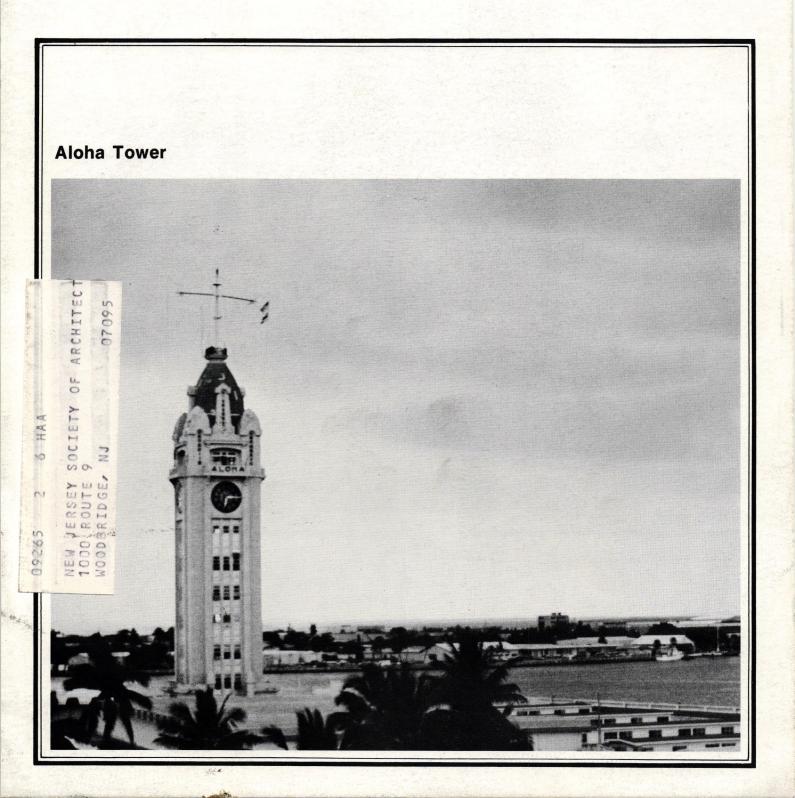


HAWAII ARCHITECT

May, 1983

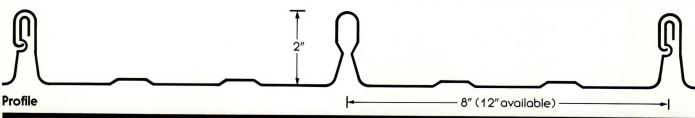


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HAWAII ARCHITECT

Volume 12, No. 5

May, 1983

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To the Editor

The choice of the headline "Why Can't Johnny Draw" for the article I wrote about my experience as a 300-level juror at the School of Architecture was most unfortunate. It contains a negative connotation which is not consistent with the spirit of the article. Rather the intent was to remind students that developing the ability to sketch and draw is vital to the proper presentation of projects-whether it be to jurors or clients. That ability should not be neglected in favor of model building or verbal skills. I didn't say that "Johnny Can't Draw." I did try to say that Johnny didn't seem to understand how important it is.

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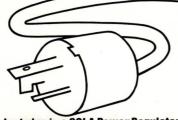
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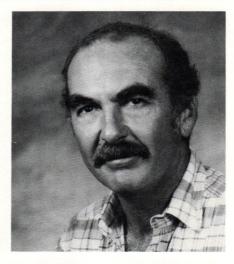
by Lewis Ingleson President, Hawaii Society/AIA

Last month, the Hawaii Society/ AIA presented its 1983 Design Awards for Excellence in Architecture to ten projects. Although all the entries are extremely good, and exhibited varying degrees of care and thoughtful design, the selected projects have that extra something that sets them above the rest.

These days, when architects find their professional worth challenged on so many fronts—even in the hallowed halls of the legislature—I take special pride in the fact that my colleagues are still creating imaginative projects such as those that won awards this year.

Wherein, then, lies the architect's special merit? It lies in care and imagination in the crafting of spaces for people. The merit we claim as our own is not, however, readily apparent in many buildings. There are so many sad diversions today that do not express the building's purpose in its form, nor adequately invite the passerby to share its function and enjoy its atmosphere-so many that use a good idea "pasted on." We are in danger of becoming timid and shallow, and we should be watchful of this.

We have an awesome trust relationship with our clients, and the public in general, coupled with a rare vulnerability among professionals to unskilled criticism. We are open to criticism from environmental and sociological activists, mortgage loan regulators, governmental officials, and various barstool experts of strong opinion concerning anything architectural. The only contribution they can make, however, is negative; they cannot create. Be conscious, then, that if you do not give the building excellence, it will not have any! Only you can command the majesty of rhythm, the sparkle of articulation, the authority of scale and



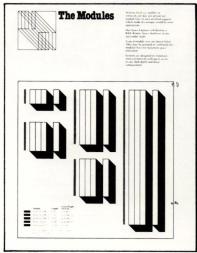
the good plain honesty of a bold design statement.

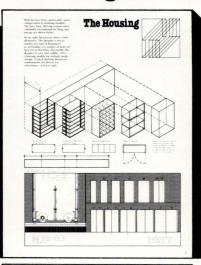
Don't be bashful in the face of the conventional wisdom that it is somehow wrong to build a monument to yourself. Every building you design should be a monument to yourself and to your client who had the good judgment and taste to cooperate in the conception and birth of a work of architecture that will please its users and grace its surroundings long after both of you are gone. Did you ever meet an owner who was proud of the cheapest, fastest, most moderate building in town? Neither have I.

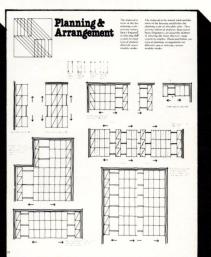
In the months and years ahead, we will be facing ever increasing challenges to our professional standing. We must stand steadfast in the face of this erosion, not only for ourselves, but also for the public, for it is they who are the ultimate beneficiaries of good work. By and large we cannot outdo our challengers with any means other than the one we have readily at hand—with our architecture!

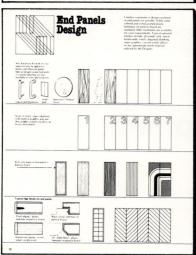
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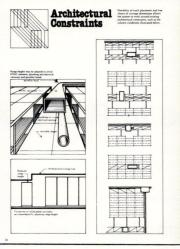
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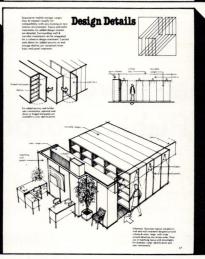












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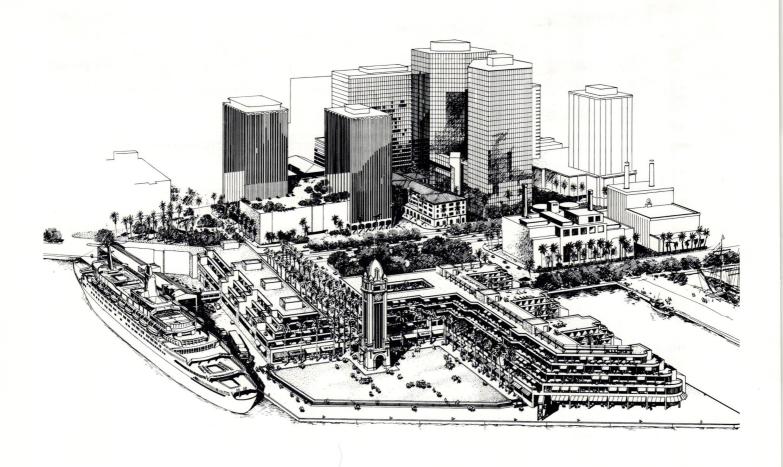
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Aloha Tower— The Public Purpose in Redevelopment

by Boris Dramov, Jim Adams and Bonnie Fisher ROMA Architects and Urban Designers

The Aloha Tower is not an ordinary development site. Rather, its history, pattern of use, and physical presence in the city gives it special meaning and significance. This article describes how proposed redevelopment will build on these qualities in creating a place that achieves a broad public purpose to the greater benefit of the people of Hawaii.

The Aloha Tower has long served an important role as the primary entry to the Hawaiian Islands by water. Although the tower was built in 1925, the site was used as a place of landing even before that time. Its proximity to deep waters, protected location behind what is now Sand Island, and adjacency to the harbor entrance made it well suited to this purpose. In its heyday in the 1930s, the Aloha Tower was alive with activity, with ships loading and unloading passengers—both residents as well as vacationers coming from the Mainland to stay at Waikiki. For many, the Aloha Tower was the first and most

memorable image they would have of the Islands. Gala send-offs created a festive atmosphere on ship days, with hula dancers, bands, and native boys diving for coins.

With the advent of air travel, rising costs of fuel, and shorter, destination-oriented vacations since World War II, passenger travel by ship has declined. Cruise ship activity reached its lowest point about ten years ago, but in recent years some increase in short-distance multi-destinational

trips has been experienced. As a result, a shift in dominance has occurred, from ports such as New York, which once catered to transatlantic voyages, to ports, such as Miami, which are favored by warm weather, calm seas, and proximity to many Island destinations. Given these trends, it is expected that the Aloha Tower will continue to play an increasingly important role in inter-Island travel, while the number of longer international trips generally will remain stable.

Last year there were about 65 calls at the Aloha Tower and of these about 13 were by international vessels. The remainder were mostly one-week winter cruises taken by passengers who arrived in the Islands by air, primarily from the Mainland. Designed to accommodate greater traffic and to serve a different kind of cruise ship trade, the 13-acre Aloha Tower facility is now much larger than it needs to be. The site is greatly underutilized, with the sheds used primarily for parking and storage. While an underutilized maritime facility can create an unattractive image of decline and neglect, a new facility integrated with lively public uses and open space can be a major means of promoting the cruise ship industry in Honolulu. Arriving at Honolulu and the Aloha Tower can be an experience comparable to sailing by the Statue of Liberty in New York Harbor or arriving at the Piazza San Marco in Venice.

In recognition of the great significance and potential of the Aloha Tower site, its owner-the State of Hawaii-has taken steps toward redevelopment. Since the 1960s, numerous studies have been prepared and development schemes proposed. To promote redevelopment of the site, the Aloha Tower Development Corporation (ATDC) was formed in 1981 and empowered by state legislation to prepare a development plan, make public improvements up to an amount equalling about \$33 million, and ultimately, to lease parcels to private developers. The enabling legislation emphasizes the maintenance of maritime activities and the value of the Aloha Tower in serving "the economic, maritime, and recreational needs of the people of Hawaii." More specifically, the legislation calls for the creation

of a people-oriented place adjacent to the downtown financial district

Under this mandate, the newly formed ATDC selected ROMA Architects along with Donald Wolbrink, planner, and Williams-Kuebelbeck & Associates, Inc., economists, to prepare a plan, and necessary financial instruments, and to design guidelines to be used in implementation. The team is also assisted by Parsons Brinckerhoff Quade & Douglas, Sam O. Hirota, Inc., Dames & Moore, and Moffat & Nichol. Our work will be completed in May and by October proposals will be solicited from developers. It is hoped that the ATDC will select a developer by the end of 1983 and that by 1987 construction will be complete.

In determining what should happen at the Aloha Tower, we looked at what has been done in other places. Recent projects, such as the Inner Harbor in Baltimore, illustrate how development can build upon the unique qualities and public nature of the waterfront through the preservation of historic elements, creation of public open space along the water's edge, and the development of public-oriented activities that complement the nearby downtown district. Other places, like the Piazza San Marco in Venice, show how a tightly framed open space can create a living room to the city and window

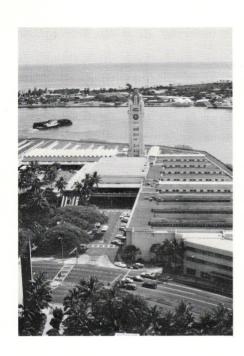
to the water. With elements similar to the Aloha Tower site, the Piazza San Marco exemplifies the level of quality and greatness we feel should be achieved.

We also looked at a variety of buildings considered exemplary of the Hawaiian design tradition. The Royal Hawaiian Hotel, the Honolulu Academy of Arts, and the Dillingham Transportation Building all serve as sources of inspiration for the Aloha Tower development. Their gracious scale, which encourages people to meet and get together; sensitivity to the tropical climate and environment through overhangs, high-pitched roofs, and numerous openings; and careful transitions between indoor and outdoor spaces through arcades, courts, and passages are all elements we believe should be emulated in the Aloha Tower proj-

Finally, we believe that in developing a public place at the Aloha Tower, lessons can be learned from the nature of the waterfront itself. The waterfront is a place of transition and duality, which relates both to land and water. It is fitting, therefore, that development there should be different from surrounding inland locations. The Aloha Tower complex should be a transition in scale and function from the intense office-oriented uses of downtown to a more relaxed mixture of lively activities



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IRWIN PAR

Photography (except top right, opposite page) by Boris Dramov, Jim Adams and Bonnie Fisher.

and open space at the water's edge.

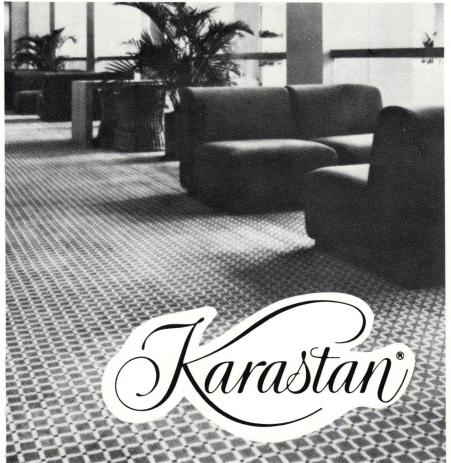
To fully realize the potential of the site through redevelopment, a number of design objectives were established. The following discussion describes how the plan attempts to meet each of these objectives.

- 1. Provide for continued maritime operations: With the exception of the historic gallery at Pier 11, all of the maritime sheds on the site will be removed. A new main cruise ship terminal will be built at piers 10 and 11, a back-up cruise ship terminal at Pier 9, and an inter-Island terminal at Pier 8. These new facilities will efficiently serve anticipated future maritime demand and will be flexible and adaptable to changing needs over time. The intention is also to make maritime activity, which is so much a part of the identity of the Aloha Tower, more visible to the public, but without compromising the need for security and safety. Buildings on the site will overlook maritime activities and the plaza at the end of the pier will make them more accessible to the general public.
- 2. Preserve and enhance the unique qualities of the site: The historic Aloha Tower, on axis with Fort St. Mall and harbor entrance. is clearly one of the most important features of the site. Its landmark quality and prominence along the waterfront are to be enhanced by the maintenance of the 65-foot height limit, presently set forth by the Capital District. This would place buildings at about one-third the height of the Aloha Tower, and would establish a proper scale relationship to it. In addition, the podium level and ramp would be removed and the tower would become a freestanding structure directly visible from the Fort St. Mall in downtown and punctuating a larger waterfront plaza.

The vegetation and canopied appearance of the ficus and monkeypod trees at Irwin Park create an important scenic open space at the foot of downtown and along the Nimitz Highway and will be maintained, as will the handsome gallery at Pier 11. Important views to the harbor will be opened up from the site by the creation of a new

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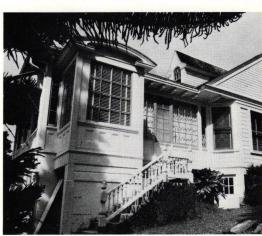
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PRESERVATION PARADE '83

Guided walking tours with open houses along the way of landmark private residences in Honolulu's lush Manoa Valley highlight this month's "Living in History" historic tour sponsored by Historic Hawai'i Foundation with support of Hawaii Society/AIA.

The event is the sixth annual



Preservation Parade, and takes place Saturday and Sunday, May 14 and 15, from 10 a.m. to 4 p.m.

Among the homes on the tour: the University of Hawai'i's President's Home, a 1929 Gothic "cottage," a 1900 Dutch Colonial designed by O.G. Traphagen, and a ca. 1915 Victorian.

AIA members are now selling tickets, priced at \$5 for one day or \$7.50 for both days.

HAWAII ARCHITECT

A different tour and lunch-time mini-seminar on the lawn of a historic home will be featured each day.

Saturday tours will explore the "College Hills" and "Seaview" Tracts, early 20th century subdivisions which set the tone for Manoa's distinctive residential ambience which has been retained to this day. From noon to 1 p.m., Vance Borland, ASID, will lead a "brown bag" lunch seminar on "With Pride and Respect: Caring for and Restoring an Older Home.'

Sunday tours will cover "Pu 'upueo"-the "Hill of the Owl" of the Princess of Manoa legends-and the Schnack-Dortch Tract further back in the valley. AIA member Spencer Leineweber of Spencer, Ltd., will lead the noon seminar focusing on "With a Sense of Place: Maintaining and Rejuvenating a Landmark Neighborhood."

Beatrice Krauss and members





Above: "College Hill," built for Frank and Eleanor Atherton in 1902, and now home of the University of Hawaii President. Photo by Phil Spalding

At left: Designed in 1900 by O.G. Traphagen, and modified in the '20s by the late William C. Furer (when front entrance was shifted), now owned by Frederick H. Furer, AIA. Photo by Mark Williford.

of the Lyon Arboretum Manoa Valley History Project and American Society of Landscape Architects will lead the walking tours, while the open houses will be hosted by members of the Honolulu Junior League and American Society of Interior Decorators.

Tickets are available from Bev at the AIA office. For more information or lunch reservations, call Historic Hawai'i Foundation at 537-9564. HA

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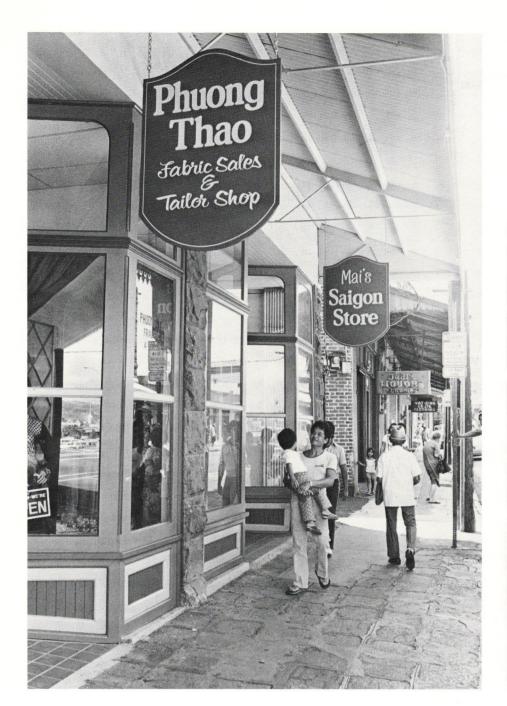
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The Changing Complexion of Chinatown

Honolulu's Chinatown is now going through some extreme changes. Outwardly, these changes have manifested themselves in new paint and a lot of second floor "For Lease" signs. The outward appearance, however, is only a thin layer of the Chinatown complexion.

For many generations the Chinese created enclaves—called "Chinatowns"—in most major cities. These urban settlements have always been set apart from

their surrounding neighborhoods because the people and culture of each Chinatown were uniquely distinctive from the rest of the city. The unique culture and point of view of the owners, builders, and users of buildings in Chinatown influenced the configuration of those structures.

In Honolulu, many of the buildings in Chinatown were built as mixed-use structures to fulfill the needs of the Chinese population. The acceptance of a common lifestyle by this specific, homogeneous group of people was reflected in their buildings. Commercial spaces were typically located on the ground floor, with residentially used space placed over these shops. Frequently, a society meeting hall was found on the top floor.

Residential space was commonly in the form of a rooming house, with residents having their own rooms and sharing common











Photos by Robert Chinn Photography

by Jeffrey Y. Nishi, AIA, Architects NKO Inc.

kitchen and bathroom facilities. This living arrangement was directly influenced by the predominantly single, male population.

The residents of Chinatown used the commercial ground floor areas to do their laundry and shop for food and sundries; and they also worked in these same establishments. In lieu of a private room, the society halls provided a living/social area for many of these dwellers. The lack of air-condition-

ing, and a desire to operate these buildings at minimal cost, were reflected by the use of interior courtyards, skylights, and clerestories.

Changes are rapidly occurring, brought on by socioeconomic evolution and more government regulation. The strong Chinese culture, once dominant in Honolulu's Chinatown, is dissipating. Families have been moving away from Chinatown to the multicultural suburban communities. Other cultural

groups are now living in the area.

Land ownership has changed, introducing a new, more progressive interest in the architecture of the area. Laws now regulate building configuration and use. The automobile is now competing for space, and air-conditioning and electric lights have become more common than operable windows and skylights.

A new prototype building is emerging—commercial space on

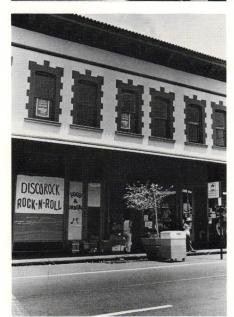


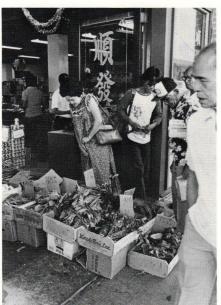










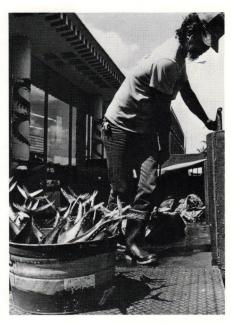




the ground floor, with office space above. Although similar to the old architectural configuration, the rooming house with common bath is now becoming office space with a locked executive washroom.

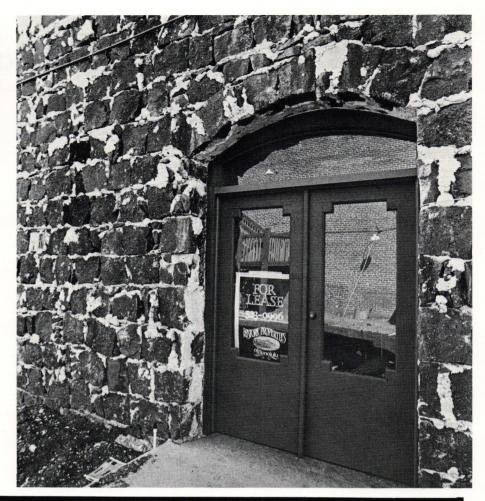
Honolulu's Chinatown has changed and will never be restored to the way it used to be. The elements that once made the area live as the Chinatown District are disappearing. The society that one saw in old Chinatown and more important, the mood and viewpoint of a dominant culture which created the feel of Chinatown, have been diluted by the movement of Chinese out of Chinatown physically and emotionally.

The movement of different cultures into the area as both tenants and landowners contributes further to this change. Laws, building codes, and zoning regulations similar to those found throughout the nation, provide a common basis of design as Anywhere USA. Rising land values are changing the community by imposing new economic pressures, forcing shops to abandon traditional merchandising techniques, or existing lifestyle, for new.





Yes, we are witnessing a complexion change in Chinatown. The change is subtle, but is eating at the very essence of Chinatown, the once-dominant Chinese culture. Let us hope the uniqueness of this area will not be lost to the onslaught of a contemporary style, but rather will mature into an even more colorful and exciting district with many different cultures resolving and interpreting their needs in their own ways.



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The Neutron Gauge— A Useful Tool for Structural Moisture Surveys

by Philip J. Manly and Nick Rinaldi Gamma Corporation

"Our firm has a problem with an historic building that's left us stymied. Somehow water's getting in, causing damage to the interior plaster wall, which is covered by an antique wallpaper. We've tried all the standard solutions to find the water entry point; meanwhile, the damage continues. It's gotten to be an embarrassment."

We all have variations on this lament, for sooner or later we run into situations where methods we presently regard as standard simply don't provide enough information to get the job done. A previous article (Strickland: "A Leaky Building is a No Win Situation," Hawaii Architect, August, 1982) dealt with the magnitude of water intrusion problems we run into in Hawaii.

This article focuses on Gamma Corporation's experience with one of the so-called "second-generation" methods of surveying structural moisture, which we began working with four years ago, not sure at that time where it would lead us.

The principal "second-generation" methods for detecting hidden water in structural materials were

reviewed in the National Bureau of Standards Technical Note 965, and are summarized briefly below:

- 1. Coring: An effective, but invasive, method which certainly would have been unsuitable for determining hidden moisture behind antique wallpaper.
- 2. Infra-red: Not destructive in any way, it depends on the greater heat-retaining ability of water over insulating material. Can only be performed adequately when a difference in temperature exists between the water-soaked insulation and surrounding material, and is subject to interference from any heat-producing source. Since this was an interior wall (vs. a roof), and the building was not heated, the temperature differential required by this method made it unsuitable for our purpose.
- 3. Electroconductive Methods: Semi-invasive, this method requires drilling two small holes beside each data point to insert the probe. Thus, since numerous data points must be taken to determine the water contour patterns, many holes must be drilled and later patched. Not surprisingly, this

method was unacceptable to the client.

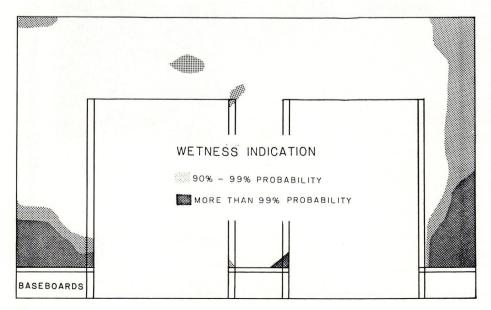
4. Neutron Gauge: Non-invasive, structural moisture surveys using a neutron gauge show few of the interferences of other second-generation methods, if properly conducted. They do require licensing of the radioactive source by the Nuclear Regulatory Commission and a sophisticated statistical analysis of the raw data. For us, as consulting physicists, familiarity with both of these procedures minimized the "humbug factor" which has until now caused all except the more innovative architects to shy away from using this method.

Initially we had reservations about the applicability of the method to this case. After all, this was not the usual built-up flat roof, where the original development work on the neutron gauge had been done. But since we had been able to successfully extend the use of structural moisture surveys to concrete decks, it seemed likely that it would work on plaster walls. The architect—once he had our assurance that no damage would be done to the wallpaper—was also willing to give the method a try.

It required gridding out the wall in one-foot squares, and taking survey readings at each intersection. We ran the raw data-some 167 points—through the computer, using the custom software we had written ourselves over the fouryear development period, to do the analysis. This generated a contour pattern of the moisture in the plaster wall behind the antique wall covering (see Figure 1). No damage was done to wallpaper or plaster, and indeed no one could have told that we had just performed a survey.

The physics behind the use of a neutron gauge for determining structural moisture is fairly straightforward. (See box.) The

Figure 1





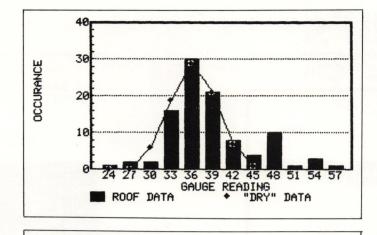
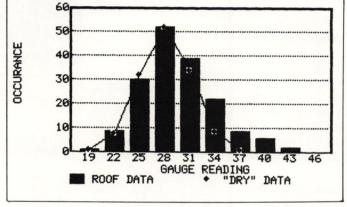


Figure 3



key to proper application of the surveys is in adequate sampling techniques, sufficient data points, and proper statistical analysis. Unless these conditions are met. either too much area will be identified as having entrapped water, or not enough area in which water is located will be identified. Since all structural materials contain hydrogen ions to some extent, a background count is obtained even from functionally dry materials. These counts take the form of a bell-shaped dry curve (see Figure 2). Additional counts resulting from a moderate, but detrimental, amount of entrapped moisture give a different picture, with skewing to the high side. Material with even greater wetness exhibits a second peak, due to the entrapped water (see Figure 3).

Computer analysis of the historic building showed an unexpected pattern. Water contours were located around the baseboards, extending toward the ceiling in the corners of the wall. Small amounts of wetness also were found near the ceiling. These results seemed inconclusive, since they showed water damage in the areas where damage to the plaster was evident. A second survey, performed after a particularly heavy

rain, showed virtually identical results. At first, this was puzzling because the suspected source of intrusion was from a lanai roof just outside the wall. However, when this lanai was eliminated as a possible source—if the water had come from the lanai, the moisture contour pattern should have enlarged—investigation as to the likelihood of a ground-level entry source was begun.

At this point, the architect examined soil studies which had been made previously. Ultimately, he determined that water was not percolating through the ground, but rather flowing along a subsurface clay and penetrating the lava rock foundation. Water then traveled from the foundation into the wall by capillary action. The moisture patterns indicated by the survey were completely consistent with the source of water entry. Had the surveys not been performed. the lanai would still have been the suspect cause, and there would have been no justification for work being done to find another source of water intrusion.

For those of us who have been involved in the surveys of challenging situations, a fascinating aspect has been that it is impossible to identify correctly the source of water intrusion before the survey has been performed, or even after looking at raw data; statistical analysis of the readings is required. Only then has the survey provided the additional information crucial to the identification of the water entry point.

Thus, the neutron gauge moisture survey method, the use of which was begun largely as an intellectual challenge, has been developed into a tool useful to the architect requiring structural moisture surveys.

Physics of a Neutron Gauge

A small radioactive source in the gauge constantly gives off "fast" neutrons. When these fast neutrons collide with much larger atoms, such as those contained in most building materials, the impact doesn't slow the neutrons down very much. They slow down appreciably only in collision with atoms of almost identical mass, such as hydrogen atoms. Water, containing two hydrogen atoms, is thus easily detected by this method.

Fast neutrons are slowed to thermal velocities after only about eight collisions with hydrogen atoms, compared to hundreds of collisions with heavier atoms. It is only the thermalized neutrons which are detected by the detector tubes in the gauge. The electronics in the gauge accurately count the number of thermalized neutrons detected and show the data on a liquid crystal display. The data is recorded for later computer analysis.

Philip J. Manly received his B.S. degree in physics from the Massachusetts Institute of Technology, and a master's degree in health physics (the profession that deals with radiation and its interaction with matter) from Rensselaer Polytechnic Institute. He is president and founder of Gamma Corporation, a consulting company dealing with radiation-related technologies.

Nick Rinaldi received his B.S. degree in health physics from the University of Lowell. After working as the radiation safety officer at the University of Hawaii for four years, he joined Gamma Corporation to develop the technology of structural moisture surveys using the nuclear method.

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Continued from page 11

plaza at the end of the pier. From surrounding inland areas, the maintenance of the 65-foot height limit will preserve views to the water.

3. Create a major public gathering place in this historic waterfront location: The plan proposes the creation of a 1.5-acre waterfront plaza at the end of the pier facing the working waterfront, Sand Island, and the entrance to Honolulu Harbor. This plaza will be a flat, soft-surface green plane only a few feet above pier level that can serve a wide variety of recreational activities, both planned and spontaneous. These could include art shows, concerts, fairs, canoe races, maritime exhibits, and the beginning of the Honolulu Marathon. Like the Piazza San Marco in Venice, it is envisioned as a major humanizing element and place of gathering in the city.

4. Create a strong pedestrian linkage between downtown and the Aloha Tower: The Fort St. Mall will be extended across Nimitz Highway to become a major organizational element of the project, taking advantage of its axial relationship to the tower. Crosswalks will be improved and the Nimitz Highway median widened and landscaped to reduce the psychological barrier of the highway. Pedestrian access to the site from downtown will also be improved by the connection of a bridge crossing over the highway.

5. Eliminate visual and physical barriers to the waterfront and enhance views of the tower and harbor: The removal of the existing podium level and ramp will open

place: Lively, public-oriented uses, including shops and restaurants, are proposed at ground level adjacent to the plaza and the extension of the Fort St. Mall. In addition, provision of pedestrian amenities such as arcades and awnings will help to create an attractive ground-level environment. Gradual grade level changes will be encouraged to promote the flow of activity between indoors and outdoors—a quality exemplified in many Hawaiian buildings.

7. Create a parking strategy which will minimize costs and impact on the waterfront: By reducing the office program from that previously proposed, the number of parking spaces is also substantially decreased. New parking facilities for about 500 cars will be submerged below the hotel and office building, rather than placed in a podium structure. Such a submerged structure can remain above mean higher high water, and be built at costs similar to standard structured parking. This facility will serve both the office and hotel on weekdays and visitors to the plaza, restaurants, and

shops on evenings and week-ends.

8. Improve vehicular access to and from the site: Vehicular access will be improved by a two-way loop circling Irwin Park. Only emergency and maritime vehicles will be permitted access on the pier aprons. Drop-off facilities will be provided for the maritime terminals and an auto court will serve the hotel.

9. Create a project which is financially feasible and attractive to prospective developers: In comparison to previous proposals, public costs have been decreased and the debt coverage ratio increased, making the project more attractive for the sale of revenue bonds. Public funds will be spent primarily in site preparation and providing the highest quality public open space and pedestrian improvement and maritime facilities. In addition, the relationship between the public and private sector has been clarified and made simpler, further increasing the attractiveness of the project and facilitating its eventual implementation.

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up views at the ground level to the water and the Aloha Tower. Maintenance of the 65-foot height limit also will maintain views from adjoining inland areas.

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New Members



by Nancy Peacock

Greg Bayless, an Associate member, works in the Maui office of Architects Hawaii. He received his B.A. from Brigham Young in Provo. Utah. His hobbies include photography, international cuisine, and tropical plants.

Dian Cleve, a partner with Detweiler/Architects/Associates, is a new Associate member. She has lived in Hawaii ten years, and received her B.Arch. from the University of Hawaii in 1979. Originally from Texas, she has traveled extensively and lived in England and the Philippines. She is an avid











from Damien High School before attending the University of Notre Dame, where he received his B.A. in architecture in 1977. He enjoys automotive mechanics, "hot rodding," and photography, and is a member of the Ala Moana Jaycees. He also participates in the Architects-Engineers softball and basketball leagues.

John Nishiki, an Associate member, received his B.F.A. in environmental design from the University of Hawaii in 1977. A Hono-Iulan, he attended McKinley High School. Some of his many hobbies







are weight training, racquetball, and golf.

Keith Tamura, Associate member, has two professional degrees. After graduating from Punahou, he attended UC Berkeley, where he received a degree in mechanical engineering in 1972, and he graduated this May from the University of Hawaii with a B.Arch. He also taught English in Japan for three years. His hobbies include Nautilus and aerobic exercise, and building sand castles.

Stephanie Yamada, a student member, expects to receive her B.Arch. from the University of Hawaii in 1985. (She received her B.A. there in 1978.) She works part-time in the custom decorating department at J.C. Penney. Her hobbies include playing the piano, flower arranging, and hiking. HA

sailor and a member of the Symphony Society and Friends of the Ballet.

Guy John Jennings, Associate member, is an employee at Jack McGarrity AIA/Associates, Ltd. Born in the Philippines, and raised in Honolulu, he attended Kalani High School. He and wife Mary Gaye have a two-year-old son, Justin Whitney, and are expecting another child in September. He is designing his own home, to be built in Kailua Bay Estates. He attended San Diego State and received his B.F.A. in Architecture in 1973 from the University of Hawaii. His hobbies include canoe paddling, volleyball, and crystal collecting.

Wendell Lum, AIA, is employed at LMLI Architects/Planners, Inc. Born in Honolulu, he graduated

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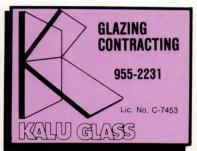
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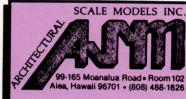
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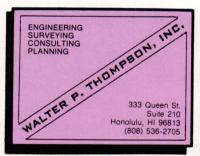
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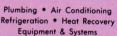






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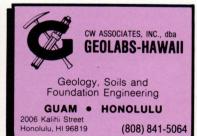
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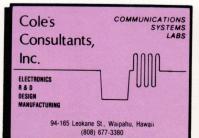
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