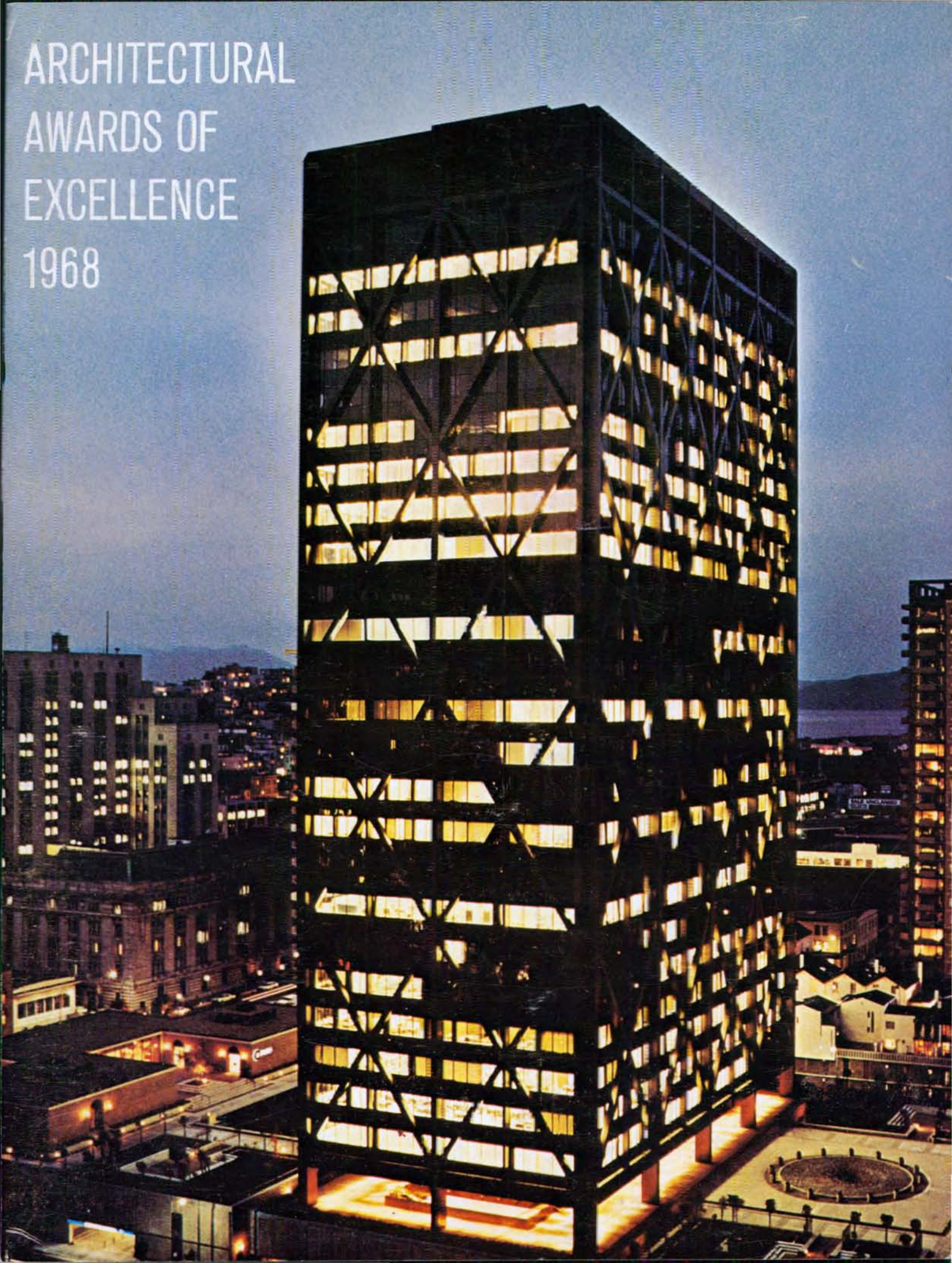
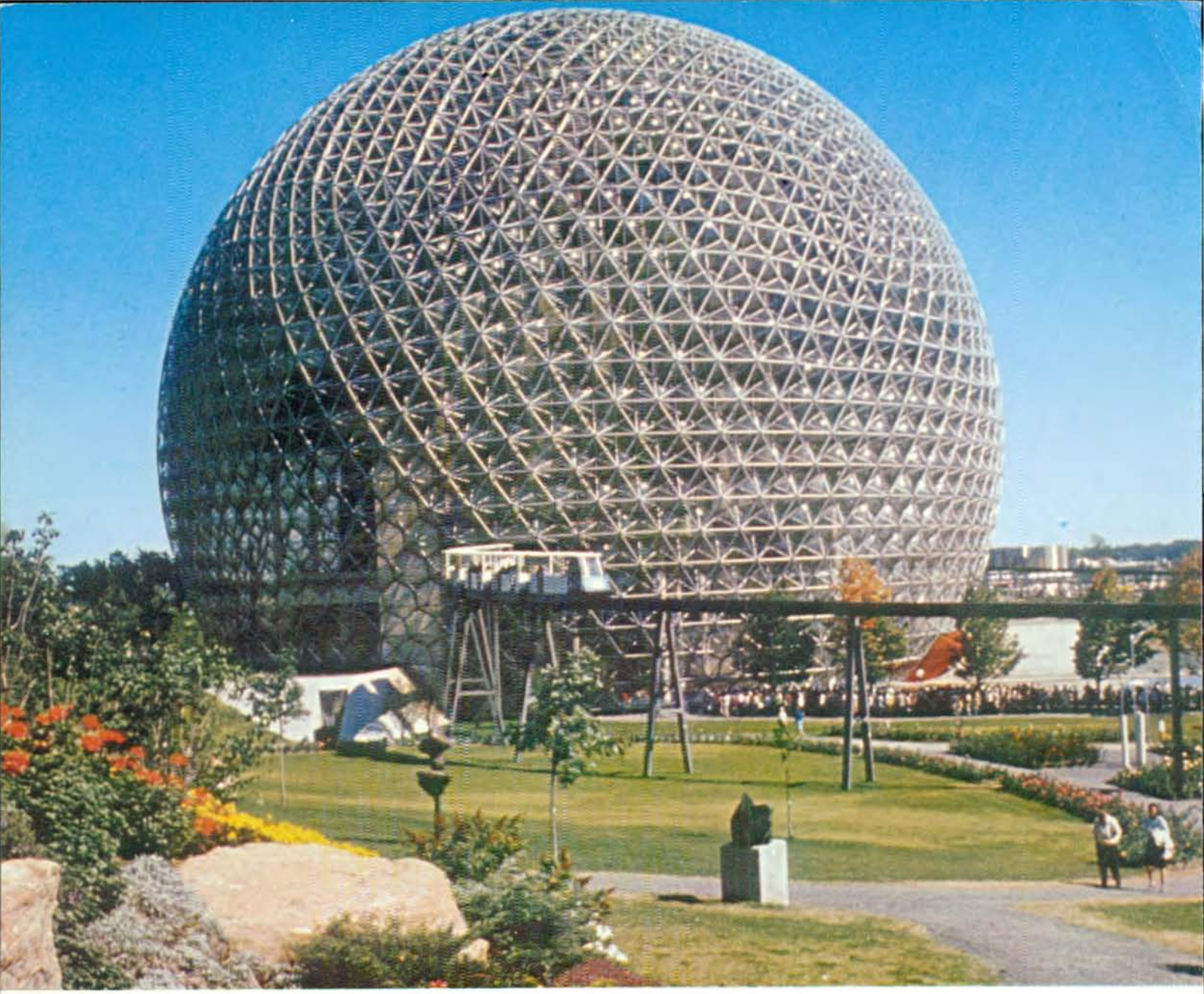
ARCHITECTURAL AWARDS OF EXCELLENCE 1968





SPECIAL AWARD FOR EXCELLENCE

The United States Pavilion at EXPO '67 has been named by AISC for a Special Award of Excellence as an "outstanding achievement in technology and aesthetics." In honoring the Pavilion, the AISC Board of Directors pays tribute to the imagination and skill of the men who conceived, designed, and built this unique and exciting structure.

ARCHITECTS R. Buckminster Fuller, Cambridge, Massachusetts
Fuller and Sadao, Inc., Cambridge, Massachusetts
Geometrics, Inc., Cambridge Massachusetts
George F. Eber (Canadian Associate Architect), Toronto, Canada

Structural Engineer Simpson, Gumpertz and Heger, Inc., Cambridge, Massachusetts

General Contractor George A. Fuller Company, Dallas, Texas

Steel Fabricators Bliss Portland, South Portland, Maine
Atlantic Steel Castings Company, Chester, Pennsylvania

Owner United States Information Agency, Washington, D. C.

1968
ARCHITECTURAL AWARDS OF EXCELLENCE

THE ARCHITECTS COLLABORATIVE, INC.
CAMPBELL, ALDRICH & NULTY (Associate Architects)
C. Thurston Chase Learning Center of Eaglebrook School

DANIEL, MANN, JOHNSON & MENDENHALL
Manufacturing and Research Facility for Teledyne Systems Company

HENRY ELDEN & ASSOCIATES
Toporock Studio-Residence

DAVID HAID
Abraham Lincoln Oasis

HAMMEL, GREEN AND ABRAHAMSON, INC.
Enclosed Elevated Concourse

HONNOLD AND REX, ARCHITECTS
Los Angeles Federal Savings and Loan

MACKINLAY / WINNACKER & ASSOCIATES
Syntex Interim Facilities

PAUL R. NEEL, AIA (ADVISOR) AND STUDENTS, SCHOOL OF ARCHITECTURE, CALIFORNIA STATE POLYTECHNIC COLLEGE
Steel Bridge Studio

NORDSTROM-SAMSON ASSOCIATES
Ford Automotive Safety Center

SIMPSON, STRATTA & ASSOCIATES
Fairchild Semiconductor Headquarters Building

SKIDMORE, OWINGS & MERRILL
Alcoa Building

SKIDMORE, OWINGS & MERRILL
Lindheimer Astronomical Research Center

TODD-TACKETT-LACY, ARCHITECTS & PLANNING CONSULTANTS
Superior Oil Company Geophysical Laboratory

F. CARTER WILLIAMS
Minges Coliseum

WILSON, MORRIS, CRAIN & ANDERSON
Bank of Houston

L to r.: Severud, Winsor, Krusé, Adley, Hurst

JURY OF AWARDS

HARRY C. ADLEY, AIP
President, Adley Associates, Inc., Urban Planners, Atlanta, Georgia

SAM T. HURST, FAIA
Dean, School of Architecture and Fine Arts
University of California, Los Angeles, California

H. SAMUEL KRUSÉ, FAIA
Director, Florida Region AIA
Watson, Deutschman & Krusé, Architects and Engineers
Miami, Florida

FRED N. SEVERUD, F.ASCE
Partner, Severud-Perrone-Sturm-Conlin-Bandel, Consulting Engineers
New York, New York

WAYNE R. WINSOR, AIA
President, Ellerbe Architects, St. Paul, Minnesota

BEAUTY IN STEEL BUILDINGS

The Architectural Awards of Excellence were established by the American Institute of Steel Construction in 1960 to recognize and honor outstanding architectural design in structural steel and to encourage further exploration of the many aesthetic possibilities that are inherent in steel construction. This year a distinguished jury named fifteen buildings for Architectural Awards of Excellence.

In the opinion of the AISC Committee on Awards, each building represents design of the highest standards, and all Awards in each class are equal in stature. The Award-winning architects are listed on the following pages with pictures of the buildings for which they received commendation.

The jury was particularly looking for the utilization of structural steel for its maximum architectural potential, and the jurors chose these buildings as outstanding examples of aesthetic leadership and direction. The architects used standard framing methods in many cases, but they used them superlatively. The successful use of steel requires a stringent attention to detail and orderliness in design. That this quality is not a restriction is demonstrated by the Award winners.

The Institute is most gratified by the enthusiastic response to the Architectural Awards of Excellence program.

ARCHITECTS The Architects Collaborative, Inc., Cambridge, Massachusetts
Campbell, Aldrich & Nulty (Associate Architects), Boston, Massachusetts

C. THURSTON CHASE LEARNING CENTER OF EAGLEBROOK SCHOOL,
Deerfield, Massachusetts

Structural Engineer Souza and True, Cambridge, Massachusetts
General Contractor George B. H. Macomber Company, Allston, Massachusetts
Steel Fabricator West End Iron Works, Cambridge, Massachusetts
Owner Eaglebrook School, Deerfield, Massachusetts

ARCHITECTURAL DESCRIPTION This three building complex, which accommodates less than 180 students, includes a classroom building linked with an assembly hall-library and a separate science building with planetarium. The buildings are located on a steep slope and are designed to retain the intimate character of the existing buildings. Construction is exposed steel columns and beams with brick walls and concrete floors.

The shape of the roofs — pitched at the edge of a parapet around the central part of the roof — gives the possibility of skylight and clerestory in the classroom building, skylight and mezzanine in the library, and room for the planetarium in the science building.

JURORS' COMMENTS

Steel and masonry are used well together to create a warm environment for learning that maintains the human scale and avoids an institutional feeling.

ARCHITECT-ENGINEER Daniel, Mann, Johnson & Mendenhall, Los Angeles, California

MANUFACTURING AND RESEARCH FACILITY FOR TELEDYNE SYSTEMS COMPANY, Northridge, California

General Contractor Oltmans Construction Company, Monterey Park, California
Steel Fabricator Riverside Steel Construction, Santa Fe Springs, California
Owner Teledyne Systems Company, Northridge, California

ARCHITECTURAL DESCRIPTION Teledyne required a complex to house all functions of its company. The architectural solution is comprised of several structures arranged along a main corridor. This open ended linear organization allows for individual expansion of the separate functional areas and for the addition of new elements to the central corridor spine.

The building was designed as a steel frame structure on friction pile foundations. Structural steel columns and girders are on bays of 36 feet x 48 feet and 36 feet x 60 feet. The girders support open web steel joists that carry a metal roof decking. The corridor balcony is held on one side by columns and on the other by tension members hung from the roof. In the high bay helicopter mock-up room, the 96-foot clear spans are achieved by three-dimensional steel V-trusses.

JURORS' COMMENTS

This building successfully combines space and function in a cohesive complex. It provides a feeling of openness to the outside and relates nicely to its environment.

ARCHITECT Henry Elden & Associates, Charleston, West Virginia

TOPOROCK STUDIO-RESIDENCE, Charleston, West Virginia

Structural Engineer W. C. Haworth, Charleston, West Virginia
General Contractor Henry T. Elden, Charleston, West Virginia
Steel Fabricator West Virginia Steel Corporation, Charleston, West Virginia
Owners Mr. & Mrs. Henry T. Elden, Charleston, West Virginia

ARCHITECTURAL DESCRIPTION Perched on a wooded cliff, this studio/residence overlooks city, river and rocky terrain. The two-story circular all-glass living room is cantilevered from a central pedestal and encircled by a wood deck. Extending from the living room, the living quarters wind around a rocky knoll and interlock with the studio, a circular form approximately twice the diameter of the living room. The studio's roofline continues that of the residence, but its location on a steep rock cliff allows the addition of two floors below those of the house.

The entire project is framed with lightweight junior beams and tubular steel. Steel was used since it allowed for an all-exposed structure as well as permitting the use of smaller members than could have been employed with any other material. The roof of the cantilevered living room is held in place by a tension ring, eliminating the need for a central column. The central column in the studio serves structurally and provides the flue for the gas fired boiler.

JURORS' COMMENTS

This is an interesting and practical solution for a residence on rough terrain and on a steep hill. The light steel frame blends very well with the rugged slope and the open design preserves the beauty of the site and the surrounding scenery.

JURORS' COMMENTS

This is a handsome utilitarian structure designed with a very straightforward structural steel system. Both the substructure and the foundation are well proportioned and the varied functions of the service area are skillfully integrated.

ARCHITECT David Haid, Chicago, Illinois

ABRAHAM LINCOLN OASIS, South Holland, Illinois

Structural Engineer Wiesinger-Holland, Chicago, Illinois
General Contractor Leo Michuda & Son Co., Chicago, Illinois
Steel Fabricator Allied Structural Steel Company, Hammond, Indiana
Owner The Illinois State Toll Highway Commission, Oak Brook, Illinois

ARCHITECTURAL DESCRIPTION The program for a highway service area required a restaurant and automobile and truck service facilities serving east and westbound traffic. The project was developed with the restaurant building spanning the six lane highway, entered from either end, and service stations with roofed-over pump island areas on the north and south sides of the site. Additionally, extensive landscaping served to provide an atmosphere of rest from the monotony of superhighway travel.

The restaurant building is a weathering steel structure, 225 feet x 90 feet, enclosed with bronze-tinted plate glass. Welded plate girders span 135 feet over the roadway, then cantilever 45 feet beyond the columns at each end. Welded trusses span the 90 feet between the girders. The interior is completely column free. Two service stations and the roofed-over pump island areas (26 feet x 255 feet) are also steel-framed. A single line of steel columns, 34 feet on center, support the pump island roofs.

ARCHITECT Hammel, Green and Abrahamson, Inc., Saint Paul, Minnesota

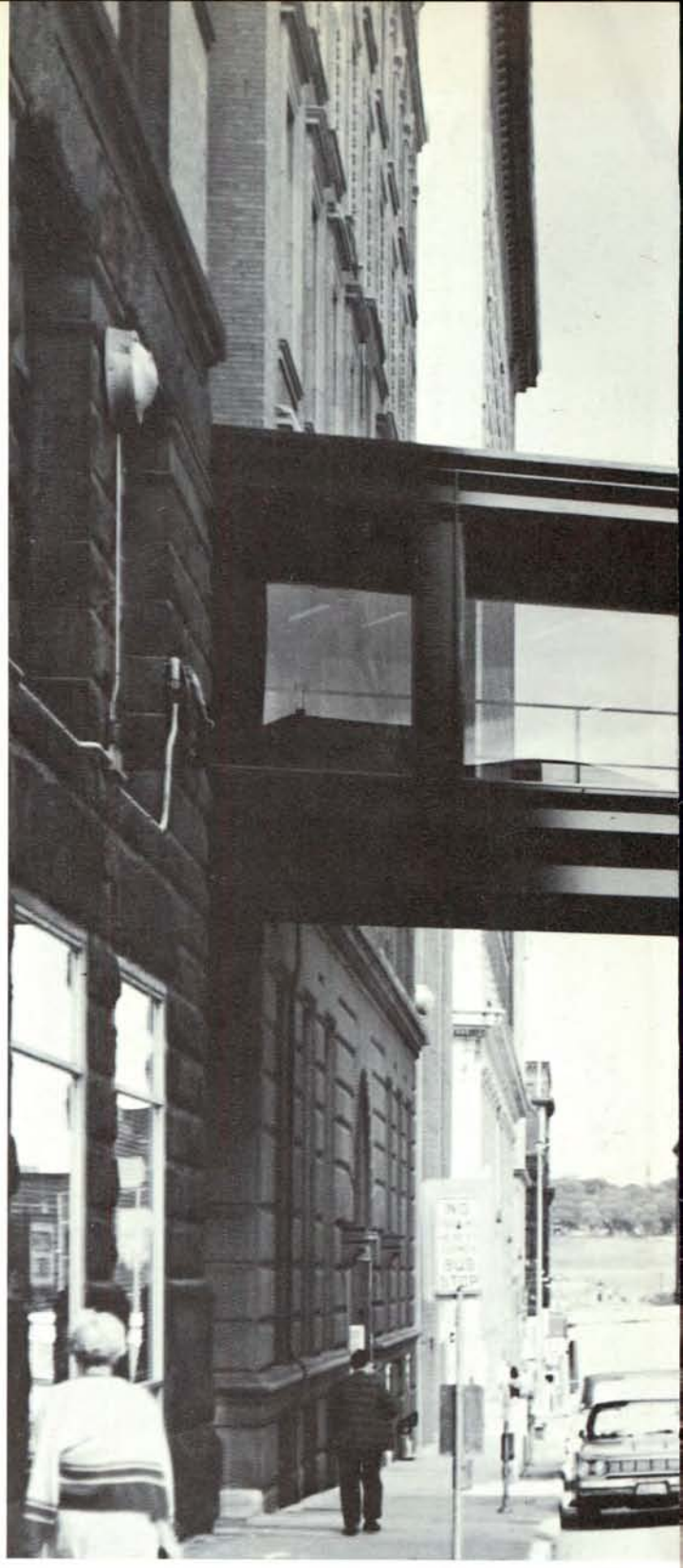
ENCLOSED ELEVATED CONCOURSE,
Saint Paul, Minnesota

Structural Engineer Johnston and Sahlman, Minneapolis, Minnesota
General Contractor Shelgren Construction, Saint Paul, Minnesota
Steel Fabricator Paper, Calmenson & Company, Saint Paul, Minnesota
Owner Housing and Redevelopment Authority of the City of Saint Paul, Saint Paul, Minnesota

ARCHITECTURAL DESCRIPTION This is the first pedestrian bridge of an integrated system of bridges and concourses planned for an urban renewal project in downtown Saint Paul. These "Skyway" bridges will span existing streets and the concourses will pass through new and existing buildings.

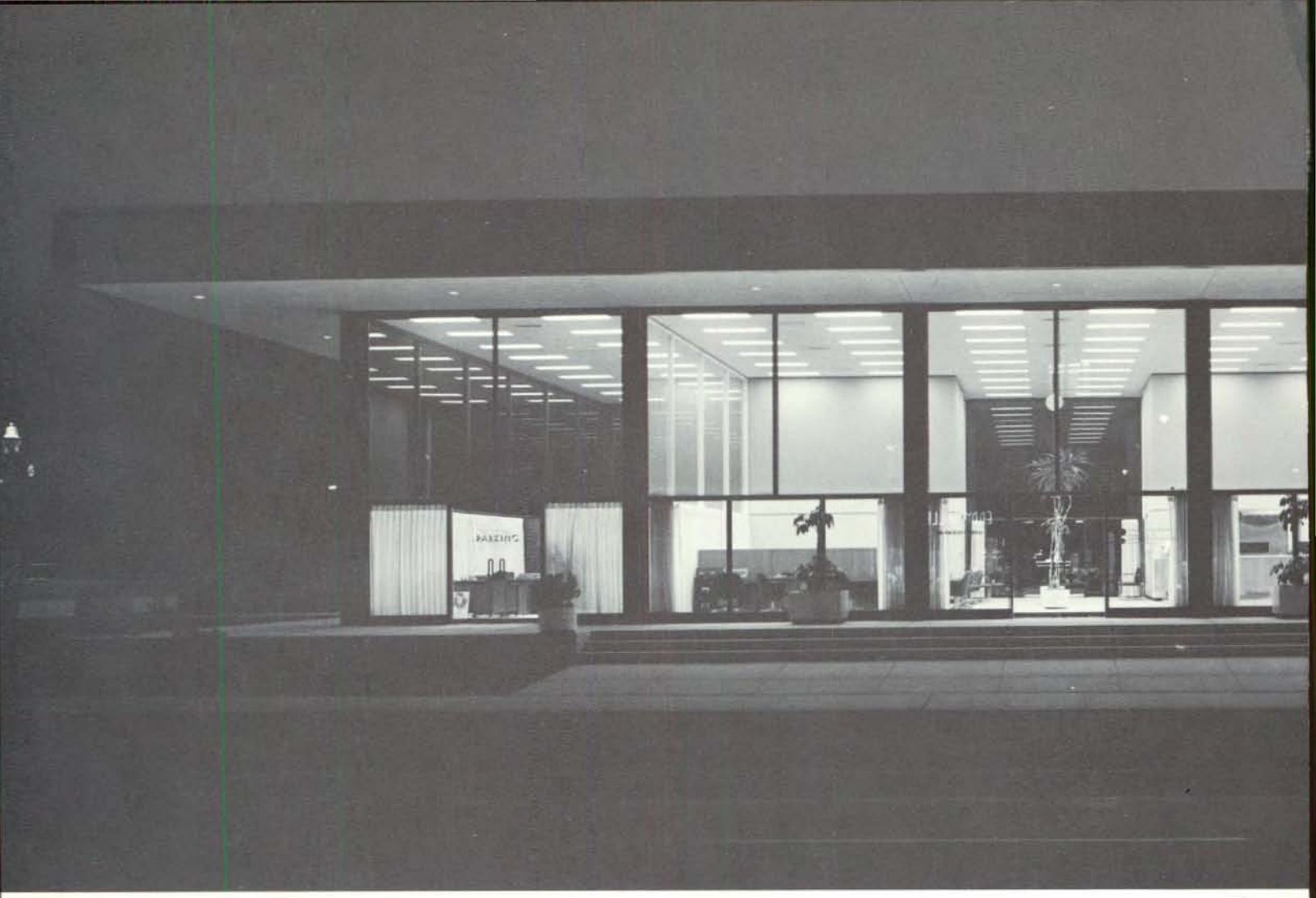
Structural steel was chosen as the most logical material for construction because of the length of the span and the relationship to other steel elements on the streets such as light posts, signs, traffic lights, and street furniture. Additionally, steel is the material that would best adapt to the variety of conditions where the various bridges meet existing buildings of many materials.

Basically, the bridge consists of steel Vierendeel trusses spanning 73 feet. The bridge is glazed with bronze plate set in neoprene gaskets. All steel is painted dark brown.



JURORS' COMMENTS

This enclosed elevated concourse is very neatly detailed and is quite handsome. It has great significance as part of a system that will be used increasingly for pedestrian circulation across streets in downtown areas. The excellence of its design establishes an admirable precedent for future structures of this type.



ARCHITECT Honnold and Rex, Architects (Sam Carson, Chief Design Architect), Los Angeles, California

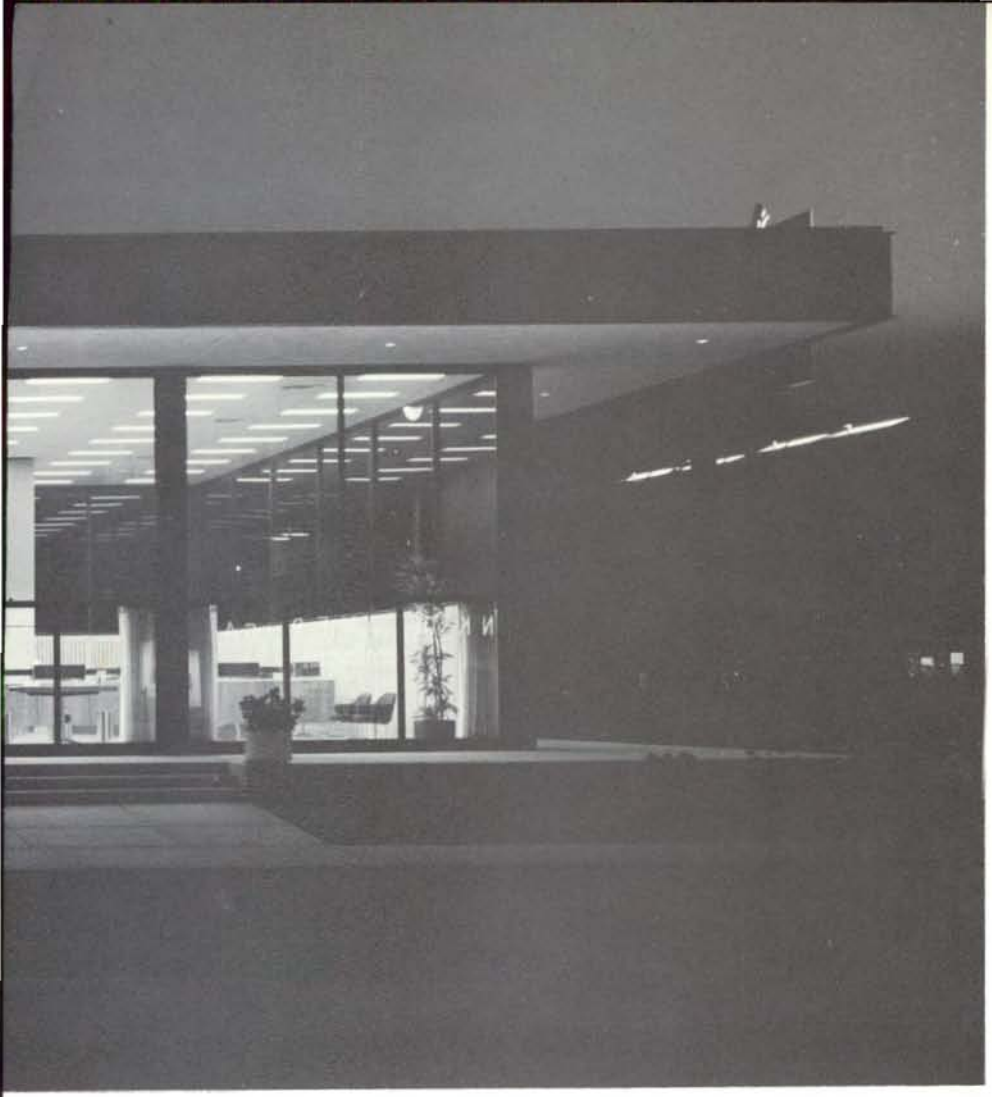
LOS ANGELES FEDERAL SAVINGS AND LOAN, Los Angeles, California

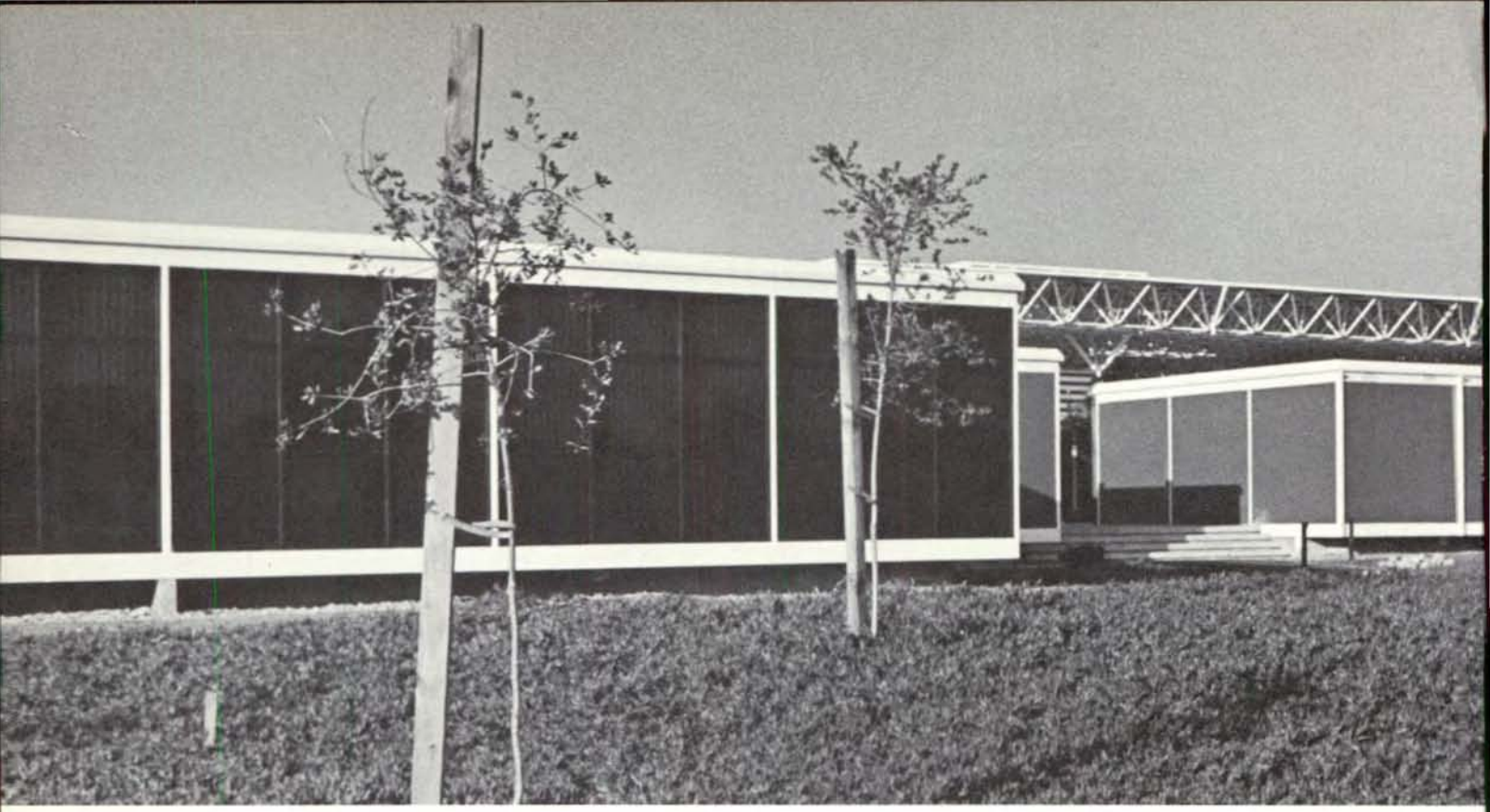
Structural Engineer Greve and O'Rourke, Consulting Structural Engineers, Los Angeles, California
General Contractor Kemp Bros., Whittier, California
Steel Fabricator Steg Iron Works, North Hollywood, California
Owner Los Angeles Federal Savings and Loan, Los Angeles, California

ARCHITECTURAL DESCRIPTION One of the major architectural considerations was that this building present to the public an image which is open and inviting. For reasons of economy and aesthetics it was decided to use steel framing. The structural frame was left exposed and painted a dark charcoal brown, while glare reducing glass fills the area between columns. There is a generous roof overhang. The ceiling is plaster with a fluorescent light fixture in every 5 foot-6 inch module. The air conditioning system is located in depressed roof wells, over the core areas. The enclosed area is approximately 4,000 square feet.

JURORS' COMMENTS

This is an attractive and skillful use of exposed structural steel framing. The building is carefully detailed and is well organized.





ARCHITECT Mackinlay/Winnacker & Associates, Orinda, California

SYNTEX INTERIM FACILITIES, Palo Alto, California

Structural Engineer Pregnoff & Matheu, Palo Alto, California
General Contractor Syntex Laboratories, Inc., Palo Alto, California
Steel Fabricators Designed Facilities Corporation, El Monte, California
Unistrut Corporation, Wayne, Michigan
Unistrut Northern California, Berkeley, California
Owner Syntex Laboratories, Inc., Palo Alto, California

ARCHITECTURAL DESCRIPTION This administrative facility was designed to provide an interim space for use until permanent construction could be completed. The requirements were that the temporary facility meet the aesthetic and environmental standards necessary in the industrial park where the project was to be built.

The four buildings comprise 23,000 square feet of space in two office buildings, a cafeteria, and a conference/training center.

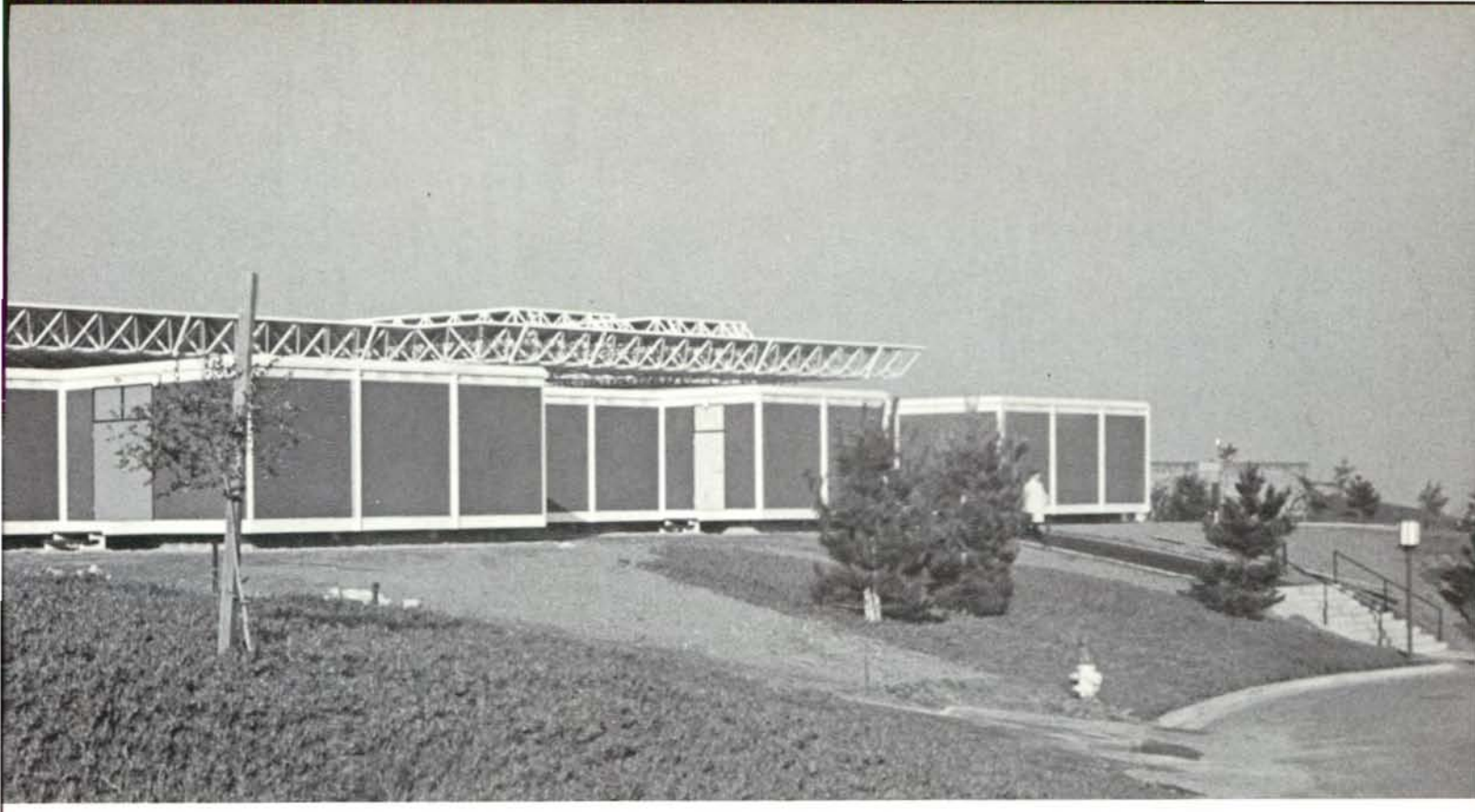
A critical path network was formulated which allowed the design and construction of the footings and mechanical and utility work while the modules were being manufactured at another location. The modules were then moved and lifted by crane onto the finished construction.

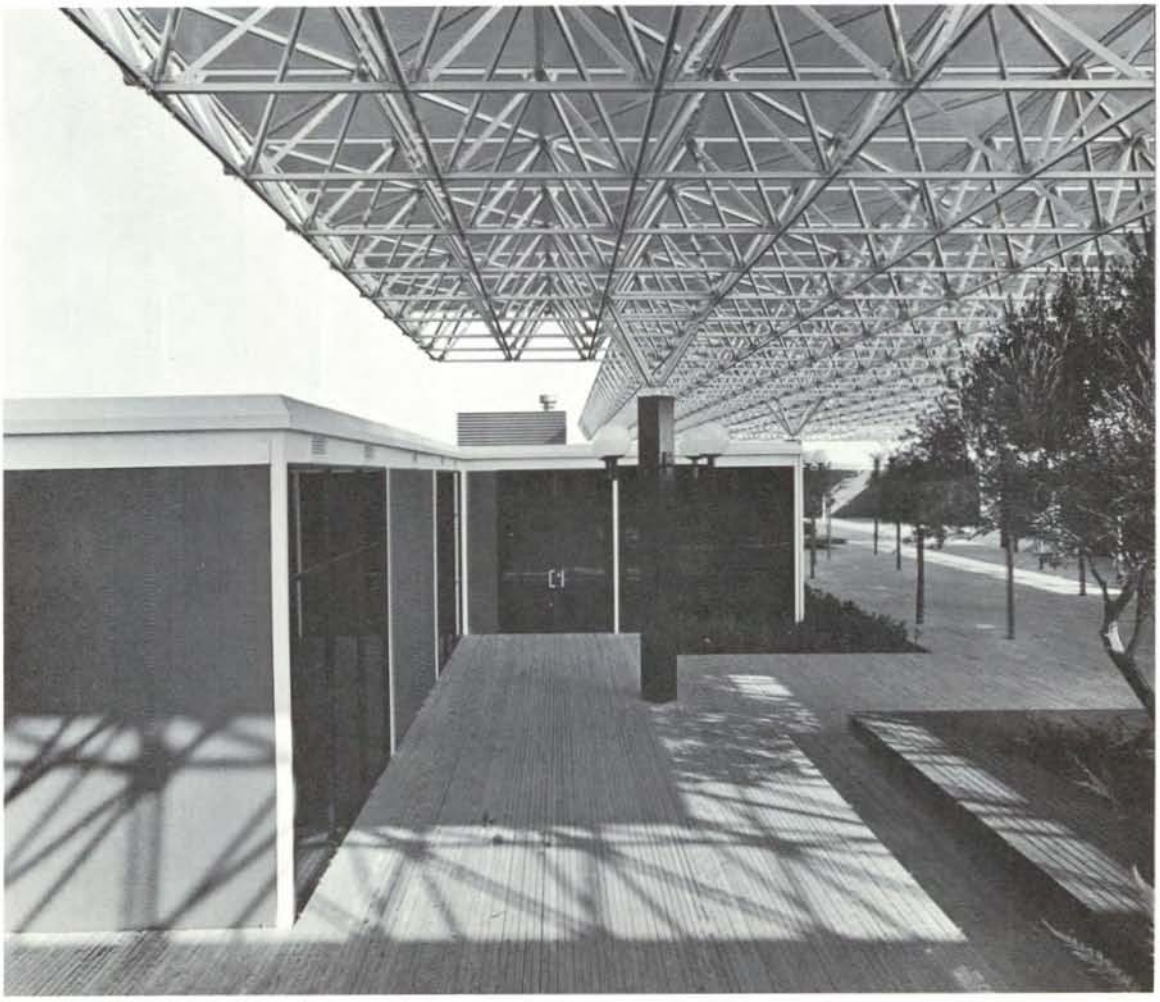
A plexiglass covered space frame protects the Mall from rain and the hot summer sun and affords an interesting visual enclosure to the Mall. The unique structural characteristics of the space frame permitted the architects to position the columns where they best suited traffic flow.

By use of these two types of steel-structured products — portable, prefabricated units and the space frame — a practical and aesthetic temporary facility was provided very quickly. When the permanent facilities are constructed, this entire interim facility, with the exception of the footings, can be disassembled and sold or moved to another site.

JURORS' COMMENTS

This temporary facility is a very valid use of steel and shows it. It is a delightful exposition of wood and steel, very sensibly done.





ARCHITECTS Paul R. Neel, AIA (Advisor) and Students, School of Architecture, California State Polytechnic College, San Luis Obispo, California

STEEL BRIDGE STUDIO, San Luis Obispo, California

Students involved in design and engineering (1966)
Ronald Davena / Joel Dean / Robert Garlow / Ray Hilken / Lui Horstmeyer / James January / Lloyd Suehiro

Students involved in design and construction (1967-1968)
Kurt Holder / Bruce Campbell / Thomas Matlock / Thomas Palmer / Larry Stricker

Steel Fabricator Kaiser Steel Corporation, Oakland, California

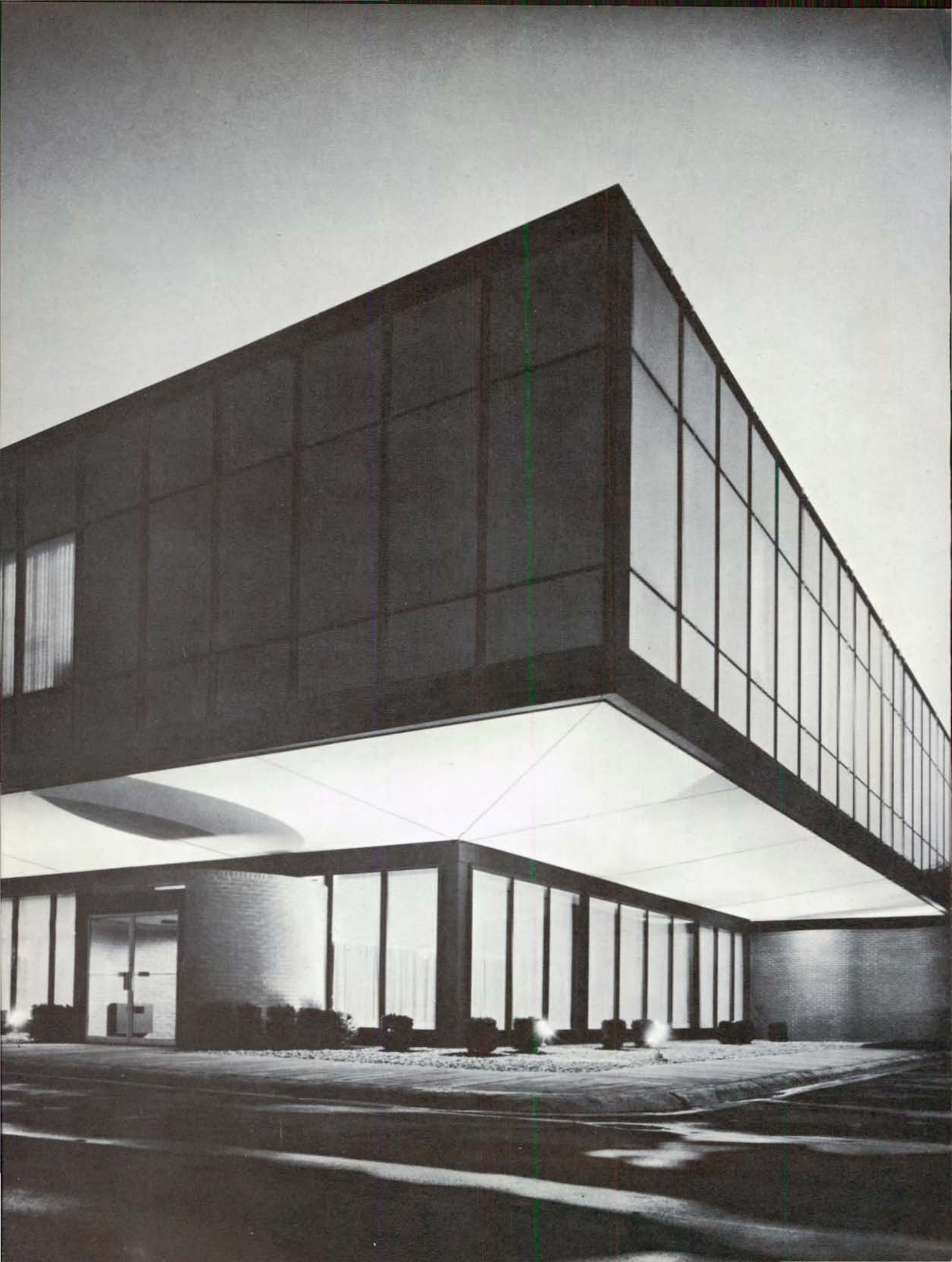
Owner California State Polytechnic College, San Luis Obispo, California

ARCHITECTURAL DESCRIPTION This steel bridge house, erected on a difficult site at a minimum budget, is an experimental effort of a group of California Polytechnic architectural students and their advisor.

The house is composed of two flat trusses which are used as exterior walls in the long direction. The purlins between the trusses provide the support for the floor and ceiling. Weathering steel was chosen for its strength and economy. Diagonals were added in each bay to form a truss which serves as an aesthetic element as well as a structural member. The interior is unobstructed. Expansion can be attained by removing one of the walls and adding a truss which is a segment of identical configuration to the existing structure.

JURORS' COMMENTS

This unique experimental building designed by students demonstrates effective use of a difficult site. The solution is imaginatively simple. The weathering steel frame blends well with the rough terrain.



ARCHITECT-ENGINEER Nordstrom-Samson Associates, Dearborn, Michigan

FORD AUTOMOTIVE SAFETY CENTER, Dearborn, Michigan

General Contractor Walter L. Couse & Co., Detroit, Michigan
Steel Fabricator Freedland Structural Steel Company, Livonia, Michigan
Owner Ford Motor Company, Dearborn, Michigan

ARCHITECTURAL DESCRIPTION This building is the world's first facility devoted exclusively to auto safety research. Designed to blend with the existing colonial style surrounding buildings, this 40,000 square foot steel, brick, and glass structure features a serpentine brick wall that serves as an interior wall for the lobby and conference auditorium, as well as a screen for parking and for traffic to the adjoining vehicle safety garage.

Since second-floor office space requirements were greater than those of the first floor lobby area, a cantilever was employed. The cantilevered second floor, faced with gold laminated glass in finely designed steel framing, solved the space differential problem. Steel was also employed in the design of the Center's 200-seat Conference Room, which features an undulating ceiling that provides excellent acoustical and aesthetic value.

JURORS' COMMENTS

The architect has effectively used counterpoint to combine the strong discipline of this building with the soft form of a serpentine brick wall which pleasantly extends the building into the landscape. The use of materials is very skillful and very simple. The result is truly twentieth century.

ARCHITECT-ENGINEER Simpson, Stratta & Associates, San Francisco, California

FAIRCHILD SEMICONDUCTOR HEADQUARTERS BUILDING, Mountain View, California

General Contractor Johnson & Mape Construction Company, Menlo Park, California
Steel Fabricator Pittsburgh-Des Moines Steel Company, Fittsburgh, Pennsylvania
Owner Fairchild Semiconductor, A Division of Fairchild Camera and Instrument Corporation Mountain View, California

ARCHITECTURAL DESCRIPTION Fairchild required a building with a minimum amount of structural elements and maximum flexibility electrically and mechanically for future subdivision and rearrangement of various spaces. The solution was a three-story building consisting of a basement containing shop and storage areas and two floors of offices and laboratories. A center core extending from the basement to above the roof contains mechanical and electrical equipment and permanent facilities such as rest rooms and lounges.

A structural steel frame with cellular metal floor deck provides large open areas with maximum electrical flexibility. A system of weathering steel members to support vertical dark-tinted plastic panels and horizontal weathering steel louvers allows complete sun control with an expressive design element homogeneous to the building structure.

JURORS' COMMENTS

This is a handsome structure. It nicely combines light and shade in interesting variety. The weathering steel exterior, the fine development of the base, and its excellent landscaping combine to make this an outstanding building.

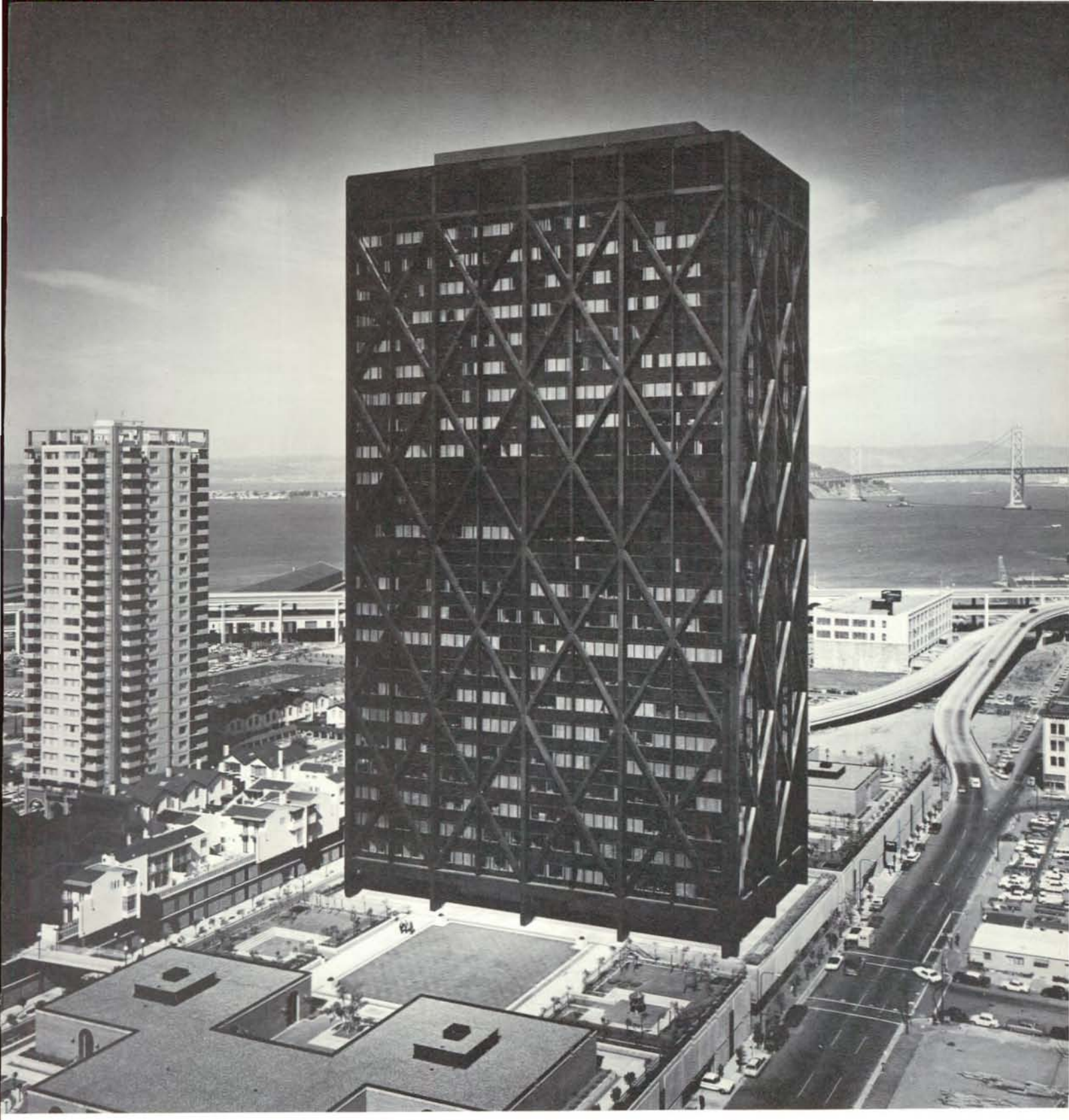
ARCHITECT-ENGINEER Skidmore, Owings & Merrill, San Francisco, California

ALCOA BUILDING San Francisco, California

General Contractor Perini Corporation, San Francisco, California
Steel Fabricator Bethlehem Steel Corporation, Bethlehem, Pennsylvania
Owner Golden Gateway Building Company, San Francisco, California

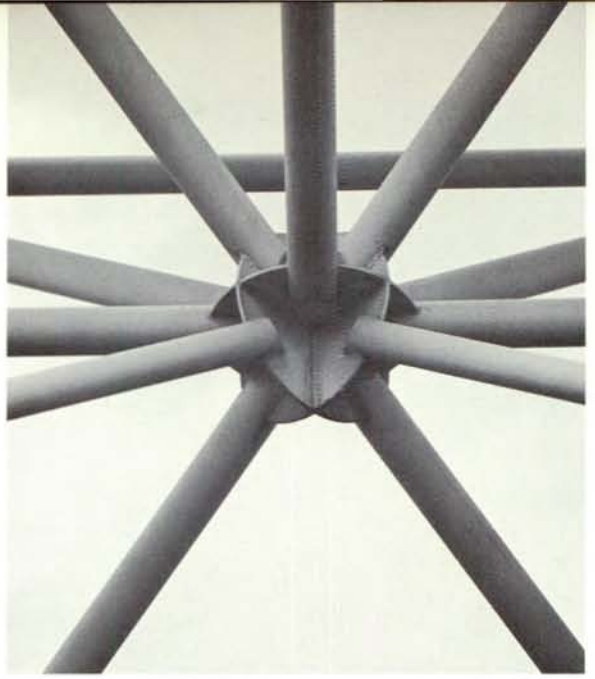
ARCHITECTURAL DESCRIPTION A new and economical structural system to resist seismic forces in high-rise buildings was introduced in this 25-story building, which occupies two city blocks and overlooks the San Francisco Bay.

The presence of tensile stresses and stress reversals due to seismic forces pointed to steel as the logical structural material. Vertical trusses on the exterior bronze-colored anodized aluminum facade place the earthquake resisting elements where they are most effective and give the building an extremely high torsional stiffness. Slender tension members, hung from every point of intersection of diagonal bracing, support the load of five floors. The load then travels down the exterior surface of the building through the diamond bracing which thus performs the dual role of carrying vertical as well as horizontal forces. The tension member concept, in addition to its participation in the overall truss, also dimensionally provides twice the effective column spacing and affords an opportunity for eliminating half the normal number of columns at ground level.



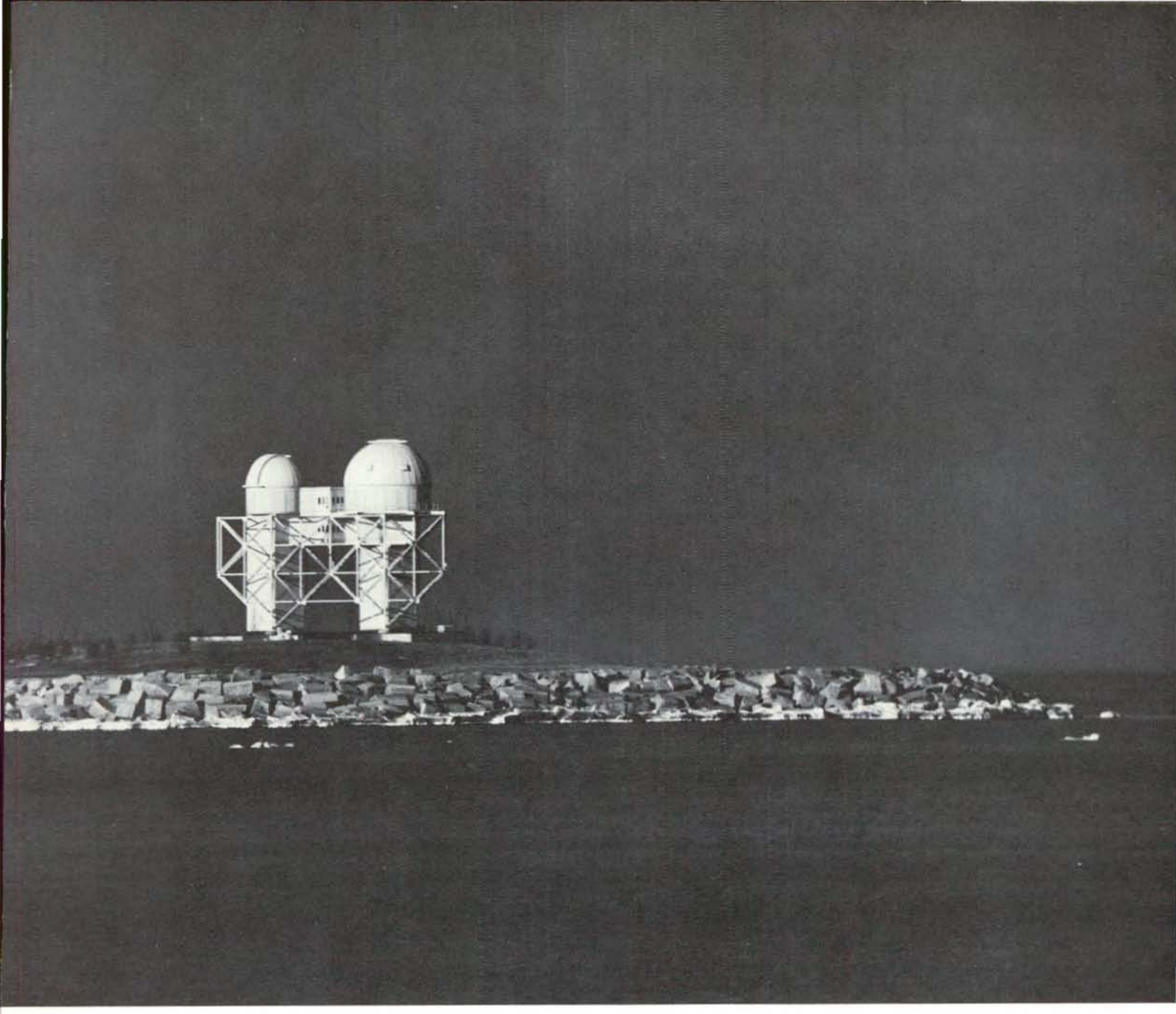
JURORS' COMMENTS

Here is a landmark structure which introduces a handsome bracing system to the San Francisco skyline. The structural system produces an interesting facade and provides stability against wind and earthquake. It is ideal to this geographical location.



JURORS' COMMENTS

This carefully detailed utilitarian structure combines ordinary materials with beautiful and pleasing effects. The expression of the independent steel frame as the exterior design around the core is a novel and extremely pleasing solution.



ARCHITECT-ENGINEER Skidmore, Owings & Merrill, Chicago, Illinois

LINDHEIMER ASTRONOMICAL RESEARCH CENTER, Evanston, Illinois

General Contractor Pepper Construction Company, Chicago, Illinois
Steel Fabricator Chicago Ornamental Iron Works, Melrose Park, Illinois
Owner Northwestern University, Evanston, Illinois

ARCHITECTURAL DESCRIPTION The 7,700 square foot observatory structure houses 40-inch and 16-inch reflecting telescopes. To distribute loads and minimize vibrations and thermal actions which could affect the rigid alignments of the telescopes, two completely independent structural systems were employed.

The lower level framing and the piers supporting the telescopes are reinforced concrete. The upper and observing levels, windscreens, and the domes are carried on an independent steel pipe tetrahedronal truss structure. The observing level incorporates the two domes that contain the telescopes, and a control room. The upper level includes an instrument room, small dark room and main code room.

ARCHITECT Todd-Tackett-Lacy, Architects & Planning Consultants, Houston, Texas

SUPERIOR OIL COMPANY GEOPHYSICAL LABORATORY, Houston, Texas

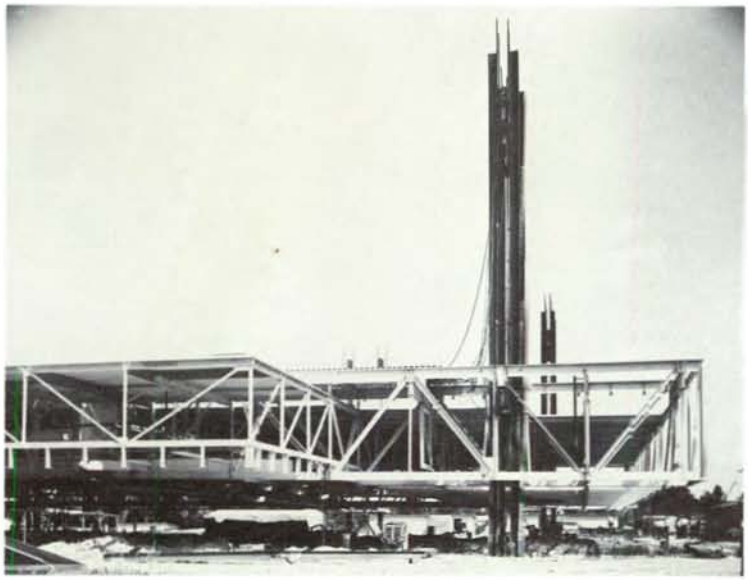
Structural Engineer Loudermilk & Loudermilk, Consulting Engineers, Houston, Texas
General Contractor Pence Construction Corporation, Bellaire, Texas
Steel Fabricators Mosher Steel Company, Houston, Texas
Bergen Iron Works, Inc., Houston, Texas
Owner The Superior Oil Company, Houston, Texas

ARCHITECTURAL DESCRIPTION Interior flexibility in planning and future ease of convertibility was necessary for this building which contains laboratories, offices, shops, and testing, installation, servicing and storage areas. The solution comprises a long, flat roof, parallel to the site, and large bays with steel truss construction which contained and allowed passage of all mechanical and electrical service to the various areas.

Weathering steel was preweathered with a five percent solution of muriatic acid to accelerate the aging.

JURORS' COMMENTS

Precise, sophisticated details make this an outstanding example of architecturally exposed steel. The fascia is beautifully executed and the building will become increasingly striking as the weathering steel takes on its final color.



JURORS' COMMENTS

This is a straightforward solution for a large clear-span sports arena. The two-way truss system, utilizing light steel members, creates a feeling of spaciousness when viewed from the inside.

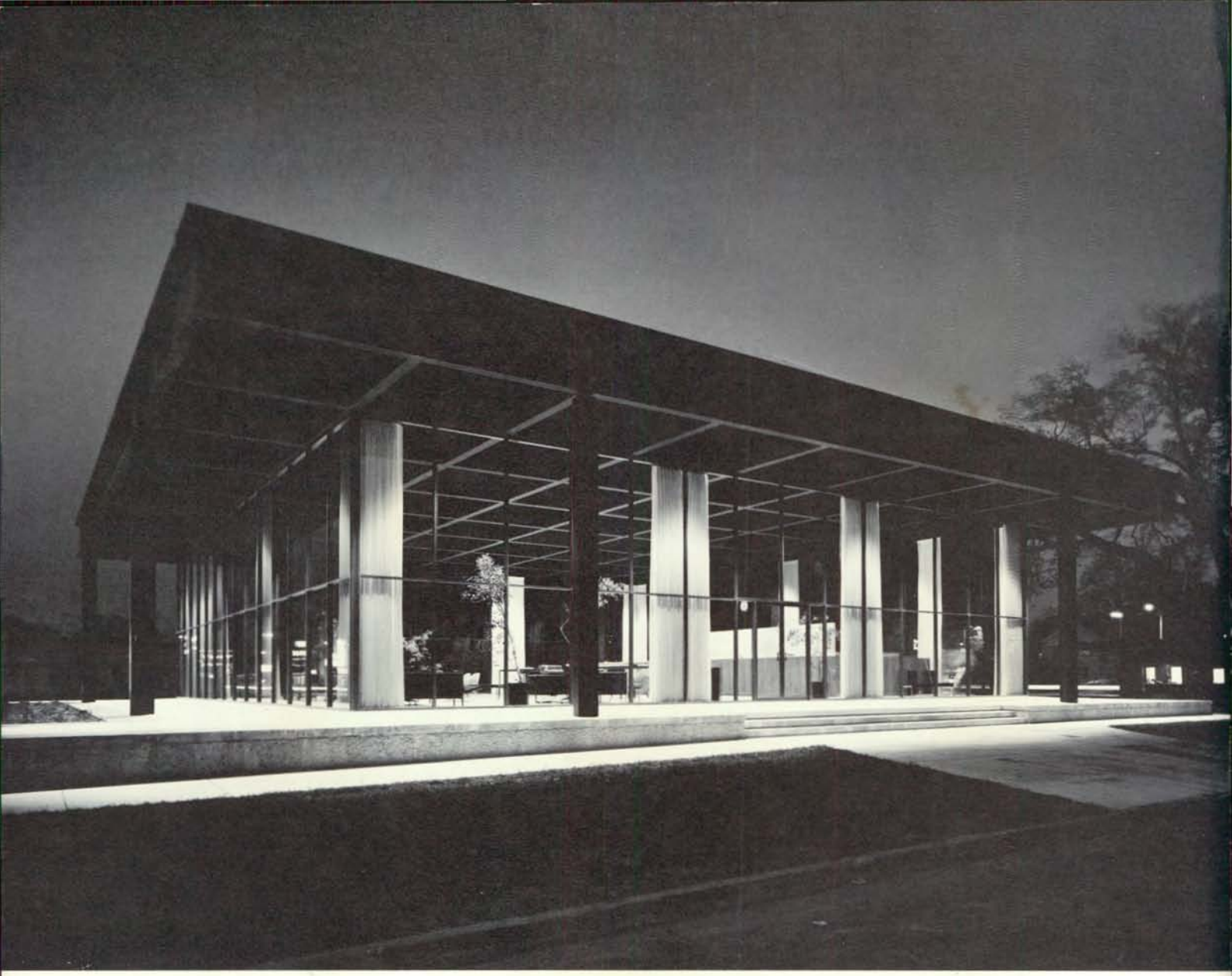
ARCHITECT F. Carter Williams, Raleigh, North Carolina

MINGES COLISEUM, Greenville, North Carolina

Structural Engineer Kahn & Furbush, Raleigh, North Carolina
General Contractor Dickerson, Inc., Monroe, North Carolina
Steel Fabricator Peden Steel Company, Raleigh, North Carolina
Owner East Carolina University, Greenville, North Carolina

ARCHITECTURAL DESCRIPTION An acre of roof tops this new sports arena. The building is framed with double rows of trusses supported by eight stair towers at the ends of each double truss. The two-way truss system forms a tic-tac-toe arrangement in plan and the spaces between are spanned by additional smaller two-way trusses.

In consideration of the height above the floor and the clear span involved, it was decided as basic to the design to complete the roof system on the ground and lift the structure into place. Mechanical, electrical and plumbing services were placed on the assembly at ground level. Field welding was kept to a minimum by prefabrication. The all-welded main trusses and the intermediate trusses were shipped to the site by rail in sections up to 180 feet long. The bidding indicated a saving of approximately $70,000 by the lift method over a conventional steel erection technique. (Approximate cost of the project was $2,500,000).



JURORS' COMMENTS

This is an attractive and well detailed building. The two-way truss design of the roof presents an attractive pattern in exposed steel and creates a highly versatile and column-free interior. Its starkly formal appearance is very pleasant and matches its function. The lighting and air conditioning have been extremely well integrated.

ARCHITECT Wilson, Morris, Crain & Anderson, Houston, Texas

BANK OF HOUSTON, Houston, Texas

Structural Engineer Walter P. Moore, Consulting Engineer, Houston, Texas
General Contractor P. G. Bell Co., Houston, Texas
Steel Fabricator Mosher Steel Company, Houston, Texas
Owner Bank of Houston, Houston, Texas

ARCHITECTURAL DESCRIPTION A full city block on the most important thoroughfare in a suburban area was selected for this rapidly expanding bank. Designed for maximum exposure, the upper level containing the officers', tellers' and public area is an all-glass column-free space. The lower level contains the bookkeeping area, vault, conference rooms, lavatories, and mechanical areas. Also on the site are parking for 61 cars and a drive-in banking facility with four stations.

The 90 foot x 90 foot structure is an exposed steel two-way plate girder grid, supported by eight columns located at quarter points of the span. The steel is painted. Coffers of the grid are lined with mineral-fissured acoustical tile, on which are incandescent downlights.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION
101 Park Avenue, New York, N. Y. 10017

PHOTO CREDITS

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Abraham Lincoln Oasis/George Cserna
Los Angeles Federal Savings and Loan/Jordan Lagman
Syntex Interim Facilities/Tom F. Walters
Fairchild Semiconductor Headquarters Building/Fred English
Alcoa Building/Morley Baer/Ezra Stoller
Lindheimer Astronomical Research Center/Orlando R. Cabanban
Minges Coliseum/L. A. Lentz
Bank of Houston/Alexandre Georges