in reducing direct and reflected solar radiation. They absorb heat, provide shade for walls and ground surfaces, and create dead air spaces that insulate building walls. This insulates buildings and the earth not only from the intense heat of the sun, but also from abrupt temperature changes. Plants absorb the sun's heat during the day and release it slowly in the evening. Shade trees can reduce heat gain on the ground or wall surface by as much as 80 percent. It was found that temperatures on sunny summer days are about 10 to 14 degrees cooler than exposed soil.

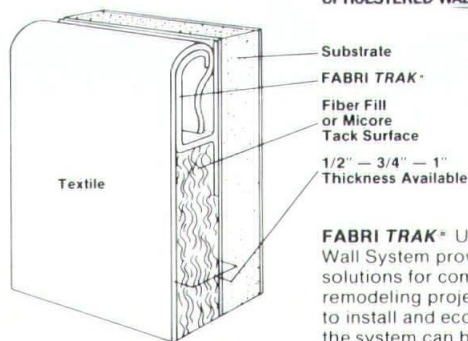
Trees and shrubs aid in wind control by blocking or directing winds. Wind depends on pressure differentials on the windward and lee side of an object. Plant material is an ideal wind control device because of the wide selection of textures, densities and heights available. By controlling the amount of wind that passes through a barrier, the wind sheltering effect on the lee side can extend up to 20 times the height of the barrier. Wind can be channeled and directed to window openings for cooling, directed around an object or speeded up by as much as 20 percent by forcing it through an opening causing a venturi effect.

Landscape is a good investment for the present and the future. Why then is landscape always the last thing to be considered on a development and the first to be cut?

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LANDSCAPE ARCHITECTURE ABROAD

*An Interview with Ray Cain, FASLA
Belt, Collins & Associates*

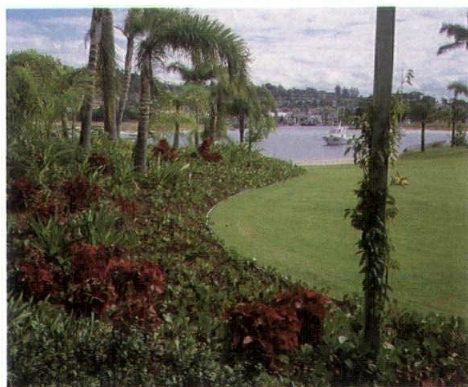
Hawaii Architect interviewed Ray Cain, director of landscape architecture for Belt, Collins and Associates (BCA), an engineering, planning and landscape architectural firm based in Honolulu with associated offices in Singapore, Australia and Hong Kong. For 32 years BCA has specialized in hotel and resort development projects. They have worked in over 25 different

countries covering most of the island countries and continents of the Pacific Basin as well as most of Asia and the Middle East.

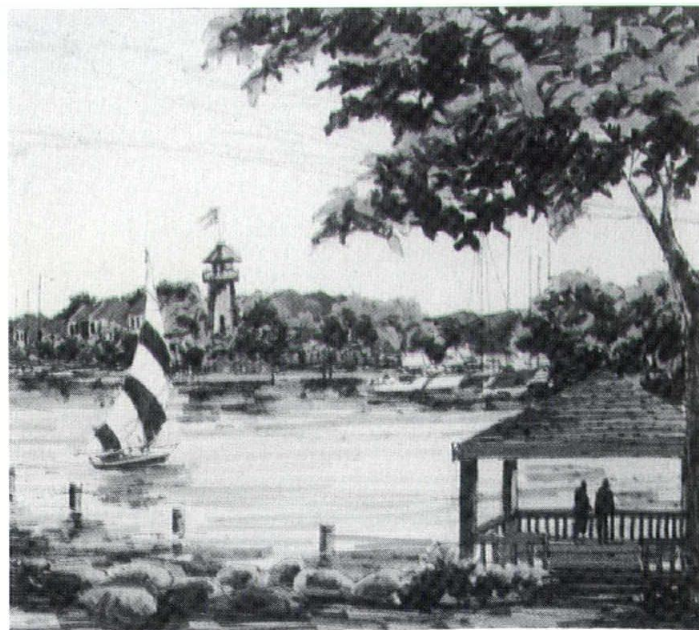
HA: How did BCA get into foreign work?

Cain: Our initial business movement to foreign countries was started in the mid-'60s by the late Walter K. Collins in association with his close friend, Pete Wimberly. After the company did much of the original tourism

planning for the State of Hawaii, Belt, Collins gained enough professional credibility to qualify for international assignments from the United Nations. Tourism was then being recognized as a valuable industry to assist the economy of the developing nations. One project led to another and over a period of 10 years, 13 different tourism programs were completed for individual countries and/or



BCA's landscape planning and analysis for the Anchorage in Australia won a 1982 Award of Excellence from the ASLA, Hawaii Chapter. Anchor, Mortlock, Woolley Architects designed the 750-unit project.



proposed major resort destinations.

During this period, the initial tourism boom was in full swing throughout the Hawaiian Islands, and Belt, Collins was able to obtain considerable work on most of the larger hotel and resort developments.

HA: What about your specializing in landscape architecture overseas?

Cain: Basically, the early international tourism studies allowed BCA to obtain numerous foreign business contacts. The work we did throughout Hawaii allowed us to establish a list of creditable landscape architectural projects upon which we have based our reputation. When the time came for the various foreign countries to implement the initial resort master plans, they came to see such places as Mauna Kea Beach Hotel, Kona Surf and Kauai Surf hotels and various Sheratons in Waikiki, as well as on the outer islands. In those days, hotels within Kaanapali and Wailea on Maui were developing rapidly and there was much for the foreign businessmen to observe and learn from. When they returned to their country to build their own hotels, BCA went with them.

HA: What other foreign work does BCA do besides hotel landscaping?

Cain: Actually we have done a considerable amount of urban design work—particularly in some of the larger cities such as Hong Kong and Sydney. Our work within the urban areas includes fountains, roof gardens and large paved plazas.

HA: Who is your primary client overseas? Project owners or architects?

Cain: Both! It just depends on the situation. Sometimes the owner puts together the team of consultants and in many cases the owner retains the architect to organize the team.

HA: Are there many architects that specialize in foreign work, and how do you keep or establish contacts for your landscape work?



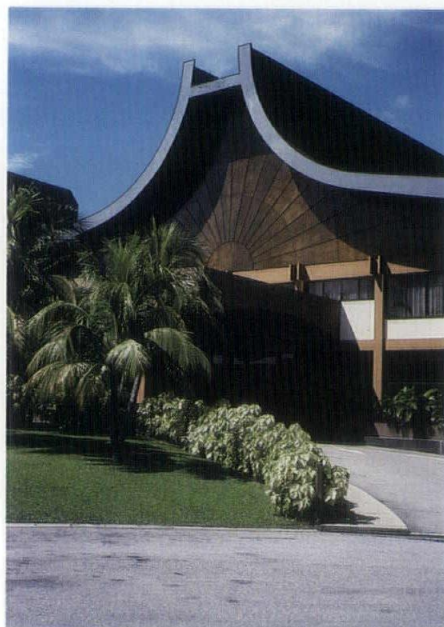
The Fijian Hotel on Yanuca Island, Fiji, is considered one of the best resorts in the world.¹ Photo by Walton Photography courtesy of Wimberly Whisenand Allison Tong & Goo Architects, Ltd., designers of the hotel.

Cain: We have worked with many of the local architects that do overseas projects, such as Wimberly Whisenand Allison Tong & Goo; Architects Hawaii and Robert Fox (Fox Hawaii). The circle of American consultants working in Asia and the South Pacific soon becomes common knowledge to all involved. Beyond Hawaii we often get calls from large firms such as Bechtel and Skidmore, Owings & Merrill to

become part of their consultant team. The exposure we have gotten from our foreign work has allowed us to work with many architects in the U.S. that we would never otherwise have known. Architects such as Paul Rudolph, Charles Moore, Welton Beckett, Minoru Yamasaki and John Portman, to name a few.

HA: Why did BCA find it necessary to open foreign offices?

Cain: Our foreign clients are



Rasa Sayang (left) is a low-rise resort hotel in Penang, Malaysia. The nine-acre site includes 500 feet of beach frontage on the Batu Feringgi coastline. Architect for the hotel was Chao Tse Ann of Archiplan. Belt, Collins designed the pool and gardens of the Golden Sands Hotel (above) in Penang, Malaysia. The hotel was designed by Fox Hawaii.

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being increasingly insistent on the need for more "presence" during the critical aspects of our landscape architectural design process. The nature of our work in Singapore and Australia has become much more than merely planting plans. Much of our design work now covers all aspects of the "hardscape items" such as pools, paving, and all external furnishings including nightlighting.

HA: What are some problems with a foreign branch office?

Cain: For BCA it was to find qualified people from our Honolulu office. Obviously most people from Hawaii would rather live here than most other places. Our people, myself included, do not mind being gone for several weeks or a month, but who wants to live in Hong Kong or Singapore when one can live in Hawaii? The incentives must be there in terms of salaries and/or opportunities for company advancement and responsibilities.

HA: To what degree do you hire foreign personnel?

Cain: As much as possible. Obviously it is more expensive to supply a staff from Hawaii so we seek qualified personnel from the various countries. It is fairly easy to find landscape architects in Australia, but in Asia there are not many to choose from. We also have to be careful because many of our clients hire us because we offer a supposedly higher degree of imported expertise and they want to be sure they get their money's worth.

HA: Is Hawaii still the main example for your foreign clients to study resort landscaping?

Cain: Yes, we recommend Hawaii because within such a concentrated easy-to-reach area, they can learn from examples of the best—and the worst—in terms of hotel environments.

HA: What projects in Asia are good examples of landscape architecture?

Cain: Some of the best examples of landscaping are in Japan. However, each country in Asia has its own style of garden design

"Our foreign clients are being increasingly insistent on the need for more 'presence' . . ."



Landscape detail of the Shangri-La Hotel in Singapore—lush foliage, waterfalls, bridges and paths—reinforces Singapore's identity as "The Garden City." Wimberly Whisenand Allison Tong & Goo Architects, Ltd. designed the hotel's garden wing.

related to its architecture and general culture. When we first perform landscape work in a foreign country, we do extensive research on such matters. Whenever possible, we seek local people who are knowledgeable about the vegetation. Again, let me emphasize that the consultation work we have been doing for the hotels includes not only the plant material but the planning of the overall external environment, including recreation facilities such as golf courses and

tennis complexes.

HA: How do some of your hotel projects in Asia compare with what you have done in Hawaii?

Cain: The Shangri-La Hotel in Singapore is one of our best projects. The garden wing of this hotel (architecture by Wimberly Whisenand Allison Tong & Goo) would equal any hotel in Hawaii. The Hilton in Jakarta (architecture by Killingsworth) is another major garden-oriented project. The pool and gardens of the Golden Sands Hotel (architecture by Fox) in

Penang, Malaysia, would compare with any beach resort we have done.

HA: What is your company's future in foreign countries?

Cain: It has been a struggle and will continue to be so. If we are to maintain a successful office operation in a foreign country, we must bring in local people as partners and teach them our expertise. We must stay flexible and alert to change, economically and politically. Three years ago our booming business in Hong Kong disappeared within a month after the Chinese and British governments argued. Then our business shifted to Singapore. Now development of new projects in Singapore is very slow. So back we go to Hong Kong from which we shall promote work in China.

HA: In what foreign country is there a particularly "booming area" for your services as a landscape architect?

Cain: Presently the new development for us seems to be in China because of its interest in building up its tourism and hotel industry. The same can be said now for Australia—the entire country is gearing up for its centennial celebration in 1988. This event, combined with America's Cup Yacht Race in Perth in 1987, has created a windfall of golf course and landscape design projects for our office in Sydney.

HA: What are the benefits of foreign work?

Cain: Most of our staff who work overseas find it a rewarding experience to associate with people in a foreign country, to learn about their culture and lifestyles.

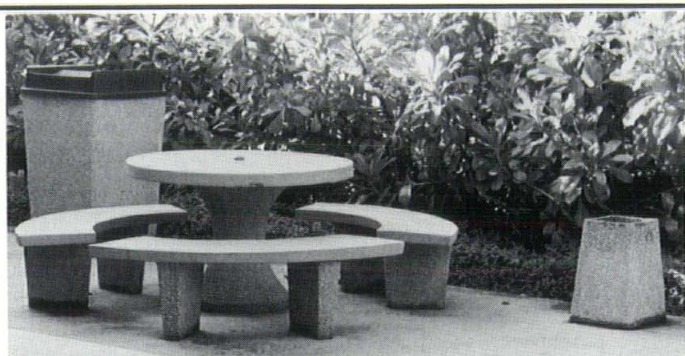
Foreign work allows our company to supplement our primary business as engineers, planners and landscape architects in Hawaii. We feel it is healthy to expand our base of operations beyond the State of Hawaii in case our business here ever slows down. There is plenty of business overseas and a considerable amount of money circulating. It is all out there—if you can get it! **HA**

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- A.** Projects must have been completed in the last five years.
- B.** Each submittal should include:

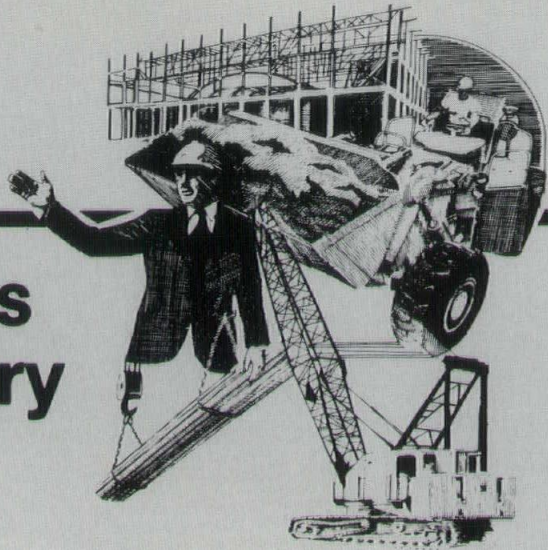
- Two to three photos with captions and photo credits
- Architectural firm name and address
- Client's name
- Names of contractors and consultants
- Date of completion
- A brief description indicating

materials and construction methods used, design problem and solution, etc.

C. Submittals must be accompanied by payment for printing costs (\$286 per page for black and white or \$494 per page for four-color which includes tax.) Color separations must be provided. Full pages only; one page minimum per project.

D. Deadline for space reservation is Nov. 1. Materials must be received by Nov. 8. Submit project materials to Miki Riker, 319B No. Cane St., Wahiawa 96786. 621-8200. Please make checks payable to PMP Company, Ltd.

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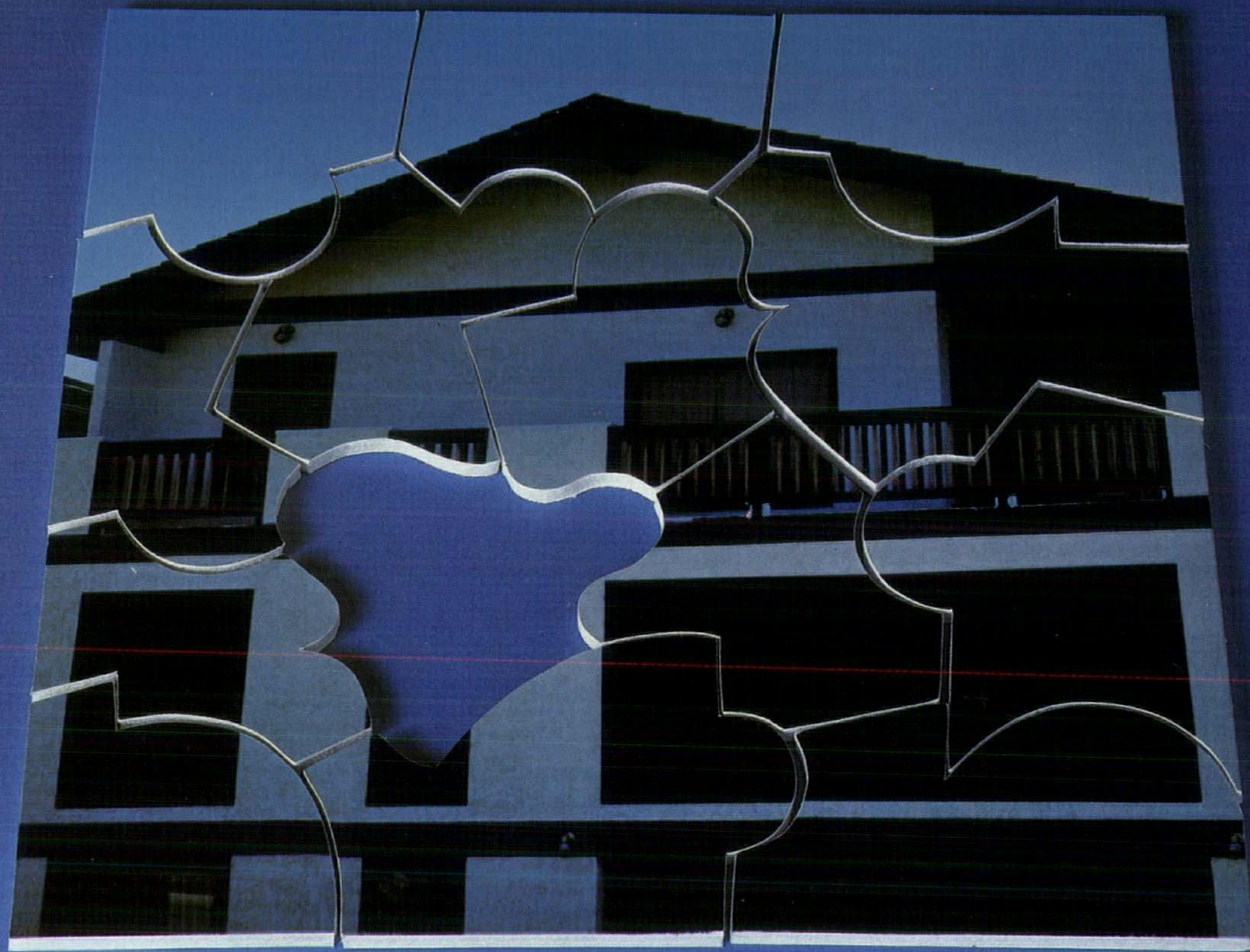


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