

Hawaii Pacific Architecture

The Journal of the AIA Hawaii State Council • October 1994



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When plans call for contemporary grandeur to blend with kamaaina past

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The assignment called for a creative approach by CJS Group Architects Ltd. and sensitive craftsmanship by Allied Builders – to preserve the estate's historic spirit and charm.

Construction challenges included creating a Grand Gallery via basement-to-ceiling reconfiguration, bisected by a bridge suspended from two smaller galleries; rebuilding the roof to conform to its original missionary style; matching detailed wood flooring, ceilings and wall panels; and carefully eradicating termite damage.

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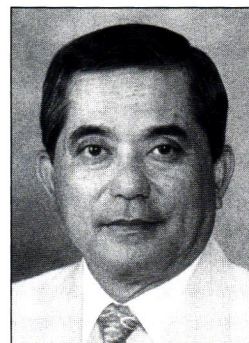
Tyau, AIA.

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Leadership message

Strengthening Public Support

by Stanley S. Gima, AIA
President



Stanley S. Gima

Writing this a few days after live television coverage about the convention center competition, I find it appropriate to discuss another main area of responsibility of the AIA Hawaii State Council, publications and public relations.

It is vital that the public understand our role in the construction industry and, as important, in society. This understanding nurtures the empathy that is the base for public support of architectural ideas and ideals.

The AIA Hawaii State Council (AIAHSC) actively strives to communicate with various elements and strata of our society through several channels. *Hawaii Pacific Architecture* (HPA) is one of our key public relations outlets and, because of its importance, the AIAHSC has embarked on a program to upgrade and revitalize HPA. Aside from visual improvements, there are other changes underway. The overall goal is to provide articles of broader interest, including more high-quality color photos and graphics to communicate what architects do.

AIA members interested in participating in the production of this magazine should call Beverly McKeague, AIA executive director, 545-4242. The HPA Editorial Board, headed by A. Kimbal Thompson, AIA, is a hard-working group, always on the lookout for new recruits to work on the many articles being planned for future issues.

Glenn Mason, AIA, heads the AIAHSC Publications & Public Relations Committee. In addition to overseeing *Hawaii Pacific Architecture* for the AIAHSC, Mason will guide the

production of the 1995 *Resource Book for Design Professionals*. For this second publication, we're fortunate to have the same team who guided the successful 1994 edition, namely co-chairmen Doug Luna, AIA, and Bob Lazo, AIA. Both spent many hours preparing the first edition and hope to apply the "learning curve" to a more profitable '95 edition.

Both publications are produced with the professional assistance of PMP Company, Ltd., ably headed by Peggi Marshall Murchison, and assisted by a conscientious and amiable staff. The increased circulation of approximately 6,000 includes architects, engineers, interior designers, contractors, developers and other industry professionals statewide plus financiers, CPAs, real estate professionals, attorneys, UH faculty members and government leaders.

There are many opportunities for architects to communicate through HPA with various segments of the public, including potential clients. By presenting projects in interesting, well-illustrated articles, architects can educate the public about the value of good architecture. This should enhance the reputation of the design business!

Ideally all AIA members should produce one article for publication every few years, but that may be unrealistic due to the pressures involved in producing projects that you want to write about.

If you feel you have something important that needs to be communicated, tell us about it. Inform us. Channel that information through our Publications and Public Relations Committee. We'll do the rest!



You're Invited!

3rd Annual
Industry
Seminar

The Hawaii Ceramic Tile, Marble and Terrazzo Promotion Program in association with the Hawaii Ceramic Tile Marble and Terrazzo Contractor's Association, is pleased to invite you to their 3rd Annual Industry Seminar and Trade Show.

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experience to our seminar. Trump Tower, Kennedy Center, Boston Public Library, the Air Space Museum in Washington, AT&T Building and the IBM Building are included in the long list of buildings for which his company has provided products and services.

Thursday, Oct. 20, 1994, 3 p.m. to 8 p.m.

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Admission is FREE to construction and related industry people. Please RSVP by FAX or Mail for advance reservations.

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We need to have some idea of how many people will be attending, so please use this panel to let us know.

Name: _____

Company: _____

Total No. Attending: _____

Please Mail to: Hawaii Ceramic Tile, Marble & Terrazzo Promotion Program, care of: 615 Piikoi Street, Suite 804 Honolulu, Hawaii 96814-3176. Or FAX to: (808) 593-8661



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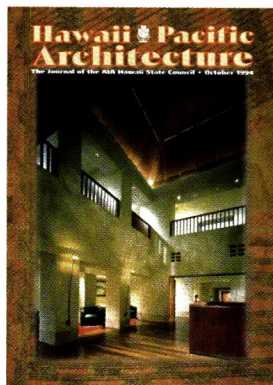
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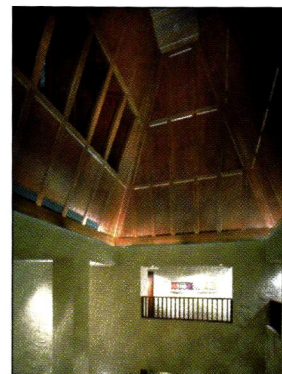
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Jon Miller, Hedrich Blessing



8 A New Terminal



20 Design Award

IN THIS ISSUE ...

This issue, which focuses on institutional architecture, highlights airports. The long-delayed opening of the Denver International Airport has created some real doubt about design fabrication of complex and innovative equipment. Henry Grimball gives us his views and those of leaders and airport planners in Denver.

With the successful opening of Honolulu's new integral inter-island terminal, parking complex and elevated roadways, passenger convenience has been maximized. The terminal facility within the seven-level superstructure encompasses more than 600,000 square feet. Brian Bowers talks about meeting the ambitious program schedule with minimum disruption to airport operations.

Following the announcement of the winning convention center design, the emphasis has shifted to a concern about potential traffic problems and transportation to and from the center. Steve Weathers, a transportation consultant, discusses the convention center's transportation plan.

This month's cover photo comes from the corporate offices of The Estate of James Campbell, designed by Ferraro Choi and Associates, winner of an Award of Merit in the 1994 AIA Honolulu Design Awards competition. The Hawaiian Tapa design is courtesy of Bishop Museum.

Maui Chapter to Host Regional Conference

AIA Maui has been selected as host for the 1996 conference for the Northwest and Pacific Region of the American Institute of Architects. The region is the most widespread of all the AIA regions, stretching more than 7,000 miles from Montana to Guam, including Alaska, Idaho, Oregon, Washington and Hawaii.

The August 1996 conference will be an ambitious undertaking for the young Maui chapter. Marie Kimmy, AIA, is the newly appointed chairwoman for the conference, which will be held at the Maui Intercontinental Resort Hotel in Wailea.

Continuing Education Course Requirement

A fall series of continuing education courses is underway as part of the national AIA move toward mandatory continuing education of all members as a requirement for membership by 1996. The courses, which are also open to nonarchitects, offer credits to architects who participate. The next three courses include a lecture by James N. Reinhardt, AIA, on ground termite mitigation, Oct. 8; a lecture by Alexandra Neuhold, AIA, on architectural programming, Nov. 12; and a lecture by Thomas Papandrew, AIA, on site design and planning, Dec. 10. More information is available from the AIA office at 545-4242.

Alternative Transportation Links Gaining Support

A visionary plan for nonautomotive transportation links is gaining increasing support in Waimea, on the Big Island, through efforts of Waimea Main Street, the mayor's committee on Bicycle and Pedestrian Safety and Hawaii Island architects Aza Summers and Clem Lam. Since a February kick-off meeting, weekly meetings have been held in this largely all-volunteer effort to

create alternative, safe transportation links in the Waimea area.

The first increment of the trail system is broken into four phases of work which would provide eight miles of multi-use trails connecting the farthest edges of Waimea and everything in between. Later increments would link ancient Hawaiian paths to scenic hiking and riding areas and many other sites in the Waimea area.

Architectural Design Show Begins Oct. 28

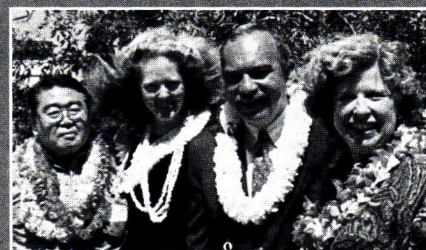
The Gentry Pacific Design Center will be hosting and sponsoring "From Grass to Glass: The Search for a Hawaiian Sense of Place," Oct. 28 - Jan. 8 in the center's exhibit space. This special show will offer in-depth perspectives on the concept of regional architectural design and "What are appropriate designs for Hawaii?"

"This is an important architectural show for Hawaii," said Don Hibbard, the exhibit's curator. Hibbard, administrator of the Historic Preservation Division within the state's Department of Land and Natural Resources said, "We hope the design community will actively participate in a debate about regional design and what is appropriate for the state. We also hope to raise questions regarding the current state of architectural design."

Seven Architects Appointed to Boards

Seven Honolulu architects recently joined the many others who serve on various state of Hawaii boards and commissions. John Hara, AIA, was appointed to the state Foundation on Culture and the Arts board, replacing Art Kohara, AIA, a long-time board member. Allen Kajioka, AIA, was appointed to his second term on the Land Use Commission.

Dennis Toyomura, FAIA, first president of the AIA Hawaii State Council, was appointed to the Hawaii



Dennis Toyomura, Nancy Peacock and Penny Posedly with Gov. Waihee.

Housing Authority Board. Another council past president, Nancy Peacock, AIA, was appointed to the Hawaii Historic Places Review Board. Penny Posedly, AIA, was placed on the Department of Health Architectural Access Committee and Ann Matsunami, AIA, received an appointment to the Board of Professional Engineers, Architects, Surveyors and Landscape Architects.

Ted Candia, partner in the architectural firm of Sutton Candia Partners, was appointed to the State Boxing Commission of Hawaii.

CCPI Offers New Guide to Architectural Concrete

The Cement and Concrete Products Industry of Hawaii (CCPI) recently published a six-page color brochure on architectural concrete in Hawaii. The brochure highlights 35 precast architectural concrete samples and nine flatwork cast-in-place concrete samples.

Spearheaded by CCPI with the assistance of the American Institute of Architects, the informational brochure was published to show industry professionals a sample of precast and cast-in-place architectural concrete available in Hawaii. The publication is available at the CCPI office, 2828 Paa Street, Suite 1110.

Urban Forestry Conference Scheduled

Anyone involved in resort or urban mall development will have a

unique opportunity to learn more about optimal plant selections, design solutions, maintenance and the development of new partnerships for the promotion of the urban landscape at Hawaii's first Urban Forestry Conference, set for Nov. 21-23 at the Ala Moana Hotel. Both local and mainland experts will make presentations on topics including water-efficient plantings, public policy issues, proper hardscape design and plant selection to minimize maintenance problems.

For more information, call the Department of Land and Natural Resources, Division of Forestry, at 587-0166.

Architects' Art Exhibit

An exhibit of original fine art done by architects and city planners will be held at Unitarian Church's Gallery, on the Pali Highway, Nov. 4-Dec. 1.

The event, themed On Our Own Time, is dedicated to Alfred Preis, FAIA, noted architect and staunch supporter of the arts in Hawaii, who died March 29.

According to Norma Nichols, the gallery's director, entries are to be submitted Oct. 30, between noon and 2 p.m.

Award presentations will be made during an opening reception, Nov. 6, beginning at 1 p.m. Works will be judged by Vladimir Ossipoff, FAIA.

Call Nichols at 526-1191 for entry information and scheduling details.

NAHB Seeks Design Entries for Housing

The National Association of Home Builders' (NAHB) National Council on Seniors Housing (NCOSH) has issued a call for entries in its fourth annual Best of Seniors Housing Awards Program. NCOSH plans to recognize projects for outstanding design and superior marketing

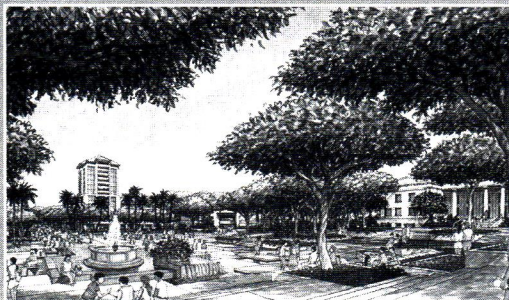
campaigns. Entries must be submitted no later than noon, Oct. 14. Call NCOSH at 1-800-368-5242, Ext. 220 for entry brochures.

UH Manoa Plan Update

The 1994 revision of the Long Range Development Plan for the University of Hawaii Manoa campus has been approved by the Board of Regents. Group 70 International, authors of the 1987 plan, were also



UH campus today.



UH Long Range Development Plan.

responsible for the current revisions.

The current plan envisions improvements to all gateway entrances for both pedestrian and vehicular traffic, pedestrian oriented pathways and plazas and attention to landscaping around existing buildings. Some of the venerable public space derelicts, like Varney Circle, are to be transformed and humanized, a long-overdue campus improvement. Additional parking will be provided but will be visually less obtrusive.

Home Building and Remodeling Show Set for Dec. 1

The Building Industry Association of Hawaii (BIA) and First Hawaiian Bank will sponsor the first annual BIA Home Building & Remodeling Show, Dec. 1-4 at Neal Blaisdell Center.

Show chairman James Zweedyk, president of TKC, Inc., said the show will feature exhibits and seminars by professionals in home building and remodeling, interior design and landscaping.

"More than 200 booths will showcase the latest trends and technology in appliances, fixtures, furnishings, products and services geared to today's consumer. The BIA and First Hawaiian Bank are committed to producing a quality show, both in content and format," Zweedyk said.

According to Walter A. Dods, Jr., First Hawaiian chairman and chief executive officer, the new show will provide residents a unique opportunity to view a full range of building and remodeling products and services, all under one roof.

For applications or information call Barbie Watanabe at BIA, 847-4666, Ext. 202.

ASID Elects Mark Masuoka President

The American Society of Interior Designers-Hawaii Chapter has elected Mark Masuoka president for 1994-95, succeeding Karren Barozzi, who remains an officer with the organization.

Other leaders for the coming year include president-elect Linda Ueda, vice president Fran Obayashi, treasurer June Fukushima-Lee and secretary Janel Craigie-Wolf.

Elected to the board of directors are Audrey Tanaka, Joan Robinson-Whiter, Gary Kim and Paul Noborikowa.

Designed to maximize passenger convenience

A New Terminal for Honolulu

by Brian J. Bowers, PE

With the opening of Honolulu's new Inter-Island Terminal (IIT), Hawaii's residents and visitors now have access to a spacious, efficient and modern facility. The project team can be justifiably

proud of the success of the project and Hawaii's air travelers' needs should be provided for well into the 21st century.

The state of Hawaii's airport system consists of 15 airports on six different islands. The hub of this system is Honolulu Interna-



This aerial view defines the multilevel complex of terminal, parking garages and elevated roadways.

Photos by Bill Hagstotz, courtesy of Kiewit Pacific



tional Airport (HIA), which is the 13th busiest airport in the country and the 20th busiest in the world. The traffic at HIA consists of both long-destination flights to mainland and international cities, as well as short inter-island flights.

The two primary carriers for inter-island flights are Aloha Airlines and Hawaiian Airlines. According to Barry Fukunaga, Honolulu's airport manager, inter-island flights account for more than 40 percent of the passengers from HIA, which totaled more than 8 million in 1992. To put this number into perspective, this is more passengers than are handled at large airports in Cleveland, New Orleans or Houston.

With such large passenger-handling requirements, a more modern facility was needed to replace the smaller commuter-type terminals which existed. Design for the terminal and parking structure was undertaken in mid-1988 by Inter-Island Terminal Associates, a Hawaii-based joint venture. In addition, the ground and elevated roadway portions of

the project were started by MNS Associates, an engineering joint venture also based in Hawaii.

The concept behind Honolulu's new IIT was envisioned by Owen Miyamoto, Hawaii's airport division chief. Miyamoto, who has headed Hawaii's airports for more than 20 years, directed that new terminal facilities be designed to maximize passenger convenience. With this guidance, KFC Airport, Inc., the project manager for development, completed a concept design for a seven-level integral terminal and parking complex similar to that used at airports such as Tampa, Las Vegas and Phoenix.

The facility encompasses more than 600,000 square feet of terminal area on the ground, second and third levels, including public areas, restaurants and concessions, passenger check-in and holdrooms and airline operation facilities.

Immediately above the terminal and access roadways, four levels of parking provide 1,750 parking spaces with direct elevator access to

Interior views of airline counters are colorful in the spirit of Hawaii.

the ticketing and baggage claim lobbies.

A concrete apron fronts the new terminal passenger gate holdrooms providing parking for 13 aircraft. Loading bridges provide access to aircraft from all second level holdrooms.

In order to meet an ambitious program schedule yet minimize the disruption to existing airport operation, a phased, fast-track program was selected by airports engineer Ernest Kurosawa and KFC Airport, Inc. This included phasing the landside and airside construction to maintain current airline operations.

Development of the first two construction packages began in mid-1989. These packages completed roadway detours necessary for other work to commence and constructed ground level roadways, site utilities and foundations. This \$10 million project by Hawaiian Dredging & Construction Company was completed in November 1990.

While this project was being finished, the design team completed the superstructure of the terminal, parking complex and elevated roadways.

The terminal design was based on the use of precast concrete for its ease of construction and compatibility with the existing airport

architecture. Spans were typically 60 feet for the precast joists. Columns, beams and decks were all poured-in-place concrete. A total of approximately 85,000 cubic yards of concrete was placed during construction for the terminal building, parking structure and elevated roadways.

The superstructure project was awarded to Kiewit Pacific Company in November 1990. Construction started in December on the heels of the foundation project.

The \$130 million project is the largest construction project undertaken by the Hawaii State Airports Division and was a challenge to manage both from its sheer magnitude and requirement for complex construction phasing.

Now that the new terminal is open and both carriers have moved in, the next phase of construction can begin. Five additional aircraft gates and pedestrian and vehicular connections to Honolulu's main terminal will be developed. This final phase of construction should be completed by late 1994.

♦ *Brian J. Bowers, PE, is executive vice president of KFC Airport, Inc., project manager for the inter-island terminal.*

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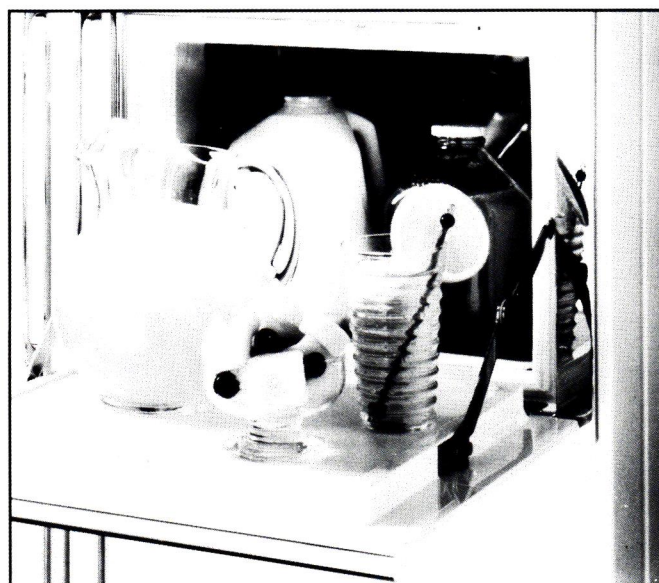
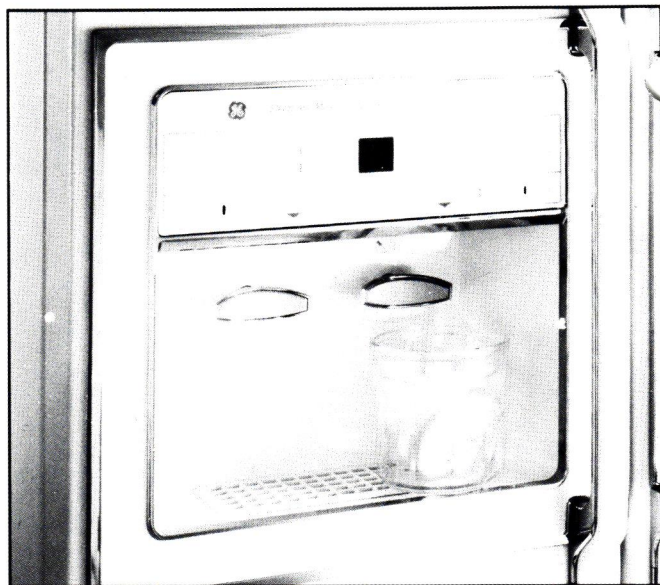
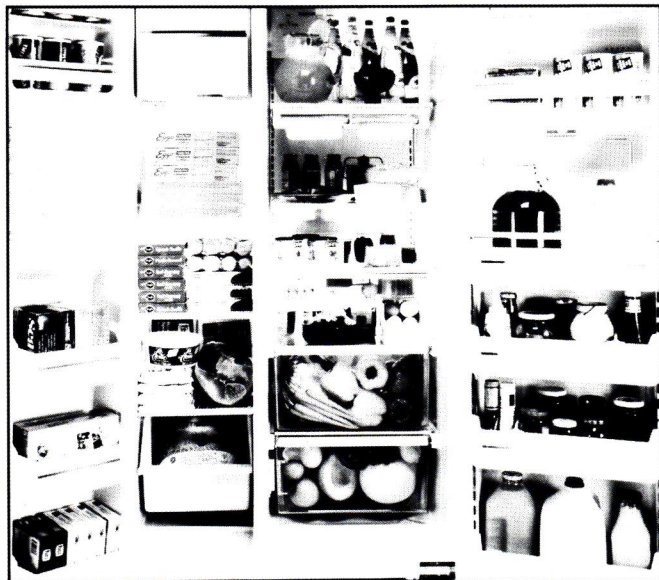
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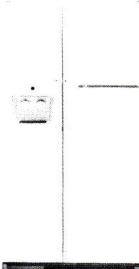
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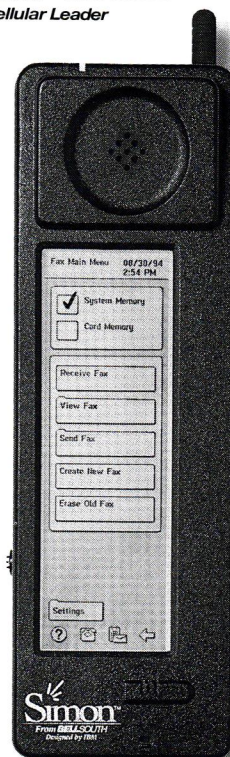
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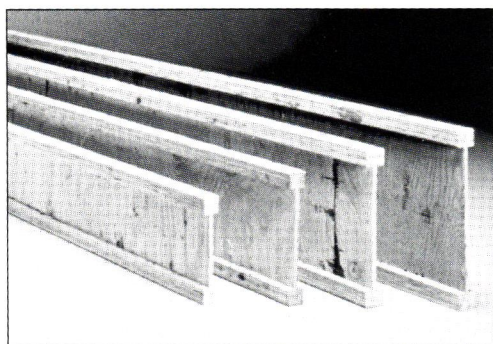
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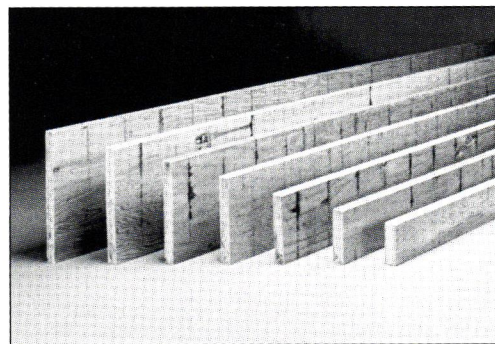
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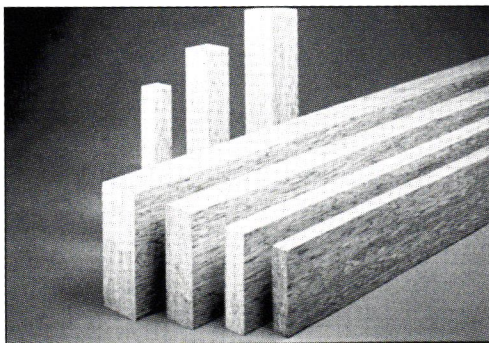
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REVITALIZE THE CONSTRUCTION INDUSTRY

The construction industry on all islands needs help. It needs the support of business, industry, unions, and of government. It needs to know that it has a sympathetic friend in Frank Fasi who knows how to get the bureaucracy out of the way so that the construction industry can prosper again. As Governor, I will continue to support the planned growth of both state and private industry development throughout Hawaii.

BUILD 5,000 HAWAIIAN HOMES

In 73 years, the Territory and then the State have only built 5,000 homes for Hawaiians on their land. As Governor, I will build that many in my first term—5,000 in just four years. That's a promise.

REFORM WORKERS COMP INSURANCE AND TORT REFORM

Business and government must work together to reform our outdated business insurance system. I will bring these groups together and draft bills aimed at relieving this government burden on our business community, while protecting our citizen's needs.

BUILD A BETTER FUTURE

We're determined to build a better Hawaii for our children and grandchildren. We're committed to educating them to make certain they have job opportunities that will make it possible for them to live here and not make them caretakers and tenants for those who come here and buy our land. Together, we can make Hawaii better for all the people, our children and grandchildren.

FASI GETS IT DONE!

High-tech goals face common problems

Denver International Airport

by Henry G. Grimbail, AIA

The desire to create the world's finest, most technically advanced air transport facility at Denver International Airport (DIA) has formed its character and created profound headaches.

Goals set by the designers of DIA required extensive research in airline trends, passenger demands and user forecasts. Concepts of and forecasts for the next 20 years are readily available from Boeing, McDonnell Douglas and others. Passenger statistics are considered separate from cargo traffic. Both are impressive.

International service

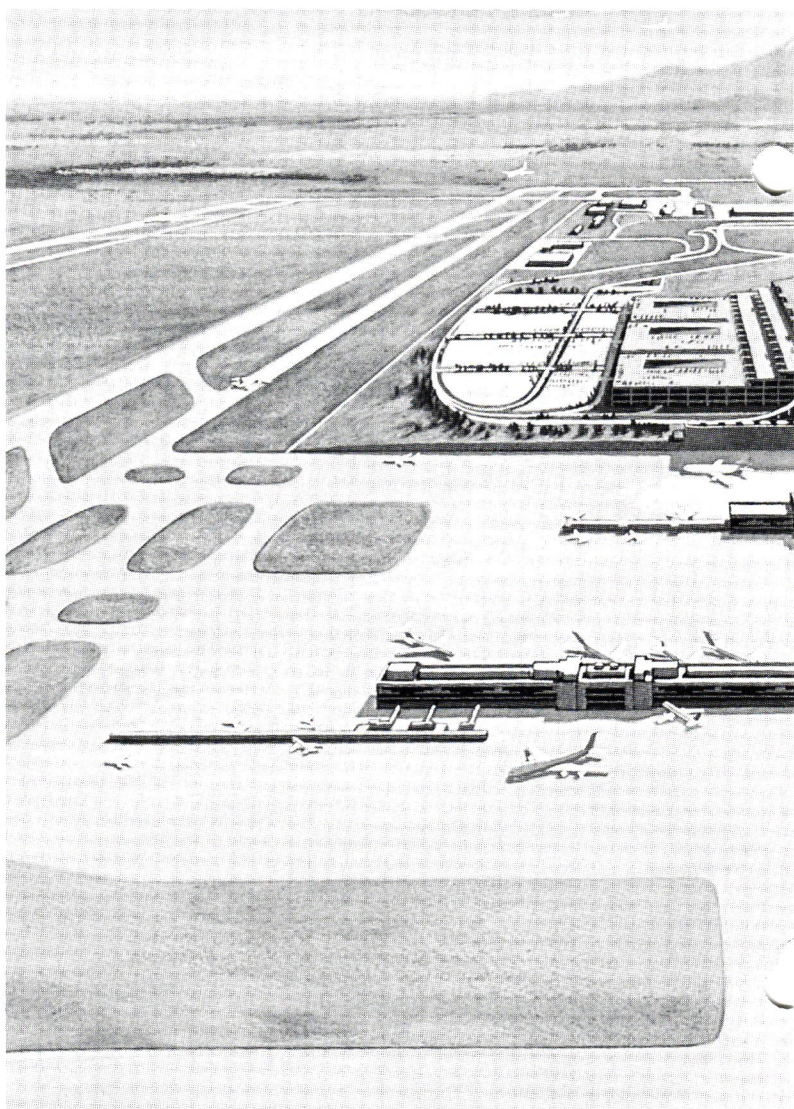
DIA was designed to accommodate a large increase in international traffic. Wide-body gates, capable of handling the newest generation of long-distance wide bodies (MD-11, 767, A340), allow for simultaneous international arrivals. A Federal Inspection Service facility capable of handling more than 600 passengers an hour (through immigration and customs) will be available. A longer runway will be available in 1995 for departures of long-haul operations in more extreme temperature conditions.

Computer systems

DIA is the first airport in

the world to be totally designed, built and operated using computers. DIA planners cite efficiency and convenience as two main reasons for the extensive use of computers at the new airport.

Computers allowed DIA's facility-manage-



ment system to accomplish the project's development, construction and operation by the scheduled opening. Planners also used computers early in the design phase to analyze different aspects of DIA operations.

To make runway-taxiway configurations as efficient and economical as possible, computer models were used to analyze taxiing distances, fuel consumption rates and arrival and departure patterns. Computer models also helped planners study wind and weather patterns to determine the most efficient airfield configuration.

Computers were indispensable in keeping track of contracts, construction companies, drawings, blueprints and other documents involved. The state-of-the-art CAD (computer-aided design) and CAFM (computer-aided facility management) systems selected by planners gave them a way to gather design information, track construction operations and

manage administration, maintenance and personnel. The systems allow engineers and planners to feed all graphic information into the computer, then isolate any section of any structure.

Computers will also be connected to a Doppler radar system that provides a 3-D picture of local weather patterns, both horizontally and vertically. Information on safety techniques and emergency operations will be stored on computers to aid airport personnel in their job performance.

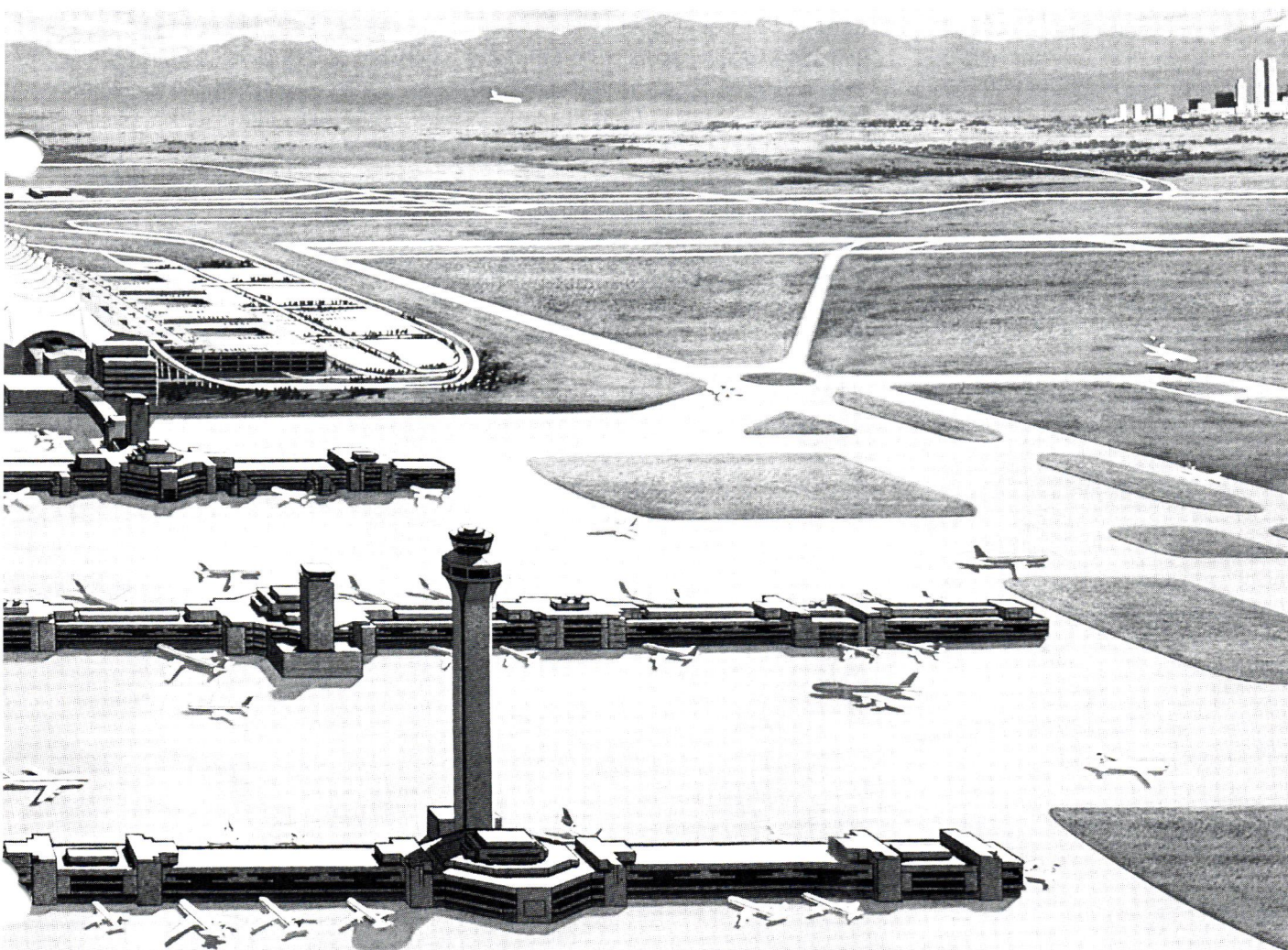
Automated baggage system

DIA will eliminate many baggage frustrations with a state-of-the-art integrated system that enables checked luggage, boxes or skis to move automatically between the terminal and concourse gates.

Designed by BAE Automated Systems, Inc. of Dallas, DIA's baggage scheme is designed

The new Denver airport's flow-through traffic pattern will allow planes to land, taxi to concourse gates and take off again all in one direction.

Photos courtesy of DIA 1992
Annual Report



to move approximately 42,000 pieces an hour. The key component of the system is a Destination Coded Vehicle (DCV), a small car that runs on a track. The DCV is guided by a computer and ferries baggage from the terminal to concourses and airline gates. The car is a versatile machine that can position itself three different ways to accept, carry or discharge a piece of luggage. Four thousand DCVs can rush into action when passenger volume is high.

About 2,100 linear induction motors propel the DCVs up, down, left and right—along 20 miles of track. The track moves through underground tunnels on both sides of DIA's subway system where the DCVs can accelerate to a speed of nearly 19 miles per hour.

At any one of 24 curbside or numerous terminal check-in positions, airline agents will attach coded destination information tags to baggage. Then agents will either put the bags onto a conveyor belt where they will be scanned or manually input destination data into the baggage system computer. Whether scanned or inputted, the information goes electronically to DCVs, which move into position to receive suitcases one-by-one from the conveyor.

With traveling instructions from the computer, the DCVs head for a concourse. Every 150 to 200 feet, checkpoints will monitor the DCVs by radio frequencies, so system controllers will always know the location of any DCV (and any bag) within the airport complex.

The new airport's baggage system is designed to eliminate lost luggage and ensure that bags make the same flight as the passenger. Inbound baggage—luggage unloaded from aircraft—will also move quickly via the automated system to terminal carousels.

Construction problems

How did such a well-planned, prestigious airport end up with major construction problems?

Construction began orderly and the airport opening was originally set for December 1993. On May 2, 1994, Denver Mayor Wellington Webb announced that DIA would not open on the scheduled date, May 15, 1994. The mayor said that a specific date to open the new airport would be set later once a full and complete analysis of DIA's complex and highly technical system was completed and all identified problems were corrected. The mayor noted that "clearly, the automated baggage system now underway at DIA is not yet at a level that meets the requirements of the city, the airlines or the traveling public."

The airport opening is now nearly 10 months late. United Airlines agreed to a lease in the fall of 1992 and requested an automated baggage system be built. A combination of mechanical, electrical and software problems have bedeviled the contracted BAE automated baggage handling system.

The delay in opening the new airport is costing \$1 million a day with half of that going to debt service and half to operations and maintenance. The city and county of Denver are absorbing a small portion of the cost, while the major share is being paid by the airlines.

An alternate system

Five options were presented by a consultant with one favored to "create a complete stand-alone alternate system which can be used in combination with subsystems of the automated baggage handling system." The idea is to bring the five loops of the automated system on line one at a time. It will also help to have this alternate system available to pick up the slack if portions of the system fail because there is not enough backup capability in the current layout. The goal is to have the BAE system eventually operate with 99.5 percent reliability.

The mayor of Denver plans to hire a contractor to install a conventional baggage handling system so the

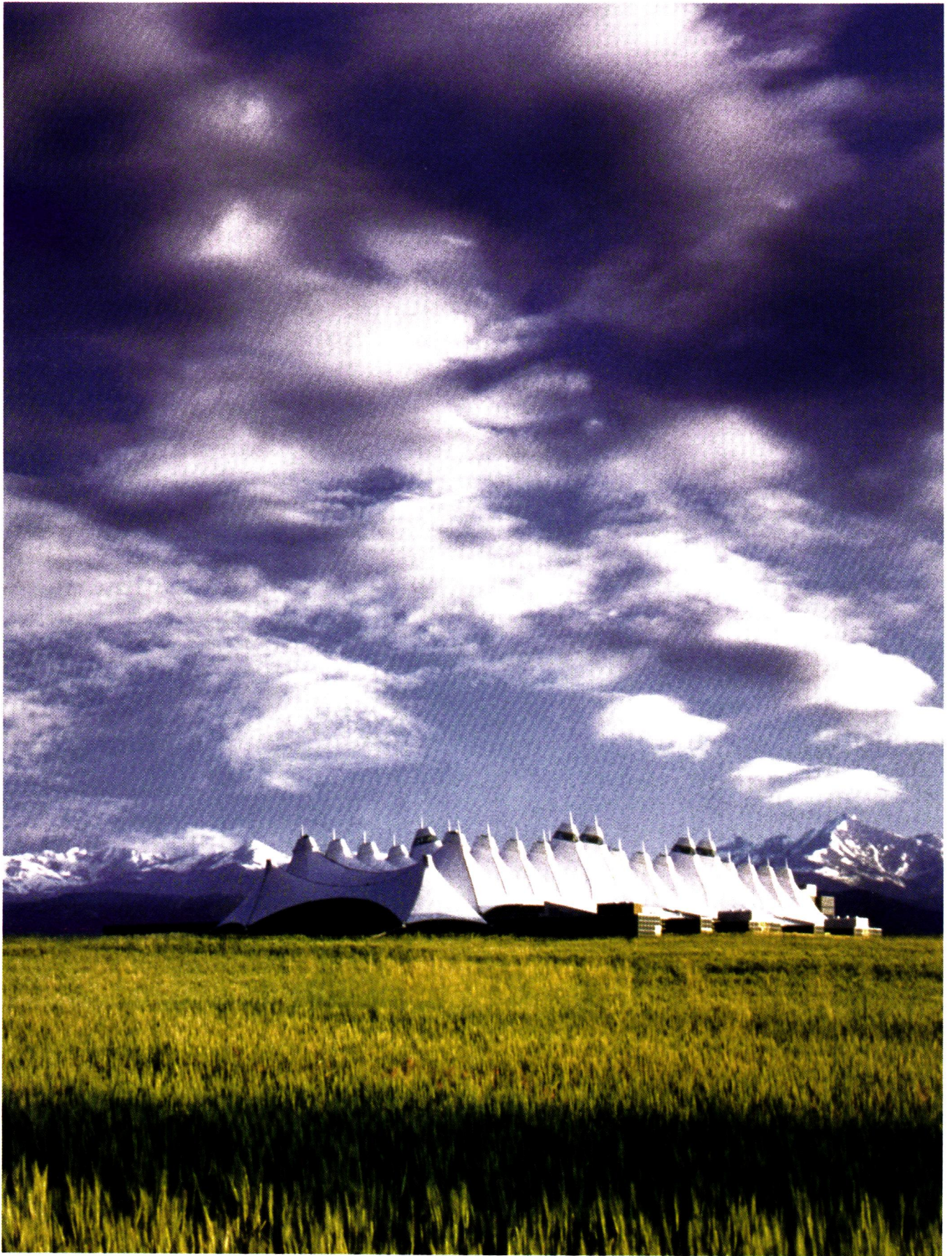
long-delayed airport can finally open, but it still will be months before airlines can begin using the \$3.7 billion facility.

In making his decision, Mayor Webb rejected a United Airlines request to study this alternative for 60 days before the city acted. Webb did not specify when the airport will finally open. It is expected to take four to five months to acquire, install and test the system that would be based on proven technology such as conventional conveyors, tugs and carts. The city would then be able to open the airport without depending on the baggage system developed by BAE Automated Systems, Inc. As the BAE system comes on line, the second system will serve as a permanent backup.

A city official said most of the problems found in the BAE system, which cost \$193 million, relate to software and that the contractor has already fixed most of the mechanical problems. The system has 22 miles of track, 1,000 baggage handling cars and about 300 computers. The BAE system recently had its first good test when it operated for 10-hour periods on two different days with about four minutes of downtime each day. In a similar test three weeks earlier, the system operated for 11 out of the 20 hours over two days.

In retrospect, we can observe that the reach extended the grasp. Design fabrication of complex and innovative equipment requires time to do and, perhaps, redo. Complex systems such as baggage handling for a major international airport are best not tracked when delays may be anticipated. The importance of on-time delivery is once again underscored.

♦ Henry Grimball is an architect graduate of Clemson, Tulane and Harvard universities and was a Fulbright student at the University of Rome, Italy. In 1993 he was the principal airport planner for the Republic of Indonesia in preparation of the Integrated Air Transport Study, Indonesia. This article reflects his personal views and those of leaders and airport planners in Denver. Comments are welcome.



Rising boldly where the Great Plains meet the Rocky Mountains, Denver International Airport should become an enduring image of Denver and the West.

Award of Merit

Interiors

Ferraro Choi and Associates, Ltd.

Corporate Offices of the Estate of James Campbell

The 50,000 square-foot executive offices for the Estate of James Campbell Building in Kapolei, designed by Ferraro Choi & Associates, Ltd., are part of the first building constructed in the new Second City. The design serves as the standard for all commercial development within the fledgling city of Kapolei.

The client expressed a desire to have Kapolei's abundant natural sunlight distributed to interior spaces. To achieve this, Ferraro Choi & Associates used reeded glass partitions incorporated in the interior office walls to allow sunlight to penetrate deep into the building.

Design requirements were broken down into three parts: general offices for the Estate of James Campbell, the City of Kapolei Marketing Center and the fitness center.

Housing the Estate's headquarters, the general offices were to include offices, open work stations, general work areas, conference facilities and dining for the staff, corporate executives and trustees. The major conference facilities were designed around specific uses to satisfy precise requirements. Both the board room and the main conference room on the second floor were provided with multimedia/video teleconferencing systems which are integrated with an electronically controlled lighting system.



The design of the James Campbell Building strives to create a "Hawaiian sense of place." The paneled ceiling of the building's main reception area recalls the Hawaiian *hale*, symbolic of Abigail Campbell's history and *ohana*.

Photos by Jon Miller, Hedrich-Blessing

Downstairs, at the City of Kapolei Marketing Center, the requirements included providing a sequence of spaces that would lead visitors through a series of exhibitions, including multimedia presentations, as part of the continuing Second City marketing effort.

Divided into two areas, the fitness center provides staff members with facilities for aerobics and exercise machines. Adjacent to these spaces are locker rooms for men and women.

The design concept incorporates the character of the late James Campbell and his wife, Abigail. Abigail's Hawaiian alii ancestry was the source of inspiration for using

the Hawaiian *hale* or "hut" form as the focal point which shapes the center of the main reception space. Here, the volume of space is lightened and transferred upward. It is a fitting place for greeting visitors, calling to mind the Hawaiian tradition of hospitality toward all guests.

In response to Campbell Estate's principle focus of shaping Hawaii's future, the design serves as a modern cultural precedent linking the past with progressive interpretations of a "Hawaiian sense of place." Elements such as the *hale* are concrete reminders of ancient form and symbolism perpetuated in the James Campbell Building as the future of Hawaiian architecture.

The relaxed atmosphere of the marketing center's screening room serves as a comfortable backdrop to state-of-the-art displays.



Credits

Owner/Client:

The Estate of James Campbell

Architect:

Ferraro Choi and Associates, Ltd.

Mechanical Engineer:

Michael Hattori & Associates, Inc.

Structural Engineer:

Richard M. Libbey, Inc.

Electrical Engineer:

Bennett Drane & Karamatsu

Lighting:

Lighting Integration Technology

Contractor:

Fletcher Pacific

Jury's Comments:

"Strong Hawaiian images used in a corporate setting."



Images used in the third-floor reception area are reminiscent of the large vaulted shelters built by ancient Hawaiians to store their canoes.

City initiates study

Convention center traffic a concern

by Amye H. Turner

A model of the winning convention center design. Construction is expected to start in mid-1995 after the completion of an environmental impact statement.

As discussion on the selection of the convention center dies down, new concerns have arisen—predominately about traffic and how the facility will fit into the Waikiki Master Plan. Judged on design, technical merit and aesthetics, the Nordic/PCL Team's plan, the product of a joint effort by Wimberly Allison Tong & Goo of Honolulu and Loschky Marquardt & Nesholm of Seattle, was chosen as Honolulu's new convention center design.

Traffic concerns include transportation around the convention site as well as getting people to and from the convention center. The winning design calls for people to enter the main

lobby on the ewa side, while service vehicles can drive directly onto the convention floor from the Kahakai Drive entry/exit and can also choose to enter from or exit onto Kalakaua Avenue. In addition, 19 loading bays are concealed under the grand staircase on the Ala Wai Canal side.

Parking on the second floor accommodates 802 vehicles. Traffic flow will be achieved with entry/exit ramps on Kahakai Drive and a reversible ramp on Kalakaua Avenue. Direct access from parking to the registration lobby, VIP board room, administration offices and the Ala Wai promenade is provided.

According to Steve Weathers, president,





The convention center design includes 14 white "sails" on the roof, a 70-foot indoor waterfall and a lobby framed by 4-story high glass walls. Location of truck bays on the Ala Wai side of the exhibition hall results in a grand staircase facing the canal.

SEAT Planners, Inc., a San Diego-based transportation consultant, the majority of conventioners will be transported to the convention center by bus, a management and organizational challenge that must be met without making the ground floor exhibit space and a sense of Hawaiian design subordinate to transportation concerns. In an area like Waikiki there may be the need for four to six shuttle bus routes serving different portions of the resort area according to Weathers.

"If there was a large number of people to be moved, say 10,000, each of these routes might have five or six buses assigned to it, or there might be more buses on a given route and less on others. Accordingly, during this mass movement, there would be buses in hotel pick-up areas, buses enroute to the center and buses dropping off people at the center and returning to Waikiki," Weathers said. "The 12 designated bus loading/unloading stops in the center's main entry are more than adequate in this type of scenario," he added.

"The Nordic/PCL design provides a covered staging area at the rear of the exhibit hall which masks bus operations and is easily accessible to the front entry loading zone. In this staging area, 30 buses can park and wait to be called up to the main entry for the disbursement of delegates to their hotels following a session," Weathers explained. He emphasized that the organization of the shuttling process is the key.

Following the release of the winning design, the city initiated a traffic study. According to Donald Clegg, director, Depart-



ment of Land Utilization, the city was not consulted in reference to the impact the convention center will have on traffic flow in Waikiki. "We are for the convention center at that location," Clegg said, "however, we (the city) may have preferred orienting it to Waikiki rather than

Kapiolani." Clegg also said the city was looking at "one way in and one way out" to prevent traffic congestion.

Does the convention center's construction fit into the Waikiki Master Plan? Donald Goo, FAIA, WAT&G principal believes it will. "The convention center will spur

redevelopment of other properties in Waikiki, creating more open space," he said. "The design illustrates the master plan's outdoor space requirement on the Ala Wai promenade side of the center," he added.

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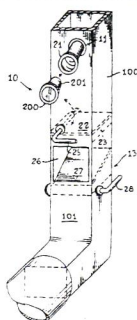
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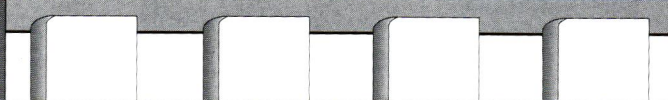
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Harry and Jeanette Weinberg Laboratory and Dental Building

Waianae Health Center Expanding

The Harry and Jeanette Weinberg Laboratory and Dental Building will be located on the Waianae Coast Comprehensive Health Center campus.

Construction of the Harry and Jeanette Weinberg Laboratory and Dental Building on the campus of the Waianae Coast Comprehensive Health Center is underway. On Sept. 7, the Weinberg Foundation awarded WCCHC \$800,000 to be used toward completing the project.

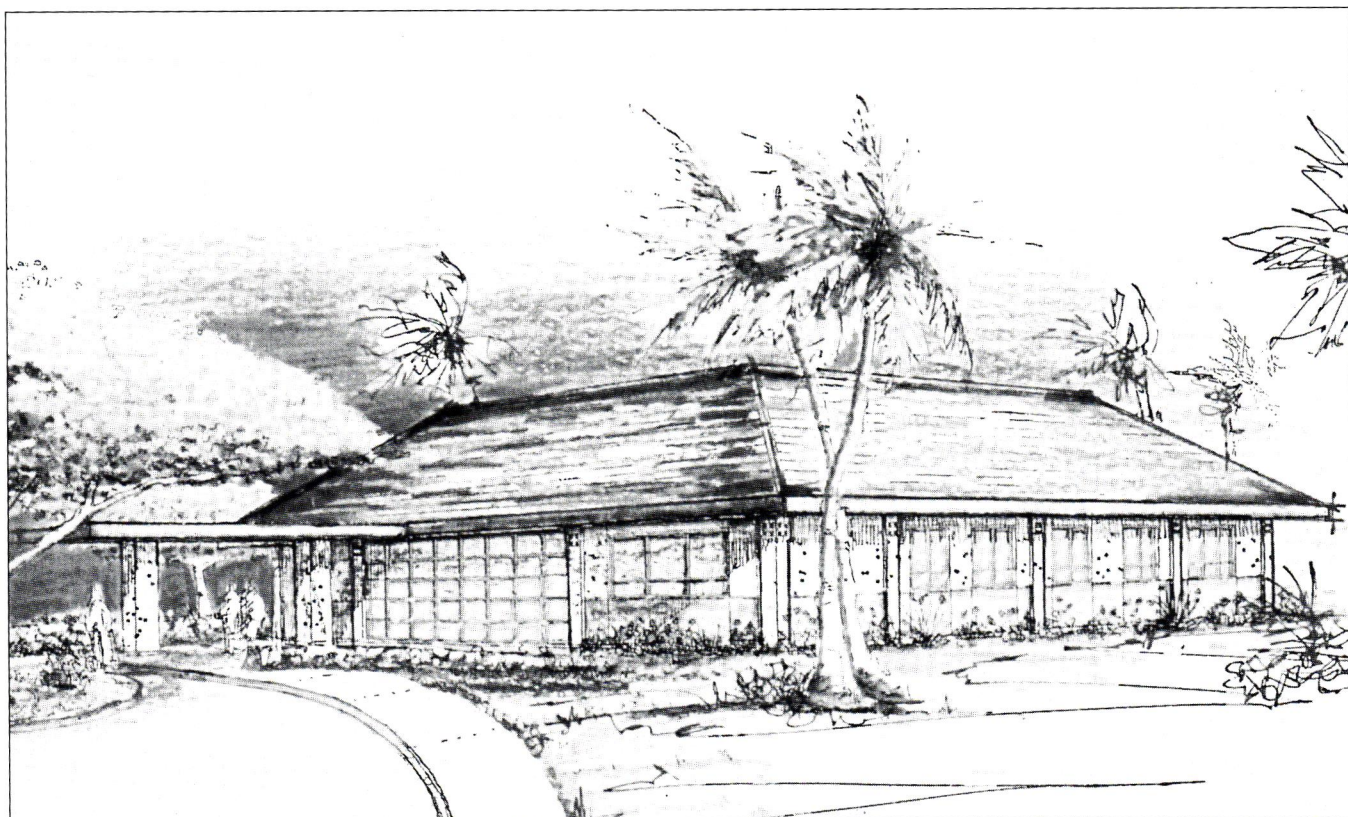
The Weinberg Building will house a 1,716 square-foot dental clinic which will expand WCCHC's capacity to provide quality dental care to leeward Oahu. It also includes a 1,460 square-foot, fully equipped medical laboratory designed as a 24-hour facility.

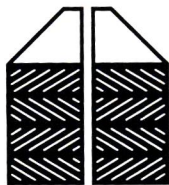
Skylights and a vaulted ceiling will enliven the shared waiting area. High performance

glass and a heat recovery system should help make the facility energy-efficient and reduce operating costs.

Upgrades to the health center's infrastructure are being added to support the Weinberg Building. A new upper campus parking lot will be constructed to replace the 14 parking stalls eliminated.

The project, scheduled to be completed in February 1995, was designed by the Honolulu firm of TRB/Architects, Ltd. Western Engineering, Ltd. is the general contractor. The project is part of WCCHC's five-year development plan.





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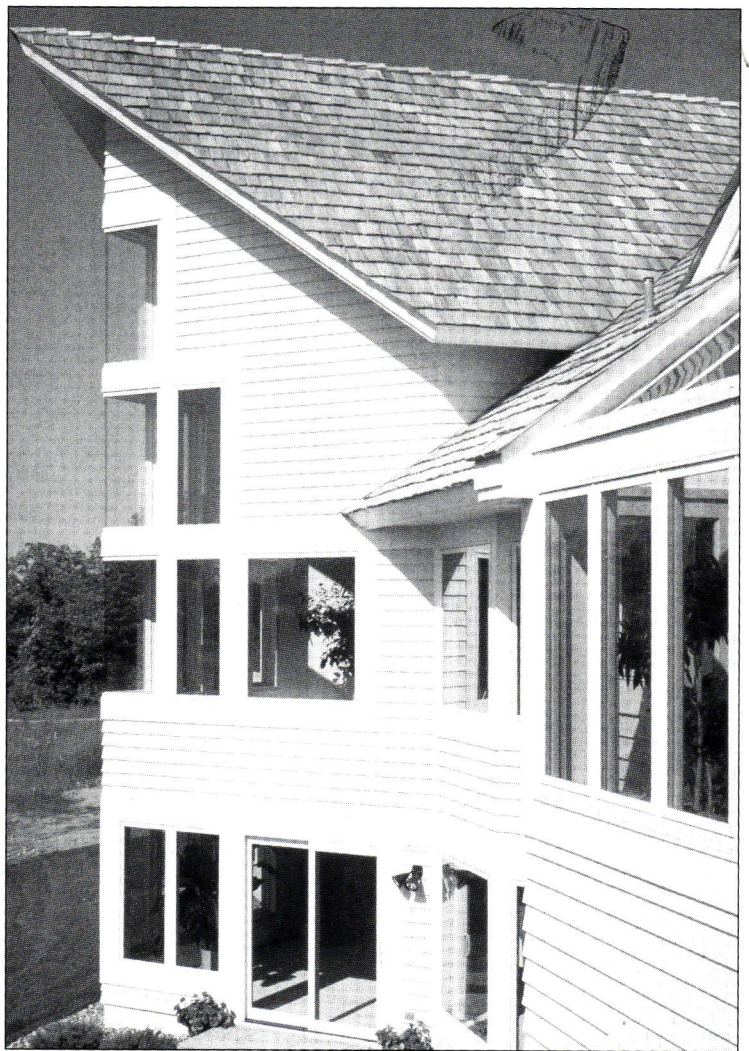
Bringing the Outside In

The concept of bringing the outside in occupies a significant place in architectural history. Frank Lloyd Wright, celebrated American architect, envisioned bringing the outside in by opening the corners of his buildings to destroy the box-like appearance of conventional architecture. In 1911—in an effort to fulfill his vision—he mitered single sheets of glass and cemented them together at the corners of the rooms in his own Wisconsin home, a then-envied creation and now often-imitated architectural design. Pella Corporation has recreated that dramatic look with the introduction of the Pella CornerView window.

The mitered, insulating glass Pella CornerView window—available in wood and aluminum clad—is an example of custom capabilities and the concept of bringing the outside in.

The CornerView window is available in three standard primed wood and aluminum clad sizes: 3636, 3048 and 3060. The 3636 and 3048 units can be stacked up to two units high. Glazing is $\frac{5}{8}$ -inch clear insulating glass. Standard and custom clad colors are available.

Pella has also redesigned its traditional product to offer three distinct lines of windows and doors, as well as support products such as folding accordion doors, skylights and sunrooms designed to match vertical window and door openings.



The Pella cornerview window is designed to bring the outside in using mitered $\frac{5}{8}$ -inch clear insulating glass.

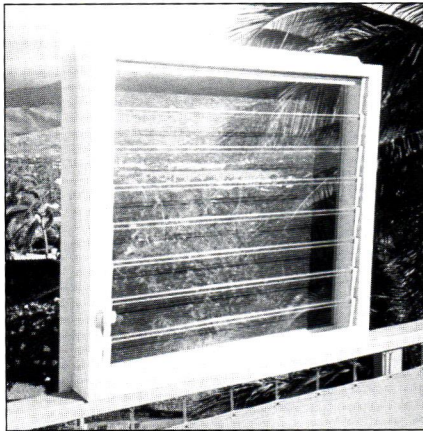
Proline series windows are designed with fold-out, pre-attached installation fins and convenient packaging. They are clad with a low maintenance aluminum exterior finished with the EnduraClad five-step finishing process plus an extra clear top coat. Seacoast hardware is standard and all interior stops and milled pieces are blind-nailed to eliminate fastener holes.

The Designer and Designer Classic series create personalized window solutions, with three standard cladding colors, custom colors or primed wood exteriors. This line has a variety of glazing systems that can be tailored to any need.

The Architect series is a custom clad or wood line with unlimited capabilities in design. Pella currently manufactures several elliptical windows for existing openings. This type of fabrication may be effective to help maintain historical authenticity in restoration.

Designed for Hawaii

Vinyl-framed Jalousies



Jalousie windows provide good ventilation in Hawaii's warm, sub-tropical climate. Coastal Windows has recently produced a vinyl-framed jalousie, manufactured on Oahu. The new window is designed to prevent rotting, peeling or the need for painting. The window's corners are also welded to prevent leakage.

According to Bob Barrett, Coastal's vice president and general manager, the vinyl-framed window is designed specifically for Hawaii's environment. Barrett noted that a window with aluminum clips doesn't last as long, because the clips tend to bend and flex.

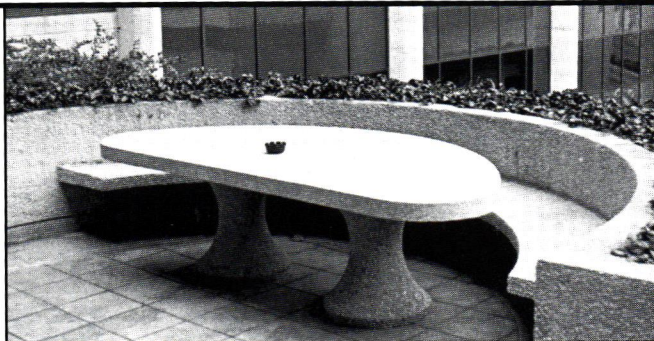
The window also has the ability to fit the standard New Zealand hardware frame and be cut to fit a customized area.

Coastal's new jalousies are designed to eliminate the need for interior trim work and include screens. The frames are available in white or dark bronze, with hardware to match.

These windows are lever-operated, rather than crank-operated, with fewer working parts. "The last half-inch of the throw locks the window and compresses the glass slats," Barrett said. "Vinyl clips maintain a constant grip on the glass."

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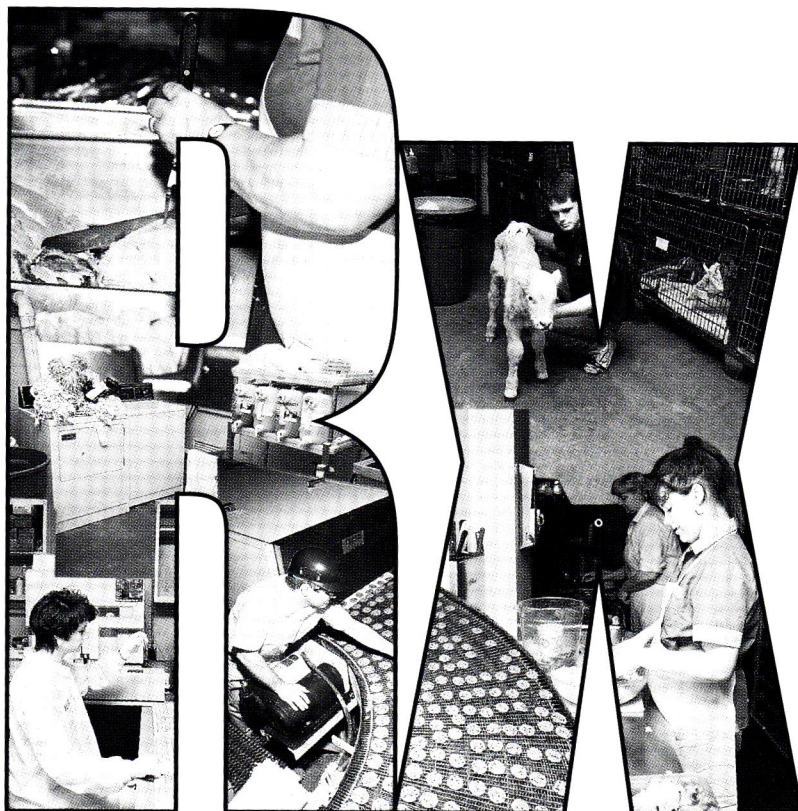
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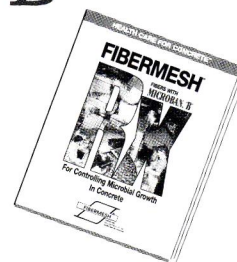
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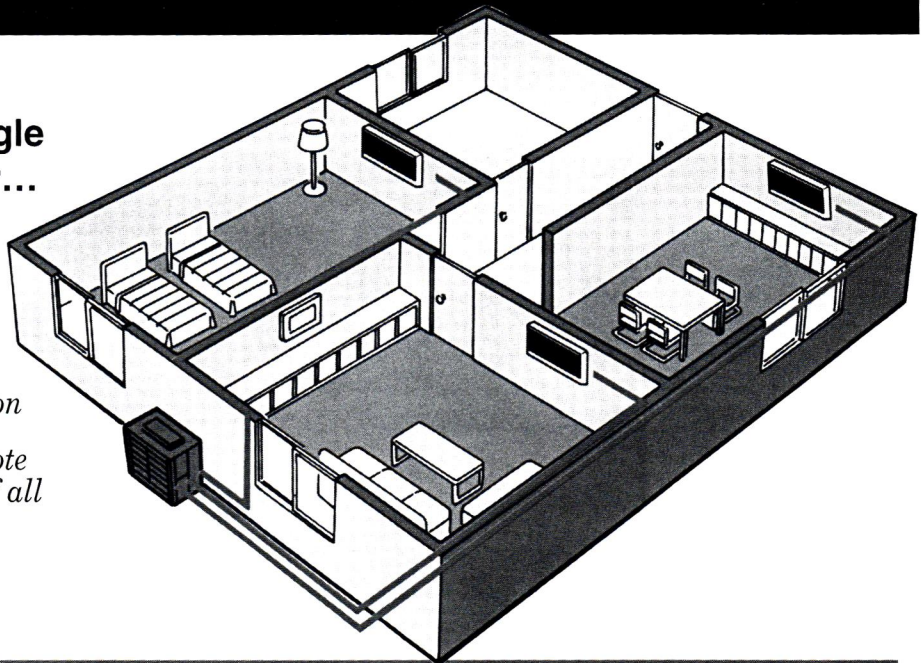
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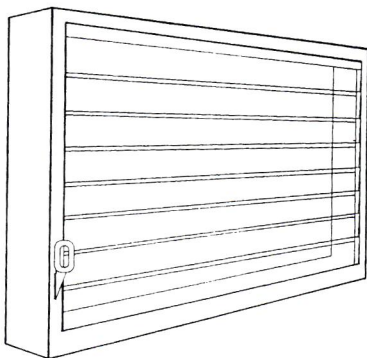
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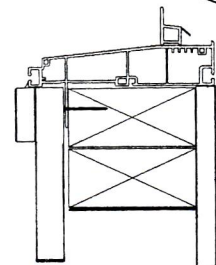
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Between graduation and licensure

Bridging the Gap

by Puanani Maunu

As architecture school graduates leave the hallowed halls of education and eagerly begin the internship process, many come to the shocking realization that the professional world is different from the academic world. There is a gap between architectural education and architectural practice.

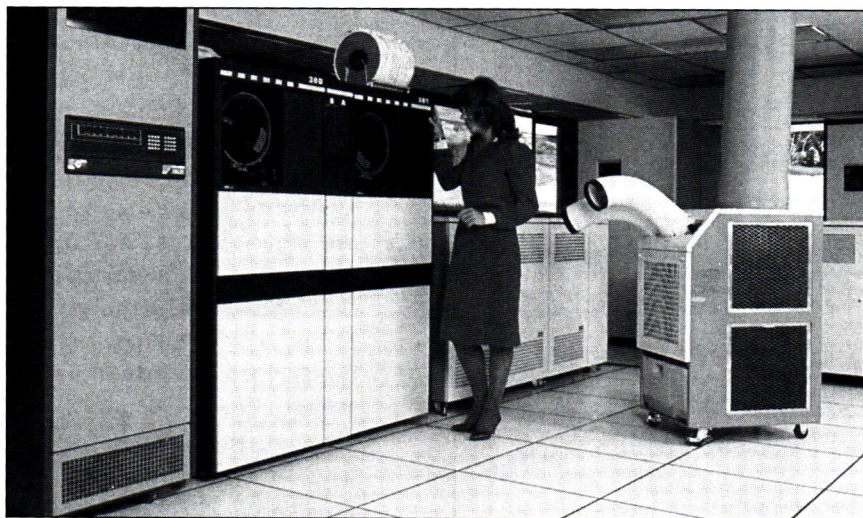
Many recent graduates and new interns fall into this nebulous chasm and become lost in the three-year period between graduation and licensure. Students graduate full

of ideas, knowledge, optimism and love for architecture, only to be faced with the harsh reality of the real world. As a recent architecture school graduate said, "Stay in school as long as you can, it's really tough out here. It's a dog-eat-dog world."

How then do we interface academia with the real world? How do students and recent graduates integrate concepts and theories learned in school with professional practice?

The answer appears to be simple. The internship process and the technical appren-

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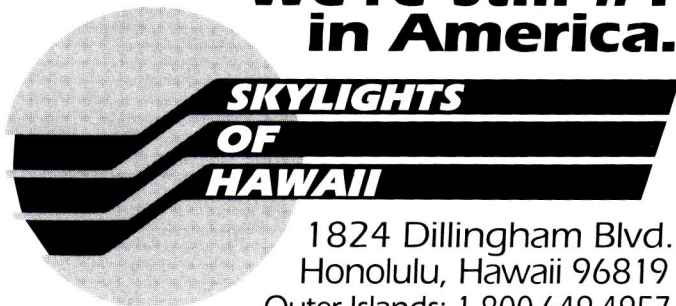
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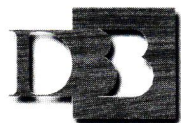
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ticeships in professional practice should become an integral part of the architectural curriculum. Students of architecture should also be students in a professional setting, an office or construction environment, learning what cannot be taught in an academic setting. Relationships between time and cost-effectiveness, bidding the preliminary design process or even working with a client in reaching the best possible solution in architecture must be ascertained.

It need not be a one-way street. Students are kept apprised of new materials and techniques and contemporary trends and ideas in this rapidly changing world, which can be shared in the workplace. There can be a genuine sharing of experience, of problem solving in the studio environment and the application of solutions in practice.

To integrate professional practice into the academic curriculum will take a concerted effort involving the professional community and the UH School of Architecture. Hawaii is the ideal place to initiate this change. The ratio of registered architects to architecture students is approximately four to one. Architects are interested and involved in the future of this community. Knowledge is passed on through experience which is the best teacher.

A small beginning was initiated during the fall of 1993. The School of Architecture began a pilot project that involved principals from several firms working on a one-to-one basis with students in the 361 studio level. Students visited various architecture firms ranging from large to small and discussed the physical layout and philosophical objectives of the firms.

The first project was to design an architect's office. Principals worked with students throughout the semester, reviewing programs and participating on juries. The pilot project was expanded to include the 202 and 302 level studios in the spring 1994 semester.

Other professional schools, such as the School of Medicine, require internship experience (similar to internship before taking the Architectural Registration Exam, A.R.E.) before graduation. The internship process begins in the first week of medical school. A medical student graduates as an M.D. A student of law may take the law exams almost immediately after graduation, enabling recent graduates to practice their profession without delay.

Currently, architecture graduates must intern for a minimum of three years before taking the A.R.E. In June 1993, only 15 percent of students taking the exam passed all portions of it. Most parts of the exam have a passing rate of 50 percent or better. Although this is not an accurate representation of architecture school graduates because it represents all candidates taking the exam, it nevertheless paints a bleak picture for licensure.

Integrating the internship process into the architectural curriculum would allow graduates to take the A.R.E. sooner, while detailed academic knowledge and application of the broad base of architecture is still "fresh" in their minds.

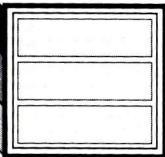
The interface of academic education and professional practice, of classroom theories and practical application, will give the student a well-rounded view of architecture. Vital connections between theories and real situations, reading and experiencing or studio project deadlines and real time-cost constraints, can be linked with the educational process through actual experience.

An ongoing relationship between students and professionals will increase the profession's overall knowledge, which will contribute approach and commitment to moving Hawaii forward, with excellence, into the 21st century.

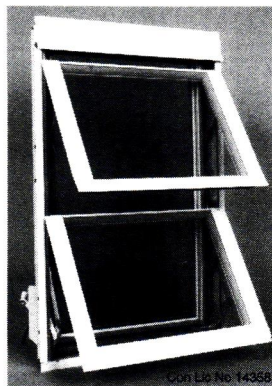
♦ Puanani Maunu, past president, American Institute of Architectural Students, graduated from the University of Hawaii in May 1994 with a master's degree in architecture.

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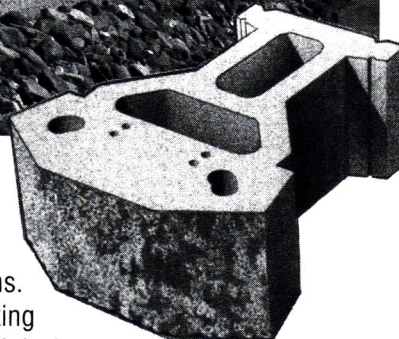
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Building on a history of innovation in refrigeration products, GE Appliance has introduced the industry's largest freestanding refrigerator available to the consumer today. The new GE Profile 30 side-by-side refrigerator with 30 cubic feet of storage space fits into a standard 36-inch wide cabinet area.

The Profile 30 can hold at least four more bags of groceries than the current GE 27-cubic-foot model without taking up even an inch of

extra space, Bucci said.

The fresh food door of the Profile 30 is designed with larger bins to stand up to heavy storage loads. The fully adjustable door bins are the industry's largest—9 inches deep and wide enough to store a 24-pack of soda.

Interior shelving in the fresh food side provides also storage flexibility. The wide glass shelves are adjustable and two of the four shelves slide out to provide quick access to food. These slide-out shelves are designed to contain spills.

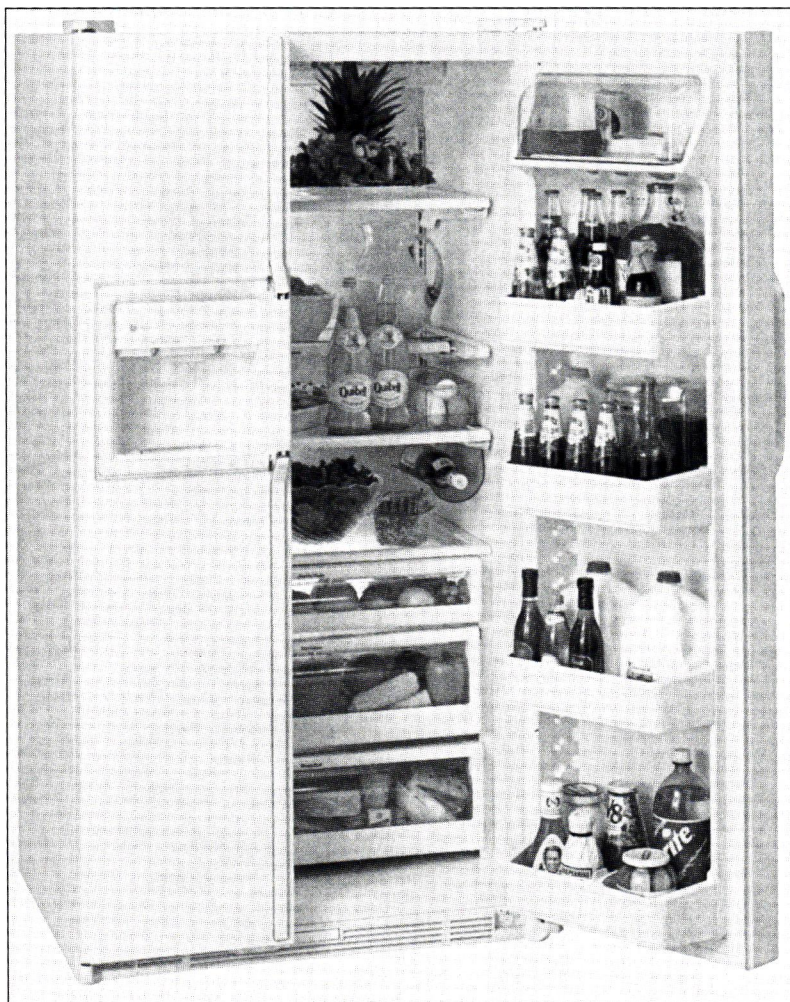
The Profile 30 features a Quick Space shelf that can be fully extended to store platters or retracted for storage of tall items on the shelf below.

Also in the fresh food side is the triple pan Smart Storage System, for storage of climate-sensitive produce. The pans feature adjustable humidity on two and adjustable temperature on the third.

The Profile 30 offers the industry's largest freezer capacity with 12 cubic feet. With an innovative approach to space in the freezer, the section has two adjustable, cantilever baskets—an industry first—and one adjustable wire shelf. Freezer baskets slide out to provide quick access to items stored near the back or under other items.

The Profile 30 also features a custom ice and water dispenser with a soft pad rather than the more traditional hard level to activate service. This design allows consumers to use even delicate crystal to get chilled water.

Designed for contemporary appeal, the refrigerator features rounded door edges and color-matched exterior. The Profile 30 is offered in three monochromatic colors: white-on-white, black-on-black and almond-on-almond. The refrigerator also exceeds federal energy-efficiency standards by 15 percent.



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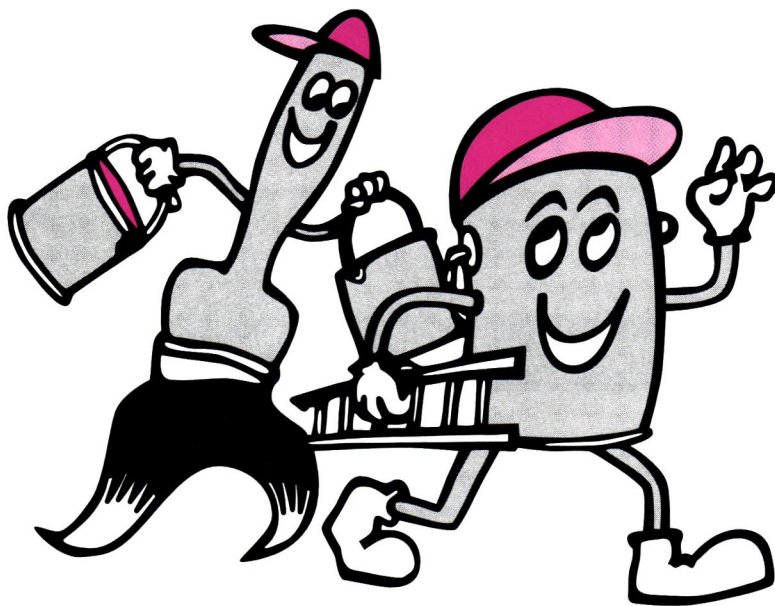
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Turner Named Managing Editor

Amye Howell Turner was recently appointed managing editor for *Hawaii Pacific Architecture* by Peggi Marshall Murchison, publisher, PMP Company, Ltd.



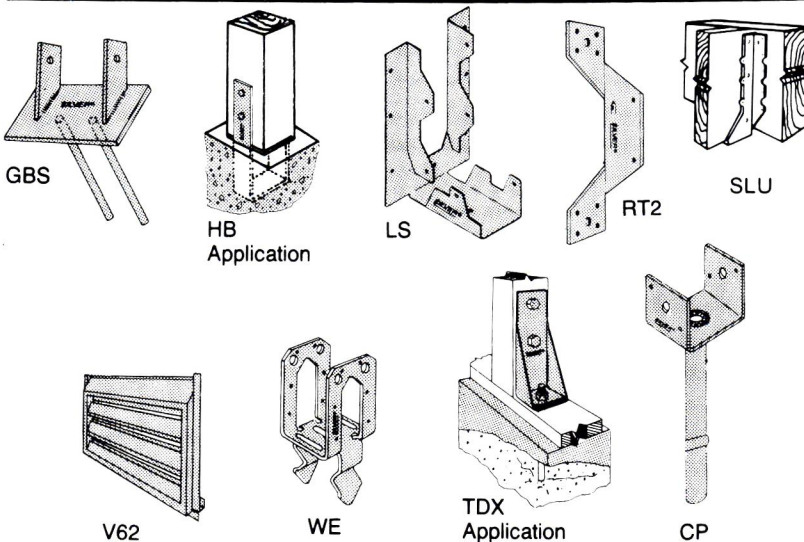
Turner joined PMP Company in March 1994 as an editorial assistant for the community and professional publications' divisions.

She has a bachelor of science degree in agricultural communications from Mississippi State University and a master of science degree in mass communications from Kansas State University.

Turner is also managing editor for the *Hawaii Realtor Journal*.

Originally from Mississippi, she moved to Hawaii last year with her husband, Richard.

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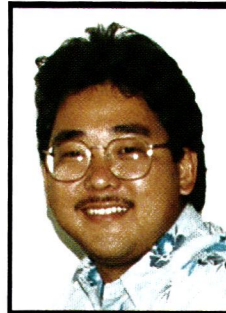
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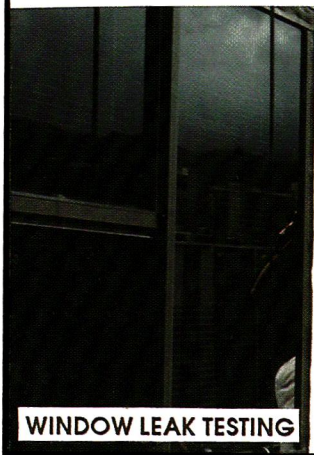


Heading a team of over 40 technicians are left to right:
Alvin Nishikawa, Ken Matsumura, John Kobayashi,
Al Gardner, Steve Kramer, and Jim Hiramatsu

Meet Alvin Nishikawa.



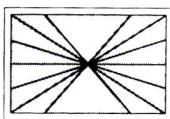
Alvin is Vice President of The American Coating Company. He is in charge of all field and estimating operations. Previously, Alvin was employed with an engineering firm in Chicago and Honolulu where he focused primarily on restoration and water infiltration problems. Alvin holds a M.S. and B.S. in Engineering from Purdue University.



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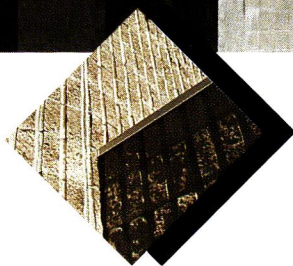
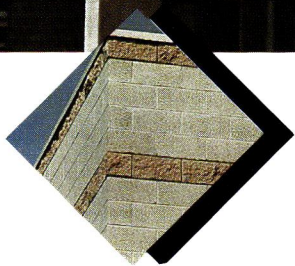
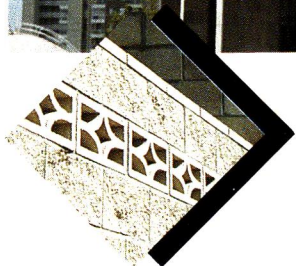
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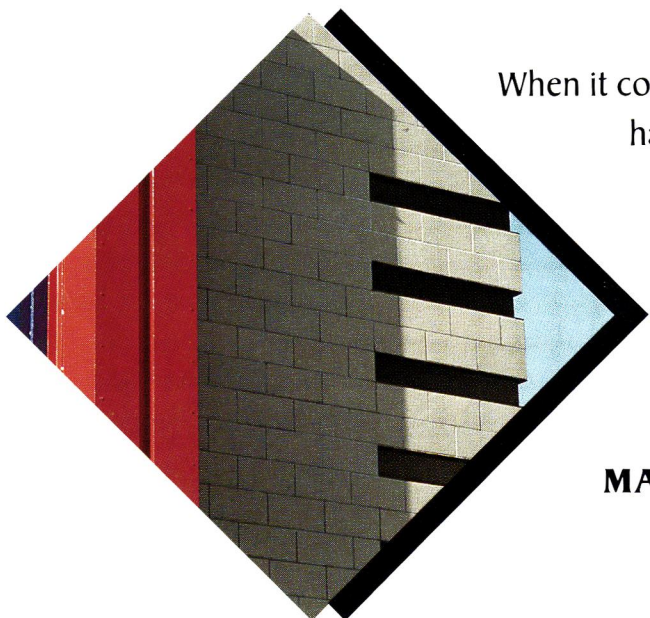
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