hawaii architect

june, 1973

the journal of the hawaii chapter, american institute of architects

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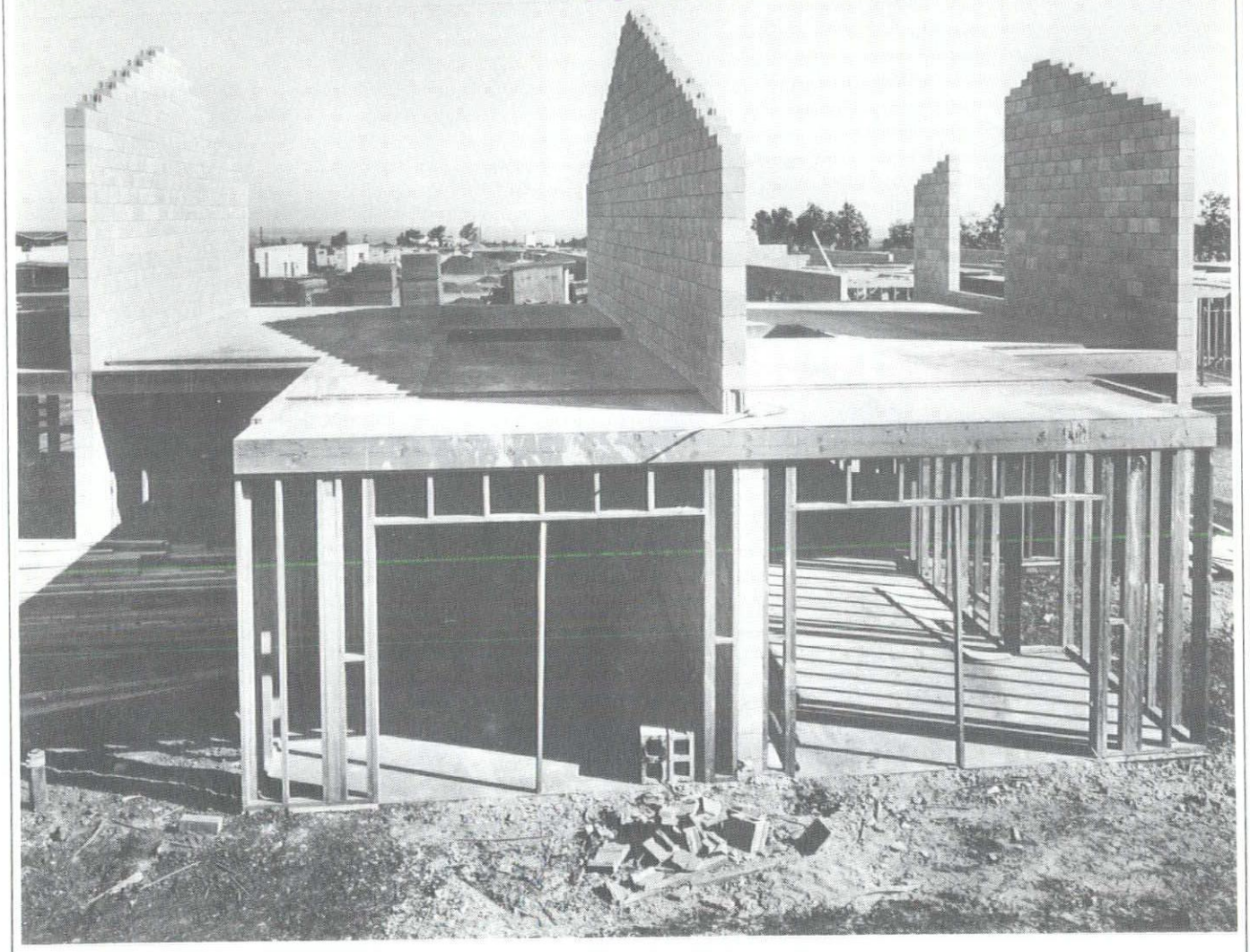

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President's Page:

The Convention

by Ty Sutton

The largest convention ever held by AIA (with over 5,000 participants), San Francisco attracted architects not only for the convention, but to see the city as well. Host Chapter events took place in the Oakland and Berkeley Museums, Jackson Square, and on the Bay itself. The McGraw Hill-Dodge party was held in a new version of the Icehouse/Cannery/Ghirardelli Square, with entertainment ranging from jugglers, dancers, and rock groups, to Turk Murphy.

For the serious conventioneers, a great array of products were exhibited by the major building materials suppliers and continuous seminars, films, and demonstrations were running on such subjects as Masterspec, transportation (including tours of BART), National Growth Policy, environmental education, housing policy, value engineering, OSHA, computerized financial management, and many others.

Members were staying at the Mark Hopkins, Fairmont, Hyatt House on Union Square, and a variety of other hotels. Shuttle buses ran continuously to the Civic Center Convention Center and to all events. Long lines and crowds were most apparent at lunch time and in busy restaurants as few people other than the architects appeared to be visiting San Francisco, but the whole show moved with amazing efficiency.

The fine program, conducted by President Scott Ferebee with Bill Slayton and the Institute staff, included as speakers Dr. Dudley Kirk, professor of population studies at Stanford; Dr. Phillip M. Hauser, professor of sociology at Chicago; Dr. Glenn Scaborg, professor of chemistry at Berkeley; Paul Ylvisaker and many others. Student programs and meetings of the Association of Architectural Secretaries were held concurrently.

New officers elected were William (Chick) Marshall, Jr., 1st vice president (president for 1975); vice presidents Van Bruner of New Jersey, Jack McGinty of Texas, and Louis Lundgren of Minnesota.

Other business of the convention included passage of a bylaws change to equalize payment of supplementary dues by partnerships as well as corporations. The Institute board has also acted to reduce the supplemental dues from 5 per cent to 4 per cent of FICA (or self-employment) tax and fixed it at that level pending further study of the dues structure during this year.

Another bylaws change passed revises our judicial procedures, based on the belief of the board that our ethical system does not work as well as it should. An average of only 10 cases per year are instituted. It was felt that the procedures can be simplified so that violations and complaints can be processed more effectively. The full text of the change will be available in the AIA office.

Resolutions passed include one on the status of women in the architectural profession. It urged that effort be expanded to encourage women in architecture. The resolution was passed only after a lengthy argument on the floor on whether or not it is really necessary. It was passed 900 to 600(±) on a roll call vote. The resolution included the proposal that the Institute conduct a study on the status of women in the profession, considering how to affirm that the profession is entirely open to women, how to encourage women to become architects, how to involve more women in AIA activities, and elimination of "sexist" wording in all AIA documents. The last item caused comment that the general conditions may be more interesting reading than we had previously thought.

A resolution to require mail balloting for national offices was defeated.

A resolution was passed directing the board to formulate a National Task Force on Energy Conservation which will report to the 1974 convention.

Another resolution passed was that AIA components located in the vicinity of architectural schools should establish

Continued on page 6

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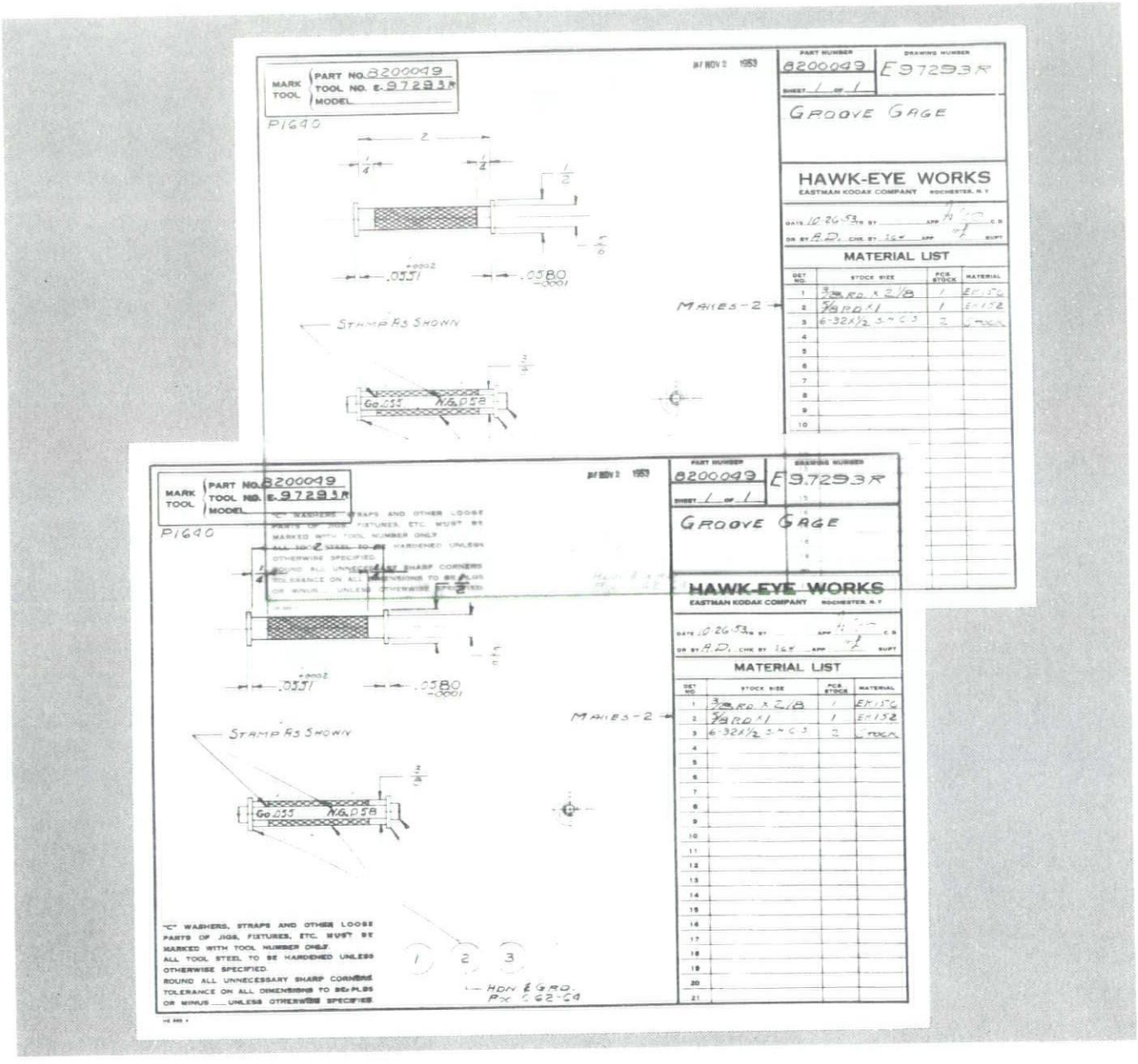

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The Future of the Pacific: Treasure or Trash Can

By HIDETOSHI KATO, Futurist, East-West Center, Kyoto University

(A condensation of a speech given to the Hawaii Section National AIA Convention, May 1973. Full text of Mr. Kato's speech is available from the AIA Office. Condensed by Gerald Allison, FAIA.)

I. SPACE

The major concern of architects and planners is the design of space. Space design in each case can differ greatly depending on the size, quality, and the desired nature of the space. These professionals are the people who create through their imagination, the appropriate space designs. The basic qualification of this profession is the capability to understand the size and distinguishing quality of each individual space and grasp the potential images of various spaces. A "space of reference" is the "canvas" on which the architect and planner works. An important development of our age is the geometric expansion of this "space of reference." In terms of both budget and physical extension the scale of present development could not be imagined a few decades ago. We are in the age of big projects with "new towns" a reality, and the talk of creating even greater units, such as the "megalopolis," is now considered a possibility.

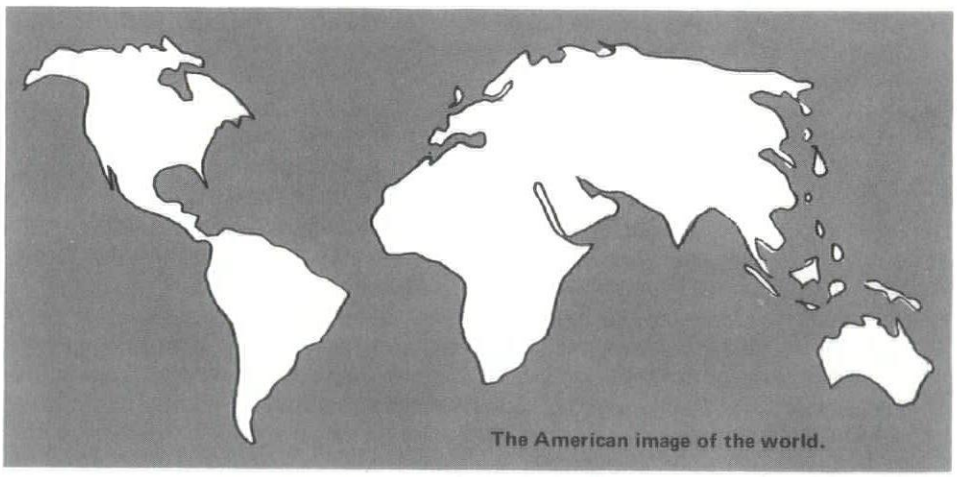
With this new context of space so fundamentally different, many architects and planners are more or less uneasy. Both success and failure have resulted in meeting the challenge of the many complex variables in this larger "space of reference." The experience under Prime Minister Kakuei Tanaka, a professional architect himself, is a good illustration. His grand plan known as "Remodeling the Japanese Islands" has come to an unsuccessful ending. His idea of dispersing the population from large urban centers, such as Tokyo and Osaka, proved unrealistic when huge amounts of speculation money immediately started flowing into the areas designated for new development, causing land prices to rise so high that public investment became impossible. The paradox of a "self-desttructive prophecy" results when the realization of the planning becomes impossible precisely because of the fact of planning.

Because of the new and increased difficulties encountered in the expansion of the "space of reference," it seems that the planning of the Pacific and Asia is almost desperately impossible. This extraordinarily vast area, 500 times greater than Japan, is surrounded by more than 300 countries with numerous islands lying within its 480 million square kilometers. Are there many planners who are brave enough to meet the challenge of this fantastic "region"? Because technological advances in transportation and communication have made it capable of bringing thousands of islands together to establish the consciousness required for a "Pacific community" we have been able to conceptualize the Pacific-Asia area as a new "region." However, optimism should not allow us to overestimate our abilities in meeting the challenge of planning the "Pacific community." The mere term itself sounds very beautiful but the achievement of the actual duty will require great efforts. Most of us are not competent enough to control the "space of reference" of a nation state, much less the extraordinarily great geographical size of the "Pacific community."

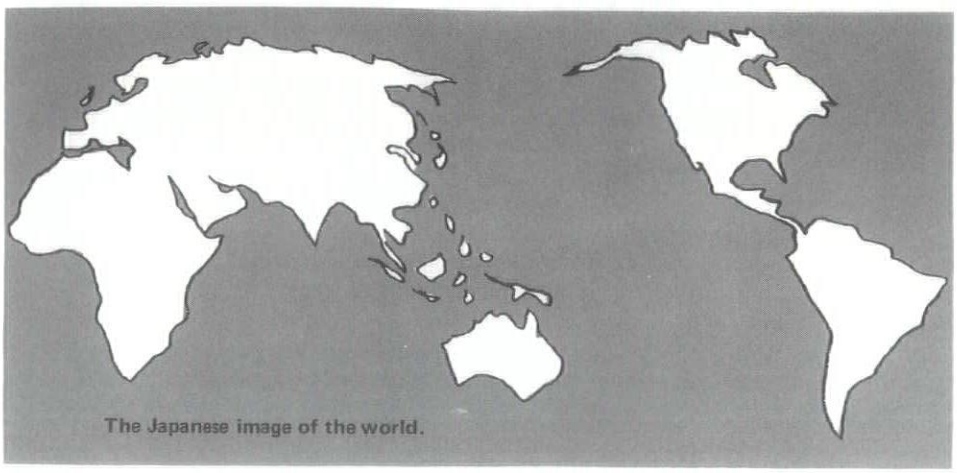
II. TIME

We must frankly face that our present knowledge of the Pacific region is

Continued on page 15



The American image of the world.



The Japanese image of the world.

The Convention

Continued from Page 3

advisory groups to provide counsel, resources, and continuing impetus to the school's faculties, students, and curricula, and that practicing architects recognize their responsibility to provide opportunities for practical office experience and education for students in work-study programs.

For more complete reporting of the convention and business sessions, I suggest you read the Institute mailers on the subject.

Reconvened Convention, Honolulu

Approximately 80 members of the Institute reconvened in Honolulu on Saturday, May 12th. The program planned by Gerry Allison was an excellent one on the subject of planning and growth in the Pacific. Speakers and panel included:

Frank Skrivanek, State planning coordinator; Ed Innskeep, planner, Belt, Collins; Wesley H. Hillendahl, economist, vice president and director of business research, Bank of Hawaii; Fred W. Riggs, director, Social Science Research Institute, University of Hawaii; Hidetoshi Kato, futurist, East-West Center. Text of their talks for those of you who did not participate can be seen in the AIA office.

The luncheon speaker was Eddie Tangen, State Land Use Commission chairman, who gave a good account of the way land use control works in Hawaii. Our visitors were impressed with the program and then went on to enjoy a great luau, planned by our convention committee.

For those of you who missed both San Francisco and the reconvened convention in Honolulu, you are missing a great opportunity to participate in the special educational and social events of your profession. Involvement in the Institute program can be very rewarding.

A special note of appreciation to those members who did the planning and preparation for the reconvened convention, including Ernest Hara and Red Phillips, Convention co-chairmen; Gerald Allison, program chairman; Geoffrey Peterson, Owen Chock, members; George Kekoolani and Greg Goetz, whose Kamehamehans put on a great show for the luau – and to Peg Gum for coordinating all the loose ends and getting it all together.

Letters from the AIA

To the Executive Committee:

On Monday, May 14th, Archibald Rogers, myself, and members of our Environmental Legislation Task Force, Don Dumlao, Gus Ishihara and Ned Weiderholt, met with the temporary commission to discuss the National Growth Policy Statement.

Arch Rogers presented the second paper, which is still under study. Copies were given informally to the Commission, since this has not yet been adopted by AIA. Arch described the AIA studies on growth policies and basic recommendations which are being made for implementation throughout the country.

The Commission was very receptive to the ideas presented and asked that they might use the paper in formulating their own outline of objectives.

CHARLES R. SUTTON, AIA
President

Dear Mayor Fasi:

We appreciate very much the opportunity to discuss with you the issue of campaign reform and limitations on campaign spending. Since our meeting with you on Monday, our Government Relations Committee, standing Committee Chairmen, and Executive Committee have met to discuss the proposed Resolution. While we strongly support limitations on spending and public disclosure of gifts we do not feel that the language of Section 14 of the Resolution, which limits a certain business group to **no** participation thus seriously infringing upon their right to honestly support a candidate for office, adequately resolves the question of campaign reform.

We believe that effective reform should open up to public view the source of all major gifts to campaigns, and further to place limits on campaign spending. We have discussed such limits here, such as a top limit in the amount below the limit of accountability in the statute, and feel that this may be a preferable solution to the strict prohibition stated in the Resolution.

CHARLES R. SUTTON, AIA
President

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Architects and the Building Industry

by Leigh Marshall

Leigh Marshall, the author, received the 1973 Masters Award for this thesis. He also receives, upon graduation, the Henry Adams Medal from the American Institute of Architects as the outstanding graduating professional student. His thesis committee consisted of the following: Hugh Burgess, AIA, chairman; Frank Haines, FAIA; Edward Laitila, Ph.D.; Jack Mathews.

Growth of the new-construction industry has been below the United States Gross National Product in the past decades, and predictions reveal no major change in this through to the year 2000. Increased output of the industry in the past has mainly resulted from an increase in the number of construction establishments. Diseconomies of scale have presented the formation of large companies, and this, along with such factors as labor unionization, dispersion of the management function, separation of design from construction, archaic building laws, and the lack of research and development, means that the industry continues to suffer from inefficiencies, fragmentation and insufficient growth.

It is seen that the present industry structure may not be capable of producing a better environment, demanded by all as standards of living increase further, and as human concern concentrates even more on the quality of life. Studies have revealed, however, that in the future the construction industry may take on a more conventional-industry structure. The main impacts will be from science and technology, management and methods of operation, additional market growth, and the entry of organizations from outside the traditional building industry.

These changes will have an important and severe influence on the architectual profession. For the architect can be considered as part of the industry's problems – maintaining the design function separate from construction with the resultant lack of overall management control, and lack of cooperation with building contractors in research and development. For these reasons the architect is unable to attain even a small part of his often-stated goal of creating the total human environment, and of being the innovative leader of the building industry. The problems of the profession caused much discussion during the 1950s, when the Package Dealer, who attempted to coordinate several functions in the building process under central management, was seen as a threat. The fact is that the design-builder is extremely capable at delivering buildings, mainly of the simple, industrial type.

Although the architectural profession is less introspective today, it is still in jeopardy, and the threat this time is the large diverse corporation from another industry, who seeks to expand into the field of environmental services and into the construction industry, bringing with it sophisticated managerial skills and strong financial backing. Such a corporation will ignore past rules; not bound by professional ethics it will regard the enterprise purely as a business venture, and vertically integrate the building process from manufacturer and supplier, to builder. Nonarchitectural companies are already dominating some aspects of environmental design services, and competing with architects, computer based research, management and facilities-planning corporations specializing in systems analysis, born in the space-age. Management consultants, programmers and industrial designers offer other services which can predetermine the architect's own services and opportunities for creativity.

Furthermore, the shape of the environment is being increasingly determined by the businessman, entrepreneur-developer or the investment builder, who typically regard the architect purely as a means to an end, and have little regard for the "whole end" – a good investment and good architecture and a pleasant environment.

Many problems face the architect if he attempts to become more influential in the creations of the environment. But it is his own characteristics which have caused some of those problems.

First is the traditional role he plays, largely determined by concepts of professionalism and ethics. The architect could have no interest in any product or construction company for fear of creating an unethical situation; nor could he have any interest in a project. However, the ethical code is now interpreted more liberally, and architects are developing associations with contractors and others to extend their function beyond design services only. Some are active developers of building projects.

The second problem facing architects is their image. Surveys show that while the status of the profession is high, architects are generally regarded as being expensive, not technically competent, and incapable of respecting the client's budget. Combined with this is the feeling that the architect has no right over any other person to decide matters of taste. The architect himself is guilty of concentrating on design at the expense of time and cost control, and this is reinforced in schools of architecture, and by the presentation of design awards. The volume home-builder is more in contact with the values and desires of the public, but because he has given up this market, the architect is not directly associated with personal environmental problems. Work in this field will increase the popularity of architecture at a basic level.

Two solutions are seen to the problems facing the architect and the profession. The first solution is to educate the public, and after much antagonism towards advertising, the American Institute of Architects has begun a belated publicity campaign to correct some of the images of architects.

The second solution is to either improve the architect or his organization. In view of his past performance, and the challenges of the future, changes in his organization may have the most potential, with widespread benefit both for the architect, his profession, and the building process.

The building process must be regarded as a **system**, complete from start to finish, with each decision affecting all others, and each phase establishing determinants for others. Participants in each phase must have the same ob-

What are the problems of the building industry? How can the needs of environmental design and construction be met? Is an independent practice the only alternative for a practicing architect? These are some of the questions raised in this thesis, entitled "The Role of the Architect in the Building Process," submitted by Leigh Marshall for his master's degree in Architecture.

The facts made clear by the recent case and co-study of practices in this state indicate that architects have much to learn about the organization and management necessary to operate a profitable firm. The middle-size firm seems to be suffering the most. This need for managerial training is stressed in this thesis, and it also describes how some architects might reorganize to become more successful environmental designers. The strategy, both of the profession and of the individual firm, seems to have been neglected.

jective. The process at present is greatly fragmented, however, and objectives in each phase may be different. Relationships must be established between the various participants. Good communication is essential. All relationships are severed as each phase is completed and feedback does not occur. Few clients are so sophisticated as to manage this whole process themselves.

Current emphasis in architectural practice is on the multidisciplinary team, wherein all disciplines necessary to the building process are brought together at the start. The architect is just another member of this team, not the leader, although the prime consultant function is fulfilled by an architectural organization. Some architectural firms have all the necessary disciplines on their staff, others bring them together as consultants. But the client/user and contractor are important members of the team also. The team of the future will include many others.

What is proposed is an organizational structure for the practice of architecture that includes the concept of the building process as a system, the need for the interdisciplinary team, cooperation with the contractor, and the need for a structure to integrate the phases of the building process, to provide strong management, and leadership in marketing environmental services. In this structure, participants in the building process are organized as subsidiaries of a parent corporation.

In effect, this structure is similar to the large, departmentalized and diverse architectural firms existing today, with the difference in the existence of independent divisions or subsidiaries replacing departments. Corporate level and operational level management already exists in the architectural firm of today, as do project managers who operate across the architectural, engineering and construction management departments. In this proposed organizational structure, the firm is decentralized and further divisions added to provide important related services necessary in the creation of the environment. Each subsidiary would have its own executive and operational management, and this would be tightly linked with the executive management of the parent corporation.

Some of the advantages of this form of organization are:

The Parent Corporation has the ability to provide complete services for a building project from initial studies to management in use. To do this it can employ the talents of any or all of the subsidiaries under coordination of a project manager. It may appear as the eventual leader of the building industry.

Each subsidiary is autonomous and can be independently commissioned by clients. This ensures competition with other organizations in the same discipline.

Through experience in working with each other the disciplines will create a synergetic effect leading to efficiency and innovation. Relationships developed in this process will facilitate the feedback of information to the designer, a great problem at present. Roles may merge as the building process becomes an integrated system.

The Parent Corporation can advertise its services, establishing and controlling its image.

The Parent Corporation can engage on Project Development work through full ownership or equity participation. By developing, designing and constructing housing projects of all types, it can increase the effectiveness of architects in personal environment situations.

The Parent Corporation can financially support a Research and Development program to explore new methods of construction, new uses for materials, and new land use concepts, which can be applied in its own projects.

The problems facing an individual architectural firm will depend on its size. It is foreseen that while the small firm may continue to exist, the middle size firm will be taken over by large firms as they grow into a small number of nation-wide "super-firms," probably of the type described above.

The small firm may have difficulty in establishing these integrated working relationships with other disciplines. It could, however, use two approaches.

First, the small architectural firm could establish a subsidiary in a directly related field using its existing staff – e.g., construction management. As growth occurred and the situation required, others could be formed in other disciplines until the full range of integrated services was available.

Alternatively, the small architectural firm could adopt this form of organization through a loose association with firms in the other disciplines, much like doctors in specialist fields form a group practice. The group as a whole could offer integrated services to a client, but each part would be independently owned, with some sharing of overhead, facilities and personnel. Another possibility is the small architect as a specialist consultant to the larger firm.

Another great problem facing the whole profession is whether or not the profession should go on striving to provide leadership to the construction industry and environmental services field, or restrict itself to that activity which architects are actually trained to do – architectural design, meaning aesthetics and function.

The real leader of the future will be the diversified, multidisciplinary corporation, forming large teams and offering total service and central responsibility. It may be quite possible that in such an environmental service corporation the architect does become only an "architectural designer," and that the real "architect role" (as we know it today) is taken over by the organization as a whole and the Project Manager in particular.

The question then arises of who will be the Project Manager – the one who coordinates the work of the analyst, the

Continued on page 11

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Realtor, the financier, the designer, the builder and the property manager? This is almost a purely managerial role, and because of his existing role as a professional and a coordinator of other disciplines, the architect is well suited to it. But such a manager needs a basic understanding of those disciplines he is responsible for, and present architectural education concentrates only on design, technology or planning. Furthermore, the architect will find that he is in competition with those from other disciplines for such a position, and for eventual leadership of the environmental service organization.

Some architects must therefore include in their education courses on management and real estate. This can be done by present students of architecture selecting their electives in a School of Business, preferably during their graduate study. Architects in practice will have to engage on a continuing education program to supplement their on-the-job training. Through either method, these architects must understand basic procedures and terms in accounting, managerial economics, business and construction finance, real estate and urbanland economics, quantitative methods, management and organizational behavior, marketing, and construction management. Some larger architectural firms are now adding staff with business training, or architects with further education in business.

Thus to the present architectural school options of design and technology should be added **architectural management** – dealing with the systems management of the whole building process.

Only with these management skills will the architect achieve a prominent executive position in the environmental services organization of the future, and therefore actually achieve the leadership position that he has been talking about for so long. From there, he can continue to exert his professional values and guide the group in providing the integrated services necessary for the successful improvement of our environment.

It is not intended that this proposed model be a panacea for the problems of architectural practice today, nor that it be ideal, but it is hoped that the reasons for its suggestion have been made clear.

Its success will be measured against conventional organizations in terms of cost, time, quality of design, service to client and society, and the degree to which it allows architects to become more involved in total environmental design.

The Council Downzones: A Step Forward

By Paul Eveloff

The unanimous decision by the Honolulu City Council, on May 15, 1973, to downzone 20 acres of privately owned land at Mokuleia Resorts, Waialua, from A-3 to A-2, effectively reducing allowable building heights from 350 feet to 40 feet, culminated nearly 11 years of repeated attempts by the Waialua Community Association and the residents of the Waialua-Haleiwa areas to protect the rural character of the Waialua District.

City Councilman Toraki Matsumoto, representing the Waialua District, stated the basic rationale for the downzoning: "Waialua retains more of the quiet charm of old Hawaii than most parts of the Island of Oahu." He went on to take note of the great beauty of the Waialua-Haleiwa area and the importance of this region as a scenic and recreational resource for the entire Island of Oahu.

Many interested observers see the unanimous City Council decision as a landmark step towards preserving those areas of Oahu which have not felt the negative impact of high-rise development in beach areas.

In recent years, the residents of Oahu have come to realize that the scenic beauty of this Island and its unspoiled beach areas are sensitive and easily destroyed phenomena. High-rise development has blighted many shorelines, obliterating mauka-makai vistas and blocking remarkably beautiful beachfront views. The best example of this type of development is the high-rise complex erected at the tip of Diamond Head, but other areas of the Island, including Waianae have also experienced the loss of irreplaceable visual assets.

The importance of the visual beauty of Hawaii to the people who live here is more easily agreed to than explained. It is a tangible factor and yet the value of living in beautiful surroundings can only be associated with the quality of life and with an individual Island lifestyle which we all experience and which we all relate to. It is a very real asset to new and old residents alike. High-rise development in beach areas results in a loss to all the residents of this Island and all those who visit here who would have potentially enjoyed experiencing the beauty that is Hawaii, while such development benefits only a few apartment owners and, in particular and to the greatest extent, the developer or promoter of those projects.

Although it was the Waialua Community Association that has for years attempted to insure the continued beauty of the Waialua District, its position has been widely supported in a variety of studies and recommendations. Perhaps the most recent of these was the State Open Space Study, prepared by the Overview Corporation for the last legislative session. Two sections of this study are directly applicable to the circumstances of the recent downzoning decision. The first speaks generally of Hawaii:

> Hawaii should be first and foremost a homeland for its permanent residents: Their environmental needs must be paramount in all decisions about the future. Conversely, the needs of the tourist industry must be adapted to – and not detract from – the indigenous amenities of Hawaii. As long as the Islands remain a life-giving place to live, they will remain a pleasant place to visit.

The Open Space Study went on to identify top priority considerations for future developmental control of specific areas in all the islands. Dealing with Oahu, the study begins:

> Honolulu is essentially an urban environment with Oahu as its region of growth. The dynamics of growth indicate that all open space preservation on Oahu will be by design, as few if any developable areas in the path of this growth would remain open.

With the latter statement as an introduction, the study spoke first of its recommendation for the Waialua District:

> Several areas on Oahu are worthy of special note and elaboration. The first of these is the Waialua-Haleiwa area, consisting of both towns and their surrounding bowl-like region of agricultural lands. This area is a major character producer and special studies should be undertaken before any growth is allowed to occur. Its declaration as a special treatment district is recommended. The preservation of this region is mandatory and its uniqueness on the Island of Oahu is irreplaceable.

The Waialua Community Association, the oldest community group on the Island of Oahu, has been very active in its years of representing the interests of the Waialua District. But, only in the past 15 years or so have the trustees of the Association and the general community at large become alarmed over the threat of high density development in the district. They feel that high density is uncalled for in this rural area, because of the existence of land areas adequate to satisfy community housing needs which are designated in the General Plan for residential uses and which have yet to be developed. In addition, the demand for permanent housing in this area is not so great as to require high density approaches. Resort housing in the area is not a new concept as many of the beachfront residential areas were once almost exclusively summer homes for people who lived and worked in Honolulu, some of whom rode the train around the leeward coast in order to reach their homes. Several more recent low-rise resort and residential projects have been built, and for the most part these have been tastefully done. More recently, a developer planning to build a medium-rise development in Haleiwa Town altered his plans downward to three stories under pressure from a downzoning request by the Waialua Community Association which had widespread community support. Today, the tallest structure in the Waialua District is the Waialua Sugar Company mill, with no other structure rising beyond three stories.

The area is undeniably picturesque and Councilman Matsumoto, who made the formal downzoning request on behalf of the Community, was accurate in his description of the area as characterizing to the furthest extent now

possible, the Hawaii that existed in the earlier part of this century. Residents of the district, working with the Waialua Community Association as their spokesman, are concerned that unrestricted and piecemeal development will irreparably damage the scenic and visual charm of the area. They are not so naive as to think that development will never come to the district, nor are they negative in their approach, condemning all development. In fact, residents often wish that there would come about a development that they could be for; a development that might truly satisfy the low-income housing needs and the employment requirements of the district. At the very least, they feel that they could support a development that was planned with the scenic beauty of the district in mind and thereby added to the charm and character of the district rather than detract from it. Several major land owners, including Bishop Estate and Dillingham Corporation have resort communities planned for the district, and many residents look forward to these developments as a source of jobs and economic benefits for those who reside in this area. But at the same time, many of these same people believe that these major land owners should be working along with the community to preserve the scenic beauty of the area and to improve the recreational facilities in the district. It is to their interest to see to the long term attractiveness of the district, for it is surely this factor alone that will make hotels in this area competitive with those in Waikiki or the Neighbor Islands. Tourists come to see Hawaii the way it is advertised in Mainland magazines, not to see a string of high-rise condominiums blocking beachfront areas. The Waialua District is one remaining rural area on the Island of Oahu which is a nearly honest repre-

Continued on page 14

The Council Downzones

from page 13

sentation of Hawaii's advertising claims.

Beyond the far reaching significance of the downzoning decision based on the protection of Hawaii's aesthetic and scenic resources, perhaps the most important impact of the recent City Council action is on the hopes and expectations of those who reside in the Waialua District. Residents have gained a new confidence in the governmental planning and review process and in their ability as a citizen group to bring their requests to the attention of their elected representatives. Undoubtedly, the recent victory leaves residents more determined than ever to safeguard the great beauty of the Waialua-Haleiwa areas.

After nearly 11 years of communicating with various levels of City government and the Planning Department and receiving little but encouragement to continue community participation, the Waialua Community Association approached their City Councilman Toraki Matsumoto. Councilman Matsumoto supported the interests of the Waialua District residents by introducing the downzoning ordinance and was largely responsible for its passage.

Prior to the final reading of the downzoning ordinance, two developers went to court to obtain building permits which had been withheld by the City Building Department, as a direct result of the pending downzoning decision. These building permits were revoked immediately after the City Council and the Mayor passed the ordinance and the developers have filed suit against the City, claiming damages and the right to build their high-rise projects. The present case will go before the State Courts for a final decision on whether or not these two high-rise developers will be able to build their projects. Residents are hopeful that wise long-term considerations of the visual quality of the district, which is so closely intertwined with the lifestyle of Hawaii's residents, as well as health and sanitation, and the essential priorities and credibility of the planning and zoning process will ultimately be recognized and supported.

Perhaps significantly, this past experience of community people working to bring about changes in the zoning code has taught them other tools that may be used effectively in their long-term attempts to make the district a beautiful place to live and visit and an important recreational area for all of Oahu. First, residents now realize that the most effective source of action is their elected representatives, both on a County and Statewide basis. These people have the legislative authority to bring about a realization of community objectives. Secondly, class action law suits represent a means of obtaining governmental action where conventional methods fail, and residents of the community are willing and ready to go to the courts when this last resort is justified.

People in this area feel strongly that if the effect of developments on roads, schools and fire protection or their supporting facilities, such as those for sewerage treatment, are honestly in doubt as to their acceptability, then such development should not be allowed. Once such facilities or developments are in place, there is little that can be done to correct problems: fines and frequent cesspool pumping do not make the other residents of the neighborhood area feel any better about a dysfunctional sewerage treatment system. The time to deal with such problems is prior to development, and local people in the Waialua District are determined to see that present decisions are not shortsighted.

The Community Association and its members feel that the recent zoning decision may give them an opportunity to work for positive improvements in the district that will be of benefit to those who live and work in the area. They hope to utilize strong communications ties with the planning department and their elected representatives. The Waialua Community Association has had an open door policy to developers who plan activities in the district, and many local residents frequently volunteer their time to meet with developers to provide them with relevant information on their projects. This assistance may help them with information regarding how they might alter their projects to better meet community needs and plans with the related possibility of obtaining strong community support in place of opposition for their projects. With these benefits in mind, the Bishop Estate has, for a number of years, held annual meetings for the community to explain their future plans and to solicit resident responses.

The experience of the Waialua District and the strong attitudes regarding preservation of our scenic natural resources should not be unusual or new to Hawaii. This State derives major economic strength from its scenic natural resources which figure strongly in our quality of life and in the attractiveness of these Islands to visitors. The residents of the Waialua District, along with many other residents of this Island and State would be quick to agree with the arguments set forth by Judge Ronald Jamieson, who, in 1963, made a landmark legal decision in which the City Charter required public officials to adopt an Islandwide General Plan. In his opinion he wrote:

> City Planning is not for the benefit of a few land owners, subdividers, promoters and the like, but for the benefit of all the residents of the City and County of Honolulu; its purpose is to promote good and pleasant living in beautiful surroundings for all the inhabitants of the City and County of Honolulu.

Ten years later, and not altogether too late, many of our elected representatives and the people who live on the Island of Oahu have taken this statement to heart.

KATO from page 5

habited for thousands of years, it was only after the 16th century that it became known to the rest of the world. It wasn't until the 19th century that a fairly accurate map of the Pacific was realized. Oceanic geography of the region began in 1930 and there are still more unknowns than knowns. Despite European curiosity and colonialism in the Pacific, the first practical use was by the Americans in the mid 19th Century. They had found it could compete with, and even beat, the British in Asian markets, especially China through the establishment of Pacific trade routes. Acting on this determination was Commodore Perry when he asked the Japanese government to "open the door." The Commodore was very much interested in Japan as a stepping-stone to China and wanted to be sure of fuel and water for the American merchantships to come. The Japanese government could no longer remain ambiguous in her international policies resulting in the sociopolitcal revolution of Japan in 1868. Thus Commodore Perry was the first person to symbolize the American increase in the Pacific and Asia and at the same time he accelerated social changes in the Asia sector, especially Japan. This past century has made the Pacific the "American Sea" with the introduction of many ships of all kinds plus the first commercial flight between San Francisco and Hong Kong.

As experts in planning, you know the importance of "cooperation" involving many professional people on large projects. Although the chief architect of the Pacific has been the American, the Pacific is such a huge project that no single architect can handle it. America, the pioneering architect, is now in need of associates and partners to create a Pacific with realistic values.

III. THE IMAGE

There seem to be contrasting perceptions of the Pacific between Americans and Asians. America, who inherited the traditions of Western Europe, used to see Asia as eastward rather than westward. Even today, many Americans, especially those who are east of the Mississippi, see Asia as beyond the Atlantic and the "old" continent instead of looking at it as beyond the Rockies and the Pacific.

Asians perceive America to be to the east of the Pacific, which leads us to a very interesting and important mental game, because both the Americans and Asians are looking for each other in the same direction, the "east." These two peoples cannot "meet." They just chase each other around the planet.

Not only the confusion of topological images, but also the mutual socio-cultural images are problematic. The knowledge of an average American about Asia is relatively naive and vice versa. We must admit our mutual ignorance as a basis for changing our confused perceptions.

IV. CODES

The Pacific Region is a vast area with more than two billion people having an interest in it. They are divided into many countries and many sub-groups. There is capitalism and socialism, Buddhism, Islamic, and Christianity,

Continued on page 21

Oahu Marine Mass Transit

Gordon Trimble is a graduate of the University of Hawaii School of Economics and is currently an instructor at Chaminade College.

Dr. John Craven is Dean of University of Hawaii Marine Programs and the co-ordinator of marine projects for the governor.

by Gordon Trimble and John P. Craven

Introduction

In the history of man, it is only recently that land forms of transportation have begun to reduce man's dependence upon the water. Even as late as the 1880's, 75 per cent of the agricultural lands in the United States were within 20 miles of navigable water. "Ribbons of steel," and later, "rivers" of asphalt and concrete brought, first locomotives, then, trucks and automobiles. While these helped to remove the economic constraints which restricted agriculture to areas within short distances of the water's edge, industry, manufacturing, commerce, and population centers are today still located along the land-water interface.

Within a few short decades the ship went from the most comfortable and convenient form of transportation to the least. Technological innovations including the pneumatic tire, shock absorbers and asphalt helped to make land travel more pleasant than the slow, rocking ride of aquavehicles.

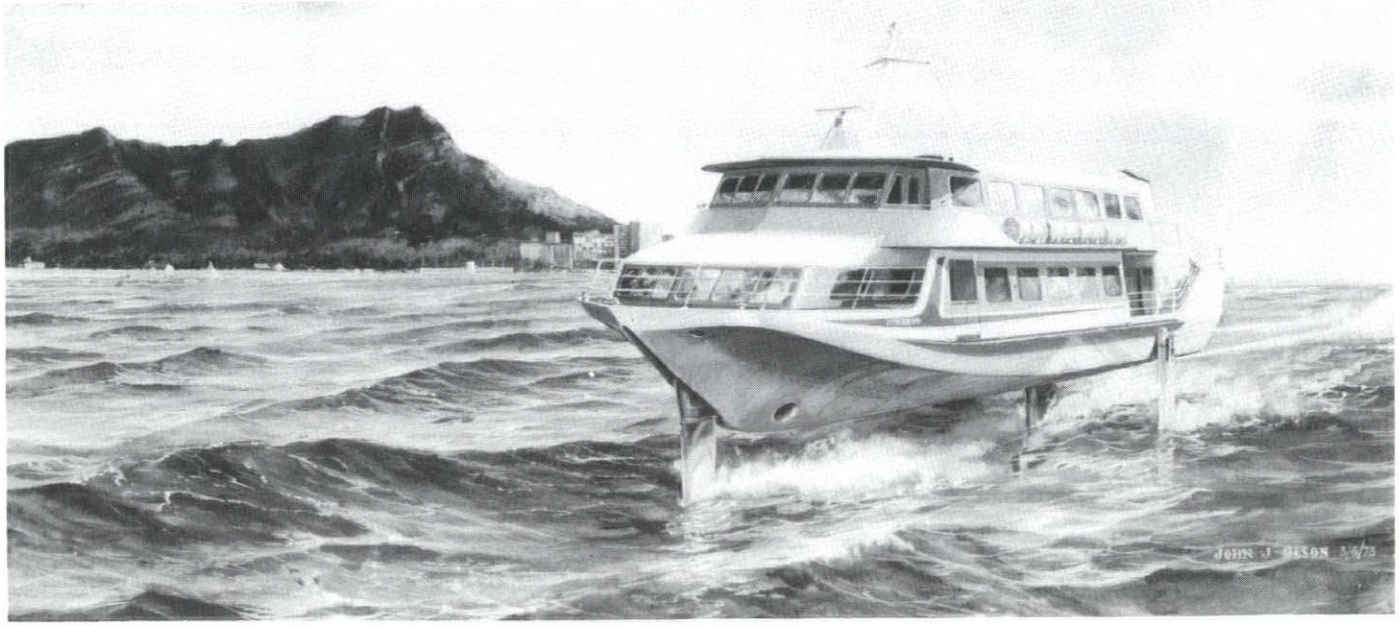
Today the pendulum of technological change seems to be swinging in the direction of marine modes of transportation. Innovations within the last five years have allowed boats to travel not only economically at higher speeds but also without the traditionally characteristic stereo-rolling and pitching which made them undesirable to many as a form of transportation. These innovations make possible a mass transit system which takes cognizance of the Islands' unique beauty and topography. Such a marine system will also be an instrument of change that will help to produce the type of living environment which we want for Hawaii's future generations.

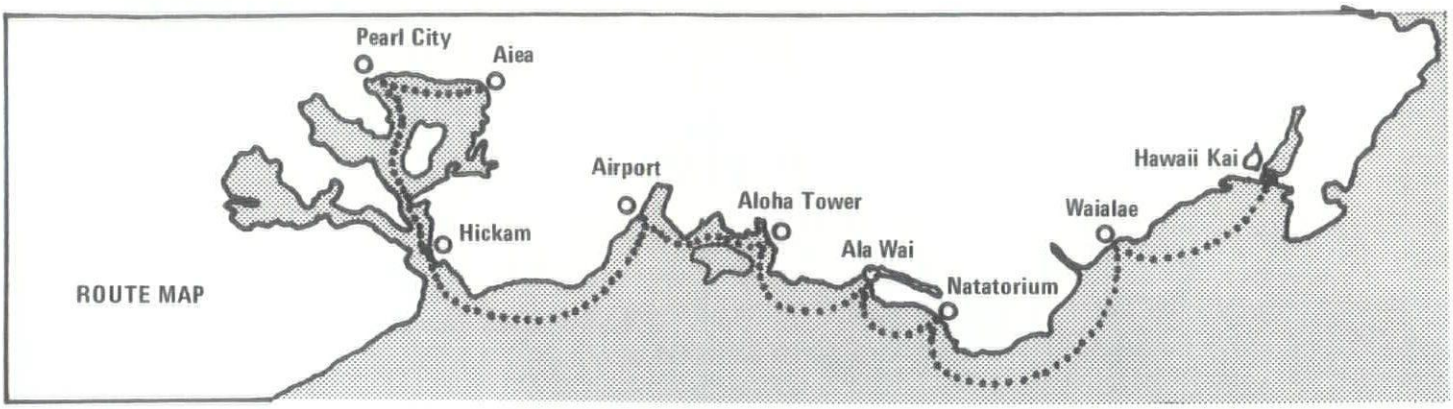
The purpose of this article is to sketch the general layout of a proposed Honolulu Marine Mass Transit System. This system is being proposed because it is far less costly than a land-based system in terms of both direct and secondary costs, and it can be implemented much more readily. A growing sector supports the marine system because its land use implications are preferable to those of alternative systems. These people have begun to view the marine system as a mode which will help channel the future pattern of development of the Islands into one that is uniquely Hawaiian.

Second Generation Hydrofoils

While man is no longer constrained to working and living within the confines of water transportation, several recent developments in marine technology have significantly enhanced the ability of waterborne systems to compete with land-based systems. The hydrofoil is perhaps the most significant development in marine hull design since the Polynesian outrigger canoe. While the speed of conventional marine craft is limited by the boat's ability to push itself through the water, the hull of the hydrofoil rides on or above the top of the water. The hydrofoil can thus travel at much higher speeds at lower fuel consumption rates than conventional craft.

The ride characteristics of the first hydrofoils were comparable to modern land vehicles only when traveling across glassy waters. Now, with the second-generation hydrofoils, the foils are electronically controlled so that they auto-





matically adjust to the height and length of the wave. These modern craft can travel at speeds of over 50 miles per hour while the hull of the craft remains remarkably unaffected by the turbulence of the surrounding waters.

Of the 29 countries around the world that are presently using hydrofoils, Russia makes the most extensive use with over 1,000 in operation. These vessels are of the first generation variety, and their use is restricted to canals, lakes, and relatively calm waters.

While Russia is currently manufacturing second generation hydrofoils, the Jones Act requires that any vessel which carries goods or people between two ports of the United States must be of United States construction and flag. The only company within the United States which is currently manufacturing hydrofoils of the type and design necessary for Hawaiian waters is the Boeing Co.

Hawaiian Marine Mass Transit

Marine Mass Transit is the name used to distinguish an integrated transportation system which uses boats from alternate proposals which do not. The marine system proposes to use various marine craft only in those situations where boats can more effectively and comfortably carry goods and people than can an alternative land mode.

The population of Oahu is distributed primarily within a narrow strip running along the coasts, with suburban communities extending up the valleys and ridges from the coastal plain.

The problem of trying to determine the most suitable site of a mass transit system is in many respects similar to one of trying to determine the optimal placement of an elevator shaft in a giant high-rise.

The optimal location of this elevator shaft may depend upon when the decision is made to have the elevator. If somehow the building has already been constructed and is being used, then it may be preferable to affix the elevator to the side of the building instead of tearing up the center portion to make room for the elevator shaft. Similarly putting a mass transit system through the center of downtown Honolulu will seriously interrupt the normal flow of goods and people.

One wonders, just as elevators were affixed to the exterior of buildings whose construction preceded the introduction of the elevator, why the ocean wasn't considered as an alternative in designing a transit system for Honolulu.

The most apparent response is that the initial planning of the fixed guideway system preceded the knowledge of technological innovations which allowed the hydrofoil to compete with other mass transit schemes. Indeed, the cost figure of $700 million for the fixed guideway system was made in 1967, two years before the introduction of the second generation of hydrofoils.

The success of the marine system, as with the fixed guideway system, is dependent upon a fully integrated bus and automobile system. While the marine is far more flexible than any other system, it is generally limited to areas that fall within the 10-foot contour line, as shown below. This line indicates that land area which is ten feet above low-mean tide. Except in the

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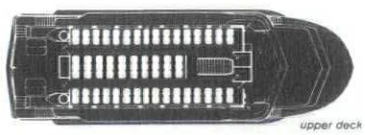
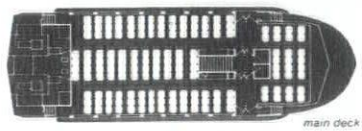
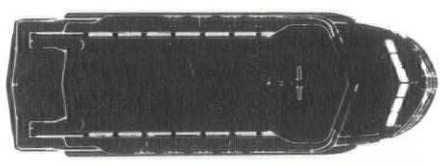
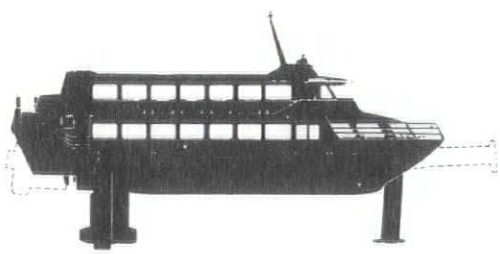








Design cruise velocity (in 12-ft waves)	45 knots
Displacement	106 long tons
Overall length	90 feet (27.4 meters)
Maximum beam	31 feet (9.5 meters)
Mean hullborne draft	
Foils down	16.3 feet (5 meters)
Foils up	4.8 feet (1.5 meters)
Propulsion	Gas turbines—waterjet
Capacity	From 190 passengers with baggage to 250 commuter passengers

Continued from page 17

Diamond Head area, this generally falls on the mauka side of the H-1 freeway. Beyond this line dredging costs increase rapidly.

The marine system utilizes three distinct types of craft in serving inland and coastal areas from Hawaii-Kai to Pearl Harbor. Express hydrofoils cruising at speeds greater than 50 miles an hour could connect Hawaii-Kai, Waialae Park (Kahala), the Natatorium, Ala Wai Harbor, the Aloha Tower, the airport, and Pearl City. Locals will ply the same general routes as the express craft, stopping at intermediate terminals along the way. Shuttle craft will connect local and express terminals with inland areas via existing canals and stream beds. As previously mentioned, the 10-foot contour line determines the length of the stream which can be utilized for mass transit. This distance varies from .4 miles with the Manoa stream (mauka side of the H-1 freeway) to 1.5 miles with the Moanalua stream.

At present, the estimated cost of the marine subsystem is $181.5 million. The cost breakdown is as follows:

Dredging	$25,500,000
Lining	35,000,000
Bridges	20,000,000
Terminals	20,000,000
Vessels & Spares	76,000,000
Support Facilities	5,000,000
Total	$181,500,000

Evaluation of Alternate Systems

The most important considerations in evaluating the alternative transportation systems are: rider acceptability, the cost, the time required to implement the system, the interference of the implementation phase on the normal flow of goods and people, the ability of the system to adapt to changing conditions, and the long term impact of the transit system on the pattern of land use and development. The final decision as to whether the fixed guideway system or the marine transit system is chosen will depend upon what the people of Hawaii want Oahu to look like in the years to come, and the extent to which they can make their feelings known.

The 1967 cost estimate of the fixed guideway system was $700 million. The 1973 cost of the proposed marine system is less than $200 million.

The marine transit system has greater flexibility than its proposed alternatives.

It is flexible in the sense that the State is not committed to the system even while it is in operation. The hydrofoils which constitute the single major expense of the system can be sold at about or slightly above the purchase price. Hawaii would not be locked in – having spent so much money in the beginning that it feels that it must continue supporting the system regardless of the cost.

For a sum of money less than that which is currently being spent for the planning of Honolulu's mass transit, the essential components of the marine system can be tested for rider acceptability. Only when rider acceptance has been shown do we suggest that the marine transit system, or any other system, be fully implemented.

Schedules, frequency, and destinations can be changed to accommodate the needs and wants of the people of Honolulu instead of trying to force them to fit their schedule and habits to that of the transit system. During off hour weekdays, hydrofoils can service the Neighbor Islands and ply the tourist trade. Evening events, such as trips to Halawa Stadium, can be easily accommodated. On weekends, the boats can service the various beaches around Oahu and travel to the Neighbor Islands.

Classically a good mass transit system has a high-speed spine and a number of subsidiary local loops or feeder routes. A central question is whether the ocean is not as good or better a high-speed spine than any other line drawn parallel to the coast. The fixed guideway is not exactly centered and is about as much mauka of the total city as the ocean is makai. It is not therefore automatically superior. Indeed, it does not directly serve Waikiki or the major Pearl Harbor facilities, even as the ocean does not serve Kaimuki.

The construction of a fixed guideway system in downtown Honolulu will seriously impede the normal flow of goods and people for a considerable length of time. Concomitant noise and dust will make the conduct of normal business activities practically impossible. The marine system, however, does not necessitate the tearing up of major portions of Honolulu or the limiting of access to Hawaii-Kai. Construction of the marine system is limited to the dredging of drainage canals, raising of bridges, and the building of terminals.

The length of time required to implement the marine system is considerably shorter than that of alternate systems. It is limited primarily by the time

Continued on page 20

required to obtain the necessary craft. For these reasons, the marine system has been suggested as a supplemental system to serve the people of Honolulu during the construction phase of the fixed-guideway system.

Land Use Implications

Since the beginnings of man, modes of transportation and transportation systems have been instrumental in shaping society, including its physical characteristics. The rapid expansion of suburban America, for example, followed the conclusion of World War II. The private automobile and accumulated private savings together with the government's commitment to build roads made it possible for many to escape the dreary life of the inner city. The subsequent decline of public means of conveyance and the further deterioration of life in the inner city is well documented.

Hawaii's limited land area makes it inadvisable for the State to continue its ad hoc and permissive policy of accommodating an ever-increasing number of private automobiles. We are not ready to continue a policy which will eventually lead to the rezoning of suburban Oahu. And yet, in our search for an alternative we seem bent on recreating the very misery the Mainland tried so hard to escape following World War II. Mass transit, particularly fixed rail and guideway systems, serves densely populated areas. They, in turn, tend to breed even higher population centers.

Construction of a fixed guideway system in Honolulu will, for a while, alleviate much of the visible congestion and pollution. This system, however, will tend to lead to the development of a solid corridor of people some 22 miles long, 3,000 feet wide, and some 500 feet tall. Future generations may refer to this corridor as the Great Wall of Honolulu. With its construction, the charm that was once ours will have vanished in columns of concrete, steel, and glass. Honolulu will be indistinguishable from any Mainland city. Years from now, people may wonder what possessed those who referred to Hawaii as the "Paradise of the Pacific."

Marine mass transit has land use implications far different from those of the automobile, bus, or fixed guideway transportation systems. While the majority of the advocates of marine transit prefers its lower costs, the non-disruptive nature of its construction, and its shorter implementation time, a growing number of people prefer it because they view it as a mechanism which will help develop the type of society and community they would like to see in Oahu and Hawaii.

Much of the Island of Oahu can be characterized as a series of distinct valleys, some one-half mile wide and three miles long, opening onto a narrow coastal plain.

It is these valleys which could become basic planning units. From the old Hawaiians we can borrow the idea of the ahu puaa – a contiguous land area which contained all that was deemed necessary to sustain life and livelihood. With proper planning and appropriate incentives these valleys of Oahu can become a series of modern ahu puaas. Each ahu puaa or community while having the necessary access to every other will have enough seclusion to form a separate and unique identity of its own.

High density living units will be located along the perimeter of the valley at the base of the cliffs. Thus one man's quest for a view will not destroy that of his neighbors and from every lanai there will be an open expanse from the mountains to the ocean.

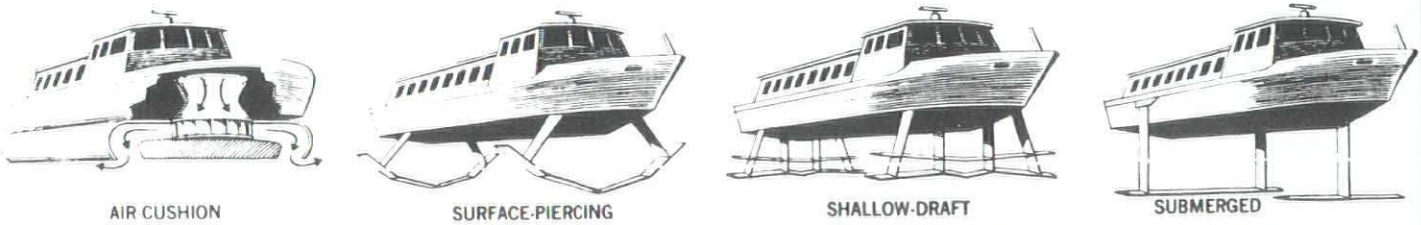
A natural linear park will stretch along the stream from the upper reaches of the valley to its mouth. From the residential high-rises at the base of the cliffs to the park-shrouded stream would be a five to ten-minute walk. Between these two would be other low density functions such as schools, churches and golf courses.

While some stores will be located within the high-rise residential buildings, most of the commercial and service establishments are contained in the shopping center located along the stream at the mouth of the valley. This shopping center will also serve as a terminal for the marine transit system and a transfer point to the land-based transit system which makes the loop of the valley connecting schools, high-rises and the shopping center.

The marine transit system will connect to other places of employment and universities located in adjacent ahu puaas. The marine system will also carry goods from the commercial harbor to the shopping centers in the ahu puaas.

Each ahu puaa, while having the necessary access to every other, will thus be free to establish and maintain its identity as a living, working, recreating unit.

Many will challenge this concept as a pipe dream. Indeed the custom of our society is to conduct economic and cost-effective studies to justify initial prejudices, and to reject alternatives not previously considered. On occasion, as in the case of marine mass transit, the planners will discover the rude shock that the out-of-hand rejected alternative will survive the cost study. It is submitted that the ahu puaa concept outline here will also survive any fair cost study which takes into account all of the true costs of a modern society.



How air-cushion concept differs from hydrofoils

Air-cushion vehicle actually floats above land or water on air pumped down from above, dribbling out the sides. Surface-piercing and shallow-draft foils are for smooth water. Deep, submerged foils in rough seas need automatic controls.

KATO continued from 15

"mongoloids" and "caucasoids," and a kaleidoscope of human histories and cultures. Despite such diversities the seemingly unattainable goal, a "Pacific community," should be attained. Two most important problems confront us today. First is the two rather clearly distinguishable groups of nations among the potential members of the "Pacific community." The highly developed countries of U.S., Canada, Australia, and Japan comprise one group while the many undeveloped countries of the area make up the other. Coordination and cooperation between these two groups of countries is the most urgent challenge. Historically, the relationship has been neither profitable nor constructive and the situation is getting worse. The flow of commodities and aid from the developed to the undeveloped group has not always been in the best interest of the latter. We have sent huge farming machinery to a country where a better irrigation system was really needed, and English or Japanese teachers to an area where they really required good schools to teach their own language.

We have patronized the people of developing countries on a one-way basis, ignoring the opportunity for a mutual exchange of ideas. The result is neo-colonialism resulting in a lack of co-ordination of cooperation between countries of the Pacific.

The second important problem is the fact that more than 90% of the surface of the Pacific does not belong to anyone. It is "high sea" beyond the control of any national power, giving both anxiety and hope for the future. This vast ocean affords us an almost infinite amount of natural resources if controlled. However, overfishing, nuclear experimentation, waste-dumping, and similar mismanagement can soon destroy this potential. It now seems the Pacific is destined to become a giant wastebasket for the world. The major task for planners of the Pacific is to look for a realistic approach to another alternative. The mission in the Pacific is the creation of a viable "Pacific community" for the two billion people most directly involved as well as for the whole of mankind. With more reflection, insight, friendship, and imagination we can keep the Pacific as peaceful as Magellan found it and as the Polynesian people have enjoyed it for centuries. We must do this – and all of us who love it must participate in its realization.

What Everyone Should Know About:

Temporary Commission for Environmental Planning

By DON DUMLAO

First – What is it?

It is a commission appointed by Governor Burns, at the recommendation of the State Environmental Council with the concurrence of both the State Senate & House of Representatives to develop a "Comprehensive State Environmental Policy" aimed at guiding the future growth of Hawaii.

Second – Why is it temporary?

To insure that policy recommendations would be made by November 1, 1973 in time for legislative action in 1974.

Third – Why can this commission succeed where others have failed?

Apart from the fact that the problem has become more acute, concern and interest is greater, the legislature is seeking growth direction.

As a member of the Environmental Council which created this Commission, and as its first critic, I feel it is very important that everyone understand the importance of this Commission and its potential. It can, as many cynics would suggest, produce nothing and become a useless effort like many well intentioned Commissions which preceded it; or it can be a major step for Hawaii getting a hand in solving its chaotic growth pattern by establishing the nation's first Statewide Environmental Growth Policy and hopefully a strategy for implementation. Although the Hawaii Chapter AIA does not have direct official presentation on the Commission, it was influential in having an honorary associate member, Aaron Levine, president of the Oahu Development Conference be an honorary associate member of the Commission and Paul Ylvisaker, professional advisor for the AIA's National Growth Policy considered as consultant to the Commission. This in itself provides a good start; what is needed now is everyone's honest effort and support, together with a commitment from the Hawaii Chapter AIA to see that its concerns and thoughts are submitted for the Commission's consideration.

Seminar Planned

An educational seminar on qualified Retirement Plans for the Construction Industry has been scheduled on Thursday, June 28, at the Ala Moana Hotel's Hibiscus Ballroom. Coordinated by Victor R. Keahiolalo & Associates, Inc., the seminar is designed to educate the management of small to medium-size corporations in the benefits available through the use of a qualified retirement plan approved by the Internal Revenue Service.

The topics to be covered include: 1) The Financial Security of Pension Plans; 2) The Attractiveness of Pension Plans for Employees; 3) The Tax Benefits Granted by the Government; 4) The Various Funding Methods; 5) Two approaches in Designing Pension Plans; 6) Designing a Superior Non-Bargaining Employees' Retirement Plan for Union Shops.

The cost for the luncheon, seminar, and pension materials, including an informative booklet, is $5. For further information and reservations, call Victor R. Keahiolalo & Associates, Inc., 531-8108.

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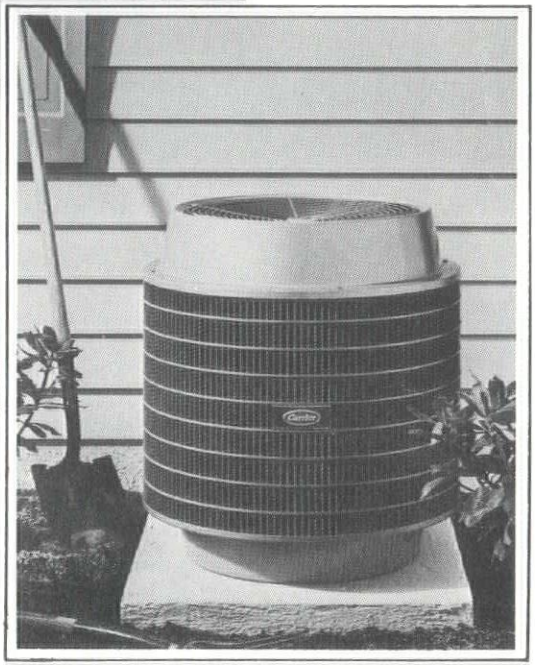

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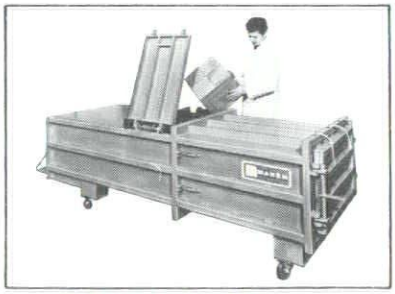

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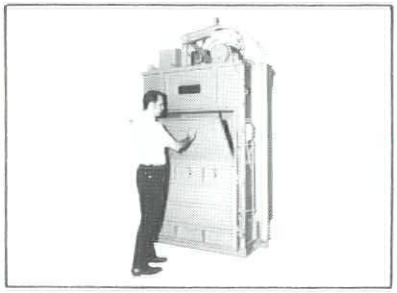

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