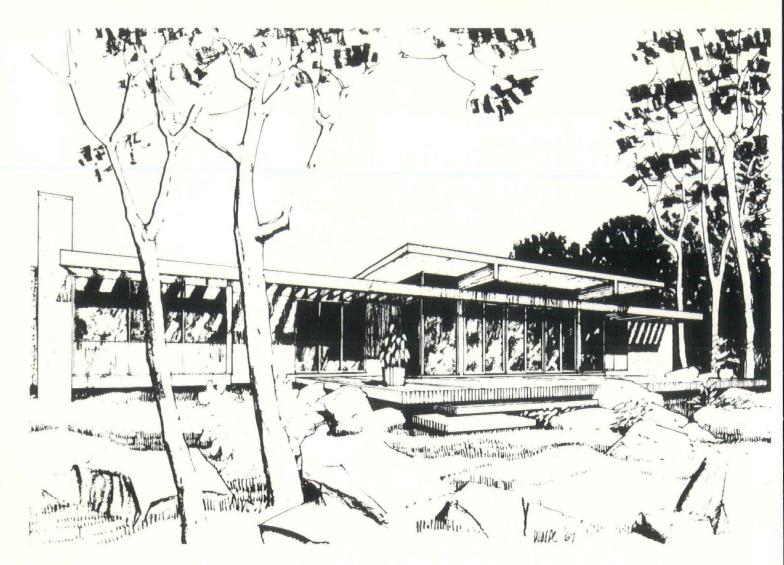
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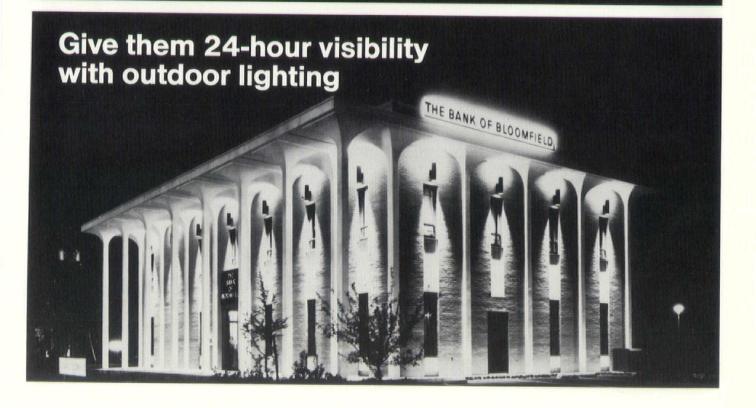
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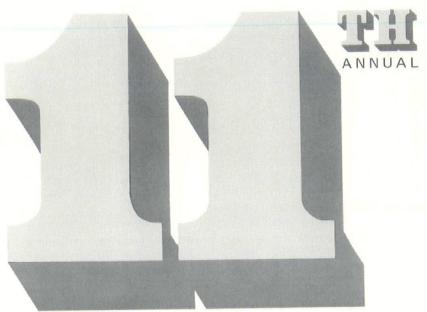
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Convention photos by Warren Freedenfeld.





Go Team Go

There has been much written about the "team approach" to the solution of architectural projects. With the world growing more and more complex, with the acceleration of technology and with the new understanding developed about the behavioral aspects of environmental developments, it is logical that a group of experts from various disciplines combine their knowledge in the solution of problems. Naturally, the team assembled for a specific project will vary with the type and complexity of the problems.

However, in every project there is one basic "team" which is essential. The combination of Owner and Architect. Fundamentally, it is the way these two parties operate together which determines the success of the undertaking.

The goal of any project is to produce something that is well designed functionally and esthetically, delivered on time and within the budget. To achieve this goal, both Owner and Architect must assume their individual responsibilities:

OWNER:

Establish Requirements Make Decisions Grant Approvals

ARCHITECT:

Develop Project Control Cost Monitor Time

- - - COMMUNICATE - - -

The success of the project depends on how well each party does his job.

The Client

For the small project, where the client is an individual, much will depend upon this person's background and understanding of the building process. For the larger project, the client can

be classified into three types with respect to their ability to respond to the requirements of a project:

- 1. Client with **no** in-house technical staff capability.
- 2. Corporate client with in-house technical staff.
- 3. Corporate client who hires a consultant to represent him.

All categories have both positive and negative aspects which may affect the relationship between architect and client throughout the development of the project.

Here are a few examples of what I mean:

The client with no in-house technical staff offers the greatest freedom to the architect where confidence is established early in the project. In a sense, the Owner can relax and enjoy the development. However, the problem arises in decision making and approvals. Without knowledge and background in the mechanics of project development, decisions and approvals become difficult to make. Further, the client's inability to visualize requires the architect to produce more models and graphics. "Show me another building like it" becomes a frequent demand. In summary, while this client seems to offer the possibility of the greatest freedom to the architect, it most often leads to frustration and time delay.

Clients with in-house technical staff vary greatly in their degree of capability. Some have the potential of doing the entire design job themselves while others establish their own criteria and monitor the project. In this sense they are a knowledgeable client, capable of responding quickly and definitely. The problem is that they sometimes have too many standard details and procedures which in turn can limit the creat-

ivity of the architect who brings to the project background and ideas from many different experiences.

"A long pull, and a strong pull, and

DAVID COPPERFIELD
Charles Dickens

a pull all together."

The client who hires a consultant to assist him can be helped greatly by the expertise of the consultant, especially when a tight time schedule or fixed low budget is involved. However, it is important that this consultant be on board early when the basic decisions are being made. Further, a clear definition of the individual responsibility and authority of all participants must be established and maintained.

The Architect's Role

In his responsibility for the technical and aesthetic development of the project, the architect must keep his client continuously aware of what is going on.

Especially is this true in the control of the cost of the project. Periodically, estimates should be made to evaluate the current cost of the project. Where it exceeds the budget, a clear decision must be made as to whether changes should be made to reduce the cost or as an alternative, the budget increased to recognize the higher cost. At early stages, before the project is fully defined, a contingency amount should be included in the estimate to provide for the additional costs which "creep" in as the project detail is developed.

The time schedule should be similarly controlled through scheduling techniques which list the key target dates and assign responsibilities to both Owner and Architect for meeting these dates. This chart should be updated periodically to keep the projections current.

Through understanding and cooperation between the Owner and Architect, success of the project is more likely to be achieved.

Nineteen Seventy

"These are the times that try men's souls," as Tom Paine said of another era. Two hundred years later I believe that men's souls were never more sorely tried than they are today. Drugs, riots and war threaten us. There are those who say that pollution will bring our world to an end in thirty years. Normal pursuits such as designing buildings and cities have been likened to rearranging the deck chairs on the Titanic.

Depressing as these thoughts are, it is perhaps even more depressing that so little is being done about it. Robert Hastings, President-Elect of the AIA, noted that our country has not yet made up its mind. We are not totally committed to saving our cities from completed disintegration; nor our land, air and water from absolute pollution.

I am sure that every President starts the year determined to cure the ills of the world and finishes the year with the despairing realization that not many of them have been cured. It is a great compliment, of course, that people expect our profession to work miracles—control urban decadence, suburban sprawl, overhead wires, ugly signs and all kinds of pollution. But such confidence in our powers lays upon us a heavy responsibility. We will have to work hard to merit it.

This year we have emphasized education, among other things. Architecture has been a mystery long enough. We are beginning to realize that we must help to inform our clientele and kindergarten is none too soon. We are encouraging and assisting the preparation of curriculum aids for awareness and appreciation of buildings, spaces, townscapes, cities, and the total environment. In high schools we are making a start toward explaining architecture as a profession. In vocational schools and community colleges we are helping to develop curricula for training draftsmen, leading to careers and to further study. An active committee is exploring the possibility of establishing a state architectural school to provide facilities that hundreds of our young citizens must now seek in other states — if they can afford it. Adult schools and continuing education for professionals are being pursued. I believe that this year's efforts in education will bear fruit in increasing measure.

Community Design Centers are another area in which we have made progress. At least four of our chapters have served their less affluent neighbors in a variety of ways, and students from Princeton have given unsparingly of their time and skill. A campaign has elicited some substantial funds for a State Center in Newark, and arrangements are currently under way for its establishment. Design Centers are exciting places where an inarticulate group or even a whole community is encouraged to express its needs and aspirations. Preparation of concrete proposals is often enough to start realization of vague dreams. The idea of centers will take many forms, but I believe that they will bring satisfaction and well-being to a great many people and not least to the architects involved.

The Society has strengthened its impact on governmental affairs, particularly within the State. Proposed legislation pertinent to the profession is reviewed and recommendations are made. Although architects are a small minority, we find that reasoned comments bring careful attention, if not always agreement. Our efforts at the national level have increased. We are heard more often, and often we are heeded.

Many of our thirty committees have been working hard and would be commended if space allowed. I want to thank all those of our membership, staff and friends who have made this a year of accomplishment.

The profession is changing rapidly and it will be difficult to keep pace. I ask every member to involve himself with the Society in promoting Vitruvius' goals of "Commodity, Firmness and Delight."



Alfred Busselle, AIA

President

Convention Report Evaluation '70





The New Jersey Society of Architects concluded its 70th Annual Convention in Atlantic City on September 26. As always, the Convention provided a perfect opportunity for architects to participate in sprightly seminars, view a superb architectural exhibition, brush up on new products and techniques, and engage in the myriad activities which promote good fellowship and understanding.

This year's emphasis was on EVALU-ATION. "More than ever before in history there is a need for sound environmental planning", said Alfred Busselle, NJSA's President. "Architects are certainly trained as designers and planners, and most are willing to accept their roles in designing and redesigning better environments for everyone."

OFFICERS INSTALLED

Peter H. Holley, AIA, of Wyckoff, was installed as 47th President of the New Jersey Society of Architects. In his installation speech he said, "January 1, 1971, will be the start of a new decade. The time for talking is over. The time for evaluation is over. Our theme for '71 is **Action**; a simple word, but a word that connotes motion, accomplishment, striving, getting things done."

Other officers installed were Kenneth D. Wheeler, AIA, First Vice President/President-Elect; Donald J. Gatarz, AIA, and Edward M. Kolbe, AIA, Vice Presidents; C. Jones Buehler, AIA, Treasurer; and Robert F. Grove, AIA, Secretary.

SPECIAL CEREMONY

Easily the most profound moment of the convention came when Rex W. Allen, President of The American Institute of Architects, presented James A. Swackhamer with his Fellowship Medal—acknowledging him as a Fellow of The American Institute of Architects.

This first-time "private" Fellowship ceremony was arranged since Mr. Swackhamer's illness in June prevent-

ed him from being inducted into the College of Fellows at the time of the National Convention.

STUDENT RAP SESSION

The students from Princeton University School of Architecture who were present felt that communication between the profession and the School of Architecture is very poor, the relationship of the practicing architect to the community needs much improvement, and the involvement of the practicing architect in helping the poor and the lower-income middle class group (who can't afford to become clients) must be stepped up.

The architects responded with concrete proof of efforts in those directions-the set-up of Community Design Centers throughout the state and the AIA's Task Force studying ways and means of bridging the gaps they referred to. Jim Swackhamer pointed out that the lack of communication between the only School of Architecture in the State and the profession might be because of the School's obvious policy of inviting only those architects whose names have made national headlines. He assured the students that anytime they want an "ordinary" every-day architect to lecture, they have but to

EXHIBITS

Highlights of the 3-day seminar included a Fine Arts exhibit demonstrating the use of art in architecture, and a computer exhibit supplied by Advanced Products Division of Bendix Center, and Design Systems, Inc., which demonstrated how tomorrow's architecture is expressed today in computer application.

1971 CONVENTION DATE SET

Plans have been made to return to Chalfonte-Haddon Hall for our 1971 Convention, September 30 to October 2.

(Editor's Note: C. Jones Buehler resigned in October due to ill health.)







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- 1 Alfred Busselle President
- 2 Peter H. Holley President-Elect
- 3 Kenneth D. Wheeler Master of Ceremonies
- 4 James A. Swackhamer receiving Fellowship Medal from AIA President Rex W. Allen.
- 5 Convention Chairman John T. Oliver with daughter, Patricia, and son, Thomas.
- 6 Ross Smith placing Mink Stole on shoulders of Mrs. Dante D'Anastasio, the winner. Stole was donated by the Structural Steel and Ornamental Iron Assn.
- 7 The receiving line showing current Officers and their wives: the Groves, Kolbes, Wheelers, Holleys, Busselles.
- 8 AIA President Rex W. Allen flanked by Vice President Kenneth D. Wheeler, Convention Chairman John T. Oliver, President Alfred Busselle, Regional Director Robert R. Cueman.
- 9 Our hosts at the cocktail party sponsored by Mechanical Contractors Assn. of N.J.: John E. Joyce, Jr., Chairman of MCA Industry Fund; Clifford L. Elling, President of MCA-NJ; Alfred Busselle; Frank Gibson, Vice President of MCA-NJ; Vincent Hindley, member of Board of Directors, MCA-NJ; Eugene Maupai, member of Board of Directors, MCA-America.
- 10 Our hosts at the cocktail party given by the Oil Heat Council: Mr. & Mrs. John Bernhardt and Mr. & Mrs. Irving Oelbaum, Chairman and Executive Vice President of OHC, with our President Busselle.
- 11 1971 Officers installed: Secretary Robert F. Grove, President Peter H. Holley, President-Elect Kenneth D. Wheeler, Vice Presidents Donald J. Gatarz and Edward J. Kolbe and Director-at-Large William Corbett. Absent when this picture was taken were C. Jones Buehler, Treasurer, and M. Leonard Levine, Director-at-Large.
- 12 Six Past Presidents added to our Board of Directors as voting members beginning in 1971:

 Eugene A. DeMartin, Arthur Rigolo, Harold D. Glucksman, James A.

 Swackhamer, Adolph R. Scrimenti, Howard L. McMurray.

Architectural Exhibit Awards



Awards were presented to nine New Jersey architectural offices who were cited for outstanding design achievement. The Jury was headed by Giorgio Cavaglieri, FAIA, assisted by Samuel M. Brody, FAIA, both of New York, and Lewis M. Wolff, FAIA, Columbia, S.C.

The Jury was impressed by the fact that "All projects were, in a sense, very modest, not so much in scope but in means and their disposal. There is the appearance of great effort and attention to do the job in very simple terms, with very simple materials and without any flight permitted for purely esthetic effect or luxurious treatment," Mr. Cavaglieri said.

These award winning projects will be featured in the next issue of ARCHITECTURE NEW JERSEY.

Church of the Nativity, N.Y. Architects: Genovese & Maddalene, Paramus, N.J.

Teaneck Complex, Fairleigh Dickinson University, and Dreier Residence, Princeton, N.J. Architect: J. Robert Hillier, Princeton, N.J.

Project Bowtie Neighborhood Renewal, Woodbridge, N.J., and a Residence, Harrison, N.Y. Architect: Milton Klein, Union, N.J.

A New Middle School, Vernon, N.J. Architects: Kruger/Kruger/Albenberg, Newark, N.J.

Rutgers Medical School, Piscataway, and South Huntington Public Library, South Huntington, N.Y. Architects: McDowell/Goldstein, Madison, N.J.

James Forrestal Building, Department of Defense Building, Washington, D.C.

Architects: Frank Grad & Sons, Newark, in a joint venture with Fordyce & Hamby Associates, N.Y., and Curtis & Davis, New Orleans, La. and

Essex County College, Newark, N.J. Architects: Frank Grad & Sons, Newark, N.J.

Atlantic City County Court Building, Atlantic City, N.J.

Architect: Martin Blumberg, Atlantic City, N.J.

Mount Olive High School, Mount Olive Township, N.J.

Architect: Jules Gregory, member of UNIPLAN, Princeton, N.J.

Underground Dining Hall, Douglass College, New Brunswick, N.J. Architects: Holt & Morgan, Princeton, N.J.

These award-winning projects will become the 1971 Travelling Exhibit of Architecture which will make its way around the State.













SOCIETY OF

ARCHITECT















Alfred Busselle, President of NJSA, presenting Awards Certificates to architects and their clients.

- 1 Robert Gasko, Atlantic County Freeholder, Chmn. Public Bldgs. Comm. and Martin Blumberg, AlA.
- 2 Anthony Genovese, AIA; Rev. William Pickett, S.J.; and Herbert Maddalene, AIA.
- 3 Harry B. Mahler, AIA, and Michael Savoia, both of Frank Grad & Sons.
- 4 David R. Dibner, AIA, of Frank Grad & Sons, and Walter Meisen, Asst. Commissioner of Construction Management, G.S.A., Washington, D.C.
- 5 Jules Gregory, FAIA, member of UNIPLAN; Susan Bacchus, Pres., Bd. of Ed., West Morris Reg. H.S. District; and Blaine Rowland, Board Member.
- 6 Robert Scheren and J. Robert Hillier, AIA.
- 7 James Deininger; Harry S. Bingham, Dir. of Facilities Planning & Construction, Fairleigh Dickinson Univ.; and J. Robert Hillier, AIA.
- 8 Philetus H. Holt III, AIA, Holt & Morgan.
- 9 Milton Klein, AIA
- 10 George Ziegler, Supt. of Schools, Vernon Township; Rudolph Kruger, AIA; and Jerome Albenberg, AIA.
- 11 George McDowell, AIA; Leo V. Brereton, Facilities Coordinator, Rutgers Medical School; and S. James Goldstein, AIA.



Seminars

Ernest O. Bostrom, AIA

Architects have long been aware that architectural planning should be broader in scope than the design of individual buildings. They are also aware that there is an environmental crisis in our nation, which, if it is to be ameliorated, will require massive efforts in the economic, social and design fields. Complicating the problems of architects and planners is that very little is known about the procedures involved in such a massive effort. The Seminars this year were devoted to attempting to shed some light on these problems.

The seminars were greatly enhanced by William B. Shore, Vice President of Public Affairs of the Regional Plan Association, who accepted the role of anchor-man and moderator during each session. Ernest Erber, Director of Research for the National Committee Against Discrimination in Housing and Robert L. Creighton, President of Creighton-Hamburg, Inc., were the panelists during the first seminar.

This session was devoted to such questions as what is a "new town" and what do we understand about "socio-economic mix" with respect to housing, transportation, jobs and education. In summary, it was felt that new towns should not be isolated communities

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unrelated to others but should grow naturally within and from existing density patterns and include all racial and ethnic groups and a wide range of incomes. The goals for planning a new city should include the productive area, humanity, a balance with nature and flexibility for future change. An important qualitative consideration in future development is the inclusion of those ingredients which will promote a sense of neighborhood. Planned Unit Development as a concept by itself would not solve our problems. However, in conjunction with solving our problems in the inner cities and their natural organic growth along with larger regional planning, significant gain would be accomplished. It was agreed that a massive effort was necessary, but that such an effort was not new to this country as illustrated by this country's effort during World War II.

Tom Hancock, architect and planner from London, panelist for the second seminar, directed attention to the design aspects of new communities related to old communities. By citing examples of town planning here and abroad he stressed some of the mistakes already made. He noted that communities should grow organically as dictated by circumstances and should















Sketches by Anthony Di Gregorio

not be pre-designed rigidly because it is impossible to know beforehand exactly how a community will be used by its inhabitants. The people using the community must be brought into the creative process. He noted that we should recognize when planning that people tend to want to live among people of similar ethnic, economic and value characteristics. Given equal opportunities such groups should be able to live well side by side.

In the final session attention was directed to the obstacles and the possibilities of improving human environment, understanding that although social goals may be defined, the means for achieving them may be unavailable. Panelists were B. Budd Chavoosian, Specialist in Environmental Resources at Rutgers; Francis Hayman, Regional Director of the National Corporation for Housing Partnerships; and Herbert Kendall, President of the Twin Rivers Holding Corporation.

The tax structure was considered a serious obstacle to the development of adequate housing. Present methods of zoning also prevented the realization of better planned communities. The American system of home rule prevented interference with their way of living in most municipalities; and consequently, regional planning necessary for balanced housing, industry, education and transportation, as well as health facilities, became extremely difficult. Public apathy and ignorance were also cited as obstacles, and architects and planners were urged to take an active role towards eliminating them.

Educational Displays



The Educational Displays exhibited at our Convention were selected to educate and stimulate the Architect's desire for a better understanding of available materials and their applications. The Exhibit provided an excellent opportunity for Architects to learn first-hand the full spectrum of equipment and services available.

Of the fifty-seven exhibits, eight were cited for Design Excellence or Informational Content.













- 1 Texas Instruments, Inc.
- 3 Bergen Bluestone Co.
- 4 American Olean Tile Co.

2 Moldcast Manufacturing Co.

- 5 Pate Manufacturing Co.
- 6 N.J. Bell Telephone Co.
- 7 Kinney Vacuum Coatings
- 8 Andersen Corporation





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Joint Ventures:

A New Way To Practice

David R. Dibner, AIA, a partner in the office of Frank Grad & Sons, addressed the members of the Central Chapter, NJSA, at their October meeting, on the advantages of establishing a temporary contractual association with another firm or firms to obtain a particular commission or to provide a wider range of services than could be performed individually.

Mr. Dibner explained that the concept of joint ventures began with the requirements for broader services that developed during and after World War II, when teams of professionals with complementary talents were sought to take over the architectural and engineering design, and often the entire construction, of large military installations.

To determine whether or not you should consider a joint venture, Mr. Dibner asked the following questions:

1. Can you alone obtain the commission or do you need a firm with greater background and experience in the specific field; better entree to a particular client; better proximity to the project location?

The speaker cited his firm's experience with Eastern Airlines, who wanted to build a reservations center in New Jersey on a very tight time schedule. His firm provided the local know-how, manpower and management skills, while J. N. Pease Associates of North Carolina furnished direct knowledge on the design of this type of installation, having done several before.

2. Can you alone produce the commission or do you need an additional firm to provide broader services; greater depth of manpower capability; management skills; financing, etc.?

Responding to this challenge and to furnish broad architectural and engineering services in the design of NATO bases throughout France, his office formed a joint venture with a U.S. engineering firm which came in with a background of engineering experience, and with Paris architects who contributed local familiarity.

3. Does the owner want to award the contract to more than one firm?

The James Forrestal Building in Washington, D. C., was designed by a joint venture of three architectural firms from New Orleans, New York and Newark, combined under the selection procedures of the GSA.

MUTUAL UNDERSTANDING

"If a joint venture is decided on," Mr. Dibner said, "The co-venturers must honestly and candidly discuss their goals and motivations and learn to know one another. There can be no secrets in a successful joint venture.

As is true in most relationships, Mr. Dibner pointed out, mutual understanding is the key to a successful association. The definition of relationships must start with the clear division of responsibilities, and the contract must confirm this agreement of understanding.

A few typical relationships are:

· Each firm assumes the responsibility for turning out a specific portion of the work. When architects and engineers combine, this division is clearly apparent, as it is when a small design office co-ventures with a large production office. When the two parties are more evenly matched, they divide the responsibilites. For example, Firm A takes over the work from inception through the design development stage while Firm B starts at that point and pursues the work through completion of construction. In this relationship, each has responsibility for only its part of the total work.

This type of arrangement, while having the advantage of limiting a firm's responsibility to only that work performed by itself, has the drawback of a possible break in continuity and complications as to clearly defined relationships with the owner and consultants.

• All parties agree to divide the work, but from beginning to end jointly share the legal responsibilities. In my experience this is the best type of association. With this method, each firm, while not necessarily equal in contribution of effort or in extraction of profit, shares participation and responsibility fully from creation to completion. Together they operate under clearly defined

guidelines of responsibility for performance of each part of the work.

- One firm takes the position of responsibility and uses another firm for manpower and expertise in a given area. In effect, however, this type of arrangement is much closer to a prime and sub-contractor relationship, complicated possibly by joint responsibilities to the owner if both firms happen to be co-signers of the prime contract.
- A continuing, loose arrangement is established by several firms for the purpose of obtaining commissions. These firms pool their resources and develop common promotion materials. They have a general understanding of how the work will be pursued after the contract is awarded. Until they receive a commission, they continue to work independently.

BENEFITS OF JOINT VENTURES

Real enjoyment can be had from joint ventures. The advantages to firms both large and small are many, and with demands growing for increasing the scope of services, what better method to meet them than to create a team of complementary talents? The advantage of a joint venture team is that each participating member can retain individual identity throughout and return to his former role when it's all over, often richer and certainly wiser.

For the small firm, the joint venture offers an opportunity to get in where the action is and do some of the larger work. Upon completion, the project goes into the firm's brochure and increases the possibilities of getting another large commission.

During the operation of the joint venture the individual firms have an opportunity to exchange information, learn new techniques and reassess old skills.

Of course, joint ventures are not without problems, but with proper preparation and through wise associational selection, better architecture can be produced than the mere sum of the firms' skills might suggest. The overriding theme must be a mutuality of interest leading to the highest goals of service to the client. It can work well.

The 'Teaching Office' in Architecture

For many years, there has been a widely expressed need to find new, effective ways to inter-relate the professional education and the professional practice of architecture. The Princeton School of Architecture and Urban Planning has joined with the New Jersey Society of Architects in starting several experiments which explore the possibilities of 'teaching offices' as a part of the School.

The 'teaching-office' concept is as an extension into architecture of the concept of the 'teaching-hospital' in medicine. In both cases, a close working relationship is sought between three parts of the profession: teaching, research, and practice.

The 'teaching-office' concept has already been developed in Great Britain. at the University of Edinburgh and at the University of Nottingham. The Edinburgh unit was established by Robert Matthew in 1959 as a Housing Research Unit, later the Architecture Research Unit; it 'remains primarily a practice unit, serving the needs of postgraduate research and undergraduate teaching within the Department.' At Nottingham, the unit was established by Arthur Ling; it is a 'teaching-office, where actual building and planning projects are carried out. This gives the opportunity for the student to study and participate in work in progress at all stages. It also enables student projects to be given a realistic basis, and the opportunity for contact with clients.' The work at Edinburgh and Nottingham is now well established.

In his report to the New Jersey Society of Architects, Dean Geddes pointed out the potential benefits of the 'teaching-office' for the student, the faculty, and the practitioner.

'For the student, the 'teaching-office' could serve in many ways to improve his educational experience. The 'teaching-office' could be one option in his choice of studio-workshops; and it

could also provide an opportunity for his employment during the summer months and during part of his internship period. The 'teaching-office's' direct connections to many participants in the design and construction process, and to real-time schedules and responsibilities, could serve to clarify the theoretical and simulation methods that are effectively used in the more conventional studio-workshops.

For the Faculty of the School, the 'teaching-office' could enable us to integrate teaching and practice, related to the research programs in the School and the University at large. For example, multi-disciplinary teams could be brought to bear on relevant problems, and experimental approaches to problem-solving could be tried and evaluated. The continuing contact with real problems could stimulate and regenerate the individual faculty members, and break down the artificial barriers between the educators and the practitioners.

For the practitioner, the 'teaching-office' could be a source of usable information and experimentation in the planning, design, construction and evaluation of buildings. As part of the 'teaching-office,' a publications program could produce public reports on the work. In addition, on projects, individual practitioners and firms could be appointed Research Associates, or equivalent, to participate in the on-going work as part of the team.

'And for the profession of Architecture, the 'teaching-office' would be another way to serve the widest social needs, as a teaching-center and communicative link with society.'

At Princeton, two 'teaching-offices' have been at work during the summer of 1970.

1. A Study of the Princeton University Lands. The project involves an investi-

gation of alternatives concerning the comprehensive development which could be undertaken by the University in the setting of the larger community.

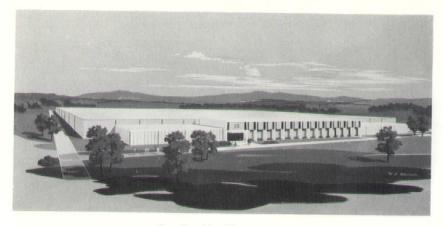
The study deals specifically with the University's potential for new housing and employment facilities. Issues are related to the University and the Princeton area, and to municipal and institutional cooperative planning efforts; the alternatives for expansion that are open to the University; the preservation of an 'open space' character in the region; and preliminary studies of prototypical office, industrial, and research installations.

Project director, Lance Brown; faculty research associate, Stephen Skjei; doctoral candidates, research associates, John Muller, Allen Krathen; graduate student research associates, Klaus Gartler, Samuel Saunders; faculty/administration project advisors, Robert Geddes, Henry Jandl, John Moran.

2. A Study of New Alternatives for the Urbanization Process in the Central New Jersey Area. Emphasis is placed on the formulation and use of advanced methodologies to improve the decision-making process in urban planning and design. The future patterns of human settlements in Central Jersey are considered as functional elements of the larger Philadelphia-New York urban region. Effective alternatives to suburbia will be the final product of the study.

Different alternatives of movement infra-structure and distribution of activities are being tested and combined to provide the macro-frame for the community. Residential, commercial, and workplace design alternatives are being proposed at the micro level. The proposed design alternatives are to be measured with a set of evaluative criteria and new computer graphic programs.

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Ivers-Lee, Div. of Becton, Dickinson & Company, West Caldwell, N.J. Architects: John Robert Gilchrist, AIA, and Associates, Montvale, N.J.



F. L. Smidth & Company, Cresskill, N.J. Architects: Harsen & Johns, Tenafly, N.J.

Good Neighbor Awards

Eleventh Annual "New Good Neighbor" Awards Competition Winners

The buildings shown on this page were among those selected by the Jury for awards in the Eleventh Annual "New Good Neighbor" Awards Competition sponsored by New Jersey Business magazine.

Leisure Technology Corporation, Lakewood, N.J. Architects: Kobayashi, Bostrom, Kaplan & Brazinskas, Red Bank, N.J.



Central Jersey Bank & Trust Company, Freehold, N.J.
Architect: James Timpson, Caldwell, N.J.
Associate Architect: Robert Charlesworth





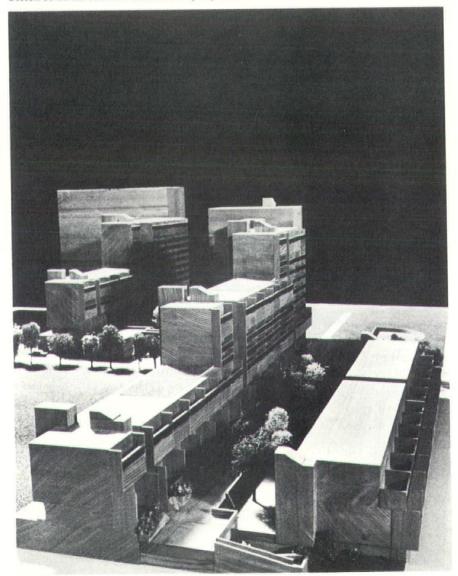
Western Electric, Raritan River Center, Piscataway, N.J. Architects: Frank Grad & Sons, Newark, N.J.

'Operation Breakthrough'

Three-day Seminar on Industrialized Housing and Building Systems Methods Held in Rochester

by Thomas R. Flagg

Descon/Concordia: Schematic Model of Jersey City Units.



Over 350 architects, engineers, builders, suppliers and public officials assembled on September 21, 1970, to review the details of the Federal Operation Breakthrough as presented by top representatives of industry, labor and government. The conference at Rochester was sponsored by HUD and several New York State agencies, principally the Division of Housing and Community Renewal, whose Commissioner, Charles Urstadt, summed up the present housing crisis:

"The industries involved in providing for the housing needs of this nation have always followed the traditional method of individual construction of units on a piecemeal basis, with design and erection specialized for the location and the type of building needed. This specialized process has continued in spite of the introduction of modern production techniques in every other aspect of manufacturing in this country. Unfortunately, as far as housing is concerned, we have reached a point where our nation can no longer permit itself the luxury of this individual type of approach tailored to each situation... It is apparent that our needs (2.6 million units per year) are beyond our capabilities (1.3 million units per year). . . Clearly a new way must be found. Industrialized housing and systems building methods, and the Federal Operation Breakthrough program can offer us the new methods needed to meet this housing need."

Throughout the seminar, the building systems manufacturers stressed that their product was no panacea for the problem. They could guarantee much higher quality at a far greater rate and volume, thereby saving in financing charges, and at a cost competitive with that of conventional construction. However, there are still many constraints which have to be gradually overcome such as specific versus performance building codes, Labor's overreaction and resistance to change, inadequate methods of financing, antiquated planning and zoning regulations, and, most important, the problem of market aggregation and the consu-



Shelley System: Typical Example.

mer's traditional reluctance to accept industrialized housing. HUD Regional Administrator William Green stated, "If this crisis is to be relieved, it is vital that traditional methods of planning, construction, financing, and management, which have proved unequal to the national need, be supplanted by modern concepts."

The 22 consortiums that emerged from the Operation Breakthrough competition will develop 11 prototype sites throughout the nation. Three of the most sophisticated of these systems have been assigned to the only prototype site in the Northeast, a six-acre tract in Jersey City. One of the high points of the conference was an indepth presentation by the various groups involved in the development of this site, the remaining portion of the St. John's Towers urban renewal area on Newark Ave. The 500 units to be built there will give it the highest density of any of the Breakthrough prototype sites. David Crane, AIA, of Philadelphia, is doing the site planning and Volt Information Services of New York is the developer.

According to Mr. Crane, there were three primary considerations which influenced his planning of the site. First, the site must provide an optimum context for a demonstration of the three systems as solutions to a unique site and the establishment of a humane environment. Second, the solution must stress the accommodation of families with children under high density living conditions. Finally, the development

should not interfere with the better interests of Jersey City and environs but should attempt to make a positive contribution to the surrounding community. Thus, within the site itself, a balanced community was created, keeping in mind family types, social characteristics, and a full economic range of units. A complete mixture of



Module Communities, Inc.: Model of Yonkers Luxury Apartment.

the population throughout the site will obviate any concentrations of ethnic groups.

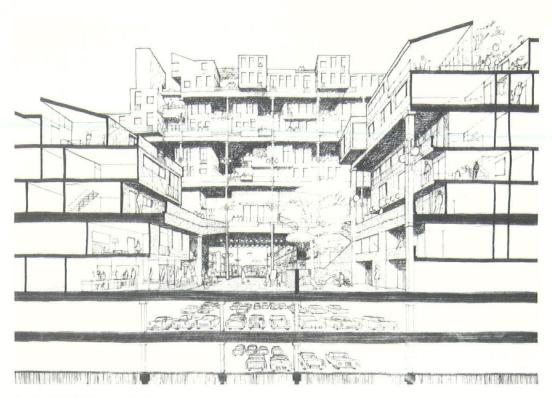
The unifying element in the project is a route building spine running the length of the site with the flexibility of high-rise and low-rise buildings occurring at various intervals forming open spaces surrounded by residential units. Other facilities include a K-3 school, a pre-school, 20,000 sq. ft. of retail space, 25,000 sq. ft. of professional and office space, a waste disposal facility, parking, and parkland. A community multipurpose center with recreational roof deck will be just one of the facilities to be shared with the surrounding neighborhood.

One of the three systems comprising the development is that produced by Module Communities, Inc., and is an adaptation of the TRACOBA No. 1 system which is responsible for 90,000 units in Europe. Skidmore, Owings and Merrill provided the necessary innovations for the Breakthrough competition such as more variety and room for the tenants and a skip-stop elevator system which allows multi-level apartments. Pre-cast concrete is used throughout. Floor slabs span between bearing cross walls which also carry the weight of non-bearing outside walls. All components are made by the table battery method with completely integrated electrical, plumbing, and HVAC conduits installed during manufacture. Insulation and interior finish are already installed on the exterior walls which are generally finished with exposed aggregate. A 20-story luxury apartment currently under construction by this method in Yonkers is expected to have the roof in place in 45 days and to be ready for occupancy in

Another system at the Jersey City site will be the Townland System, which stresses the life style of urban occupants by providing elevated pedestrian streets, back yards, and rooftop recreational areas. Warner, Burns, Toan, Lunde, Architects, developed the scheme which consists of a multistory concrete frame with 30 x 60 ft. bays supporting concrete decks which carry lightweight in-fill structures of two or three stories per deck. Excess deck space affords earth-filled, 12-ft. deep backyards, creating "synthetic land" as high as 15 stories.

The third system is that of a Canadian group, Descon/Concordia. This is a rather complex system of reinforced concrete panels which are completely coordinated, containing integrated mechanical services and both exterior and interior finishes. Philip Bobrow of Montreal was the architect who developed this highly organized system





Townland System: Typical Application.

which consists also of its own interior partitioning panels and factory produced kitchen, bathroom and storage units. The whole is extremely adaptable to almost any program and site characteristics.

Besides complete coverage of the various constraints that continue to hold back industrialized housing, the Rochester conference provided an opportunity to hear from several voices which left a memorable impression on the audience. Labor was represented by Peter Brennan of AFL-CIO, N.Y.S.

Building and Construction Trades Council, who had the following comments during a lively question and an-(to accept the upheaval in the traditionhave to give a man time to adjust."

swer session ("tame by Union standards"): "The poor are getting very sophisticated these days, and nobody is going to go into the slums and try to put up shoddy housing. And Labor won't stand by and let it happen either . We are trying to convince our people al trades caused by industrialized housing) but it is very hard because they are set in a routine and resist change. You





Other highlights of the seminar included a slide show by Jordan Gruzen of Gruzen and Partners, Architects, consisting of photographs taken last May while on the Study Tour of European Building Systems and Industrialized Housing, sponsored by the National Urban Coalition and the AIA. Harold Finger, Assistant Secretary of HUD, pointed out that the prototype sites would demonstrate not only the better quality and competitive cost of the various systems, but also overcome consumer reluctance and attract private investment. A seminar entitled "Systems Approaches Today and Tomorrow" featured Roderick Robbie advocating open systems (components inter-changeable with other systems) while Guy Rothenstein took the side of closed systems. The National Homes representative struck a responsive chord with a shotgun blast at the following constraints: market aggregation ("We need an open national market"), high interest rates and traditional mortgage financing, and even restrictions on the width of highway loads (14 ft. is much more workable). Also, "We have to free local government from using the property tax as a means of supporting itself." It all seemed to make so much sense.

(Editor's Note: More extensive coverage of the Jersey City prototype site will be appearing in a later

Lucy The Margate Elephant

By John D. Milner, AIA

During the latter half of the nineteenth century, this country fostered a great variety of so-called "architectural follies", buildings often whimsically conceived and bearing seemingly no direct relationship to those traditional and accepted building forms of the eighteenth and early nineteenth century. As manifestations of the innovative spirit of the Victorian period, these "follies" have a decidedly significant place in the evolution of American architecture.

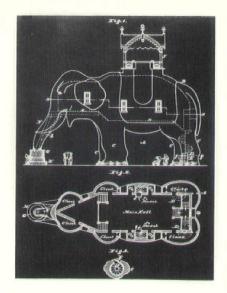
Certainly one of the most unique of the "follies" is Lucy, the Margate Elephant, erected on the beach in Margate City, New Jersey in 1881.

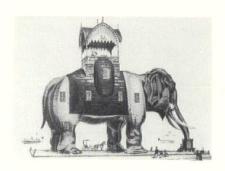
By their nature, unusual buildings of this type are often short-lived, being replaced by more functional structures in an increasingly mechanized society. The fact that Lucy has survived at all is a tribute to her designers and builders who, in spite of the complex problems encountered with the construction of an elephant, erected a thoroughly sound building. 65 feet high, 70 feet long, and 25 feet wide, Lucy was assembled basically as a large frame box, composed of massive 12" x 12" timbers.

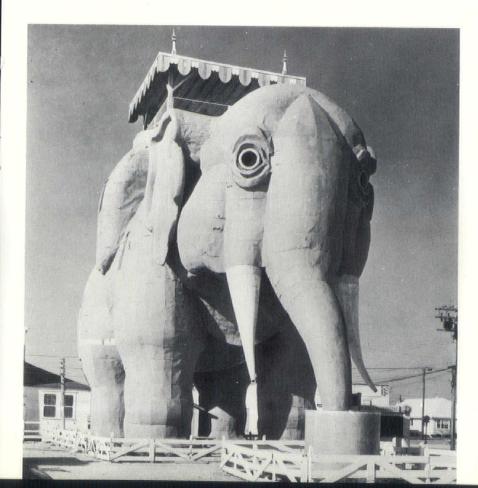
The structural frame was carefully braced with diagonal members, providing a rigid system which has successfully withstood heavy winds and storms for nearly a century. Lucy's shape was achieved by applying curved built-up members over the frame and enclosing the whole composition with sheathing boards and heavy tin.

Although Lucy's present exterior appearance is somewhat weary, it reflects only surface deterioration. Her structural frame has remained in good condition, due largely to the ample air spaces around the timbers, which have eliminated prolonged dampness. These air spaces will greatly facilitate the installation of new heating, cooling, and electrical systems to be included as part of the restoration. Moving Lucy safely to her new location two blocks away is made possible by her satisfactory structural condition.

The interior of Lucy, now divided into compartments, was originally one large domed space with a raised balcony and small side rooms housed in the flanks and jowls. Natural light is admitted to Lucy's interior through







several windows, the most unique of which are located in her eyes, behind her ears, and in her "derriere." Access to the interior was gained through two spiral staircases, one in each rear leg. The walls and ceilings are plastered and the floors are wood. A beaded wainscot extends around the perimeter of the main space, and miniature pointed doorways lead to the side rooms. Much of the plaster needs to be replaced, but the original Gothic Revival woodwork has survived intact and can be restored. The howdah is reached by two spiral staircases in Lucy's sides. The original elaborate howdah, destroyed by a storm, will be reconstructed as part of the restoration.

In summary, Lucy's restoration will require limited structural rehabilitation, repair of the outer framework, installation of new metal "skin", and complete restoration of the interior areas. Once restored, Lucy will be a structurally sound, usable building of the most remarkable character.

In the process, one of this country's most important Victorian monuments will have been preserved.







Gruzen



Gaunt

Addenda

Robert F. Grove, AIA, Secretary of NJSA, has been appointed Task Force Chairman of "MASTERSPEC", an AIA-sponsored specifications system, in the New Jersey Region by AIA Board of Directors.

Benjamin M. Gruzen, AIA, of Gruzen & Partners, Newark, has been elected a trustee of the Garden State Ballet, to serve for a term of three years.

Edmund H. Gaunt, Jr., AIA, has been named co-chairman of the Dr. Martin Luther King, Jr., Observance Committee for the greater Red Bank area. Mr. Gaunt is also on the Board of Directors of the Monmouth Coalition for Human Relations. He lives in Red Bank and practices in Hazlet.



SCHOLARSHIP

Miss Nancy James, a resident of Salem, is the recipient of the Regional Director's Scholarship Award, made possible by an allowance from the AIA. Miss James is in her fourth year at Hampton Institute, Division of Architecture, and is working as an architectural draftsman for Forrest Coile & Associates, Newport News, Va.



APPOINTED TREASURER

Gary Y. Kaplan, AIA, of Middletown, has been appointed Treasurer of NJSA, replacing C. Jones Buehler, AIA, who resigned in October because of ill health. Mr. Kaplan, a graduate of the University of Michigan, is currently President of the Shore Chapter. His office is located in Hazlet.

Mr. Kaplan has been nominated for the Vice Presidency of the Monmouth County Arts Council. Mr. Kaplan declined the Presidency because of his heavy responsibilities as Treasurer of NJSA.

Lawrence Tromeur, AIA, and Architect James Pipines announce the opening of their new firm of Pipines & Tromeur, AIA, to be located at 212 Everett Ave., Wyckoff 07481.

John Swass, AIA, and Harry Weaver announce their new partnership, Weaver & Swass, Architects/Planners, located at 2 Waverly Pl., Madison 07940.



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ATTORNEY APPOINTED

The New Jersey Society of Architects has been very fortunate in obtaining the services of Keith J. Bashaw, Esq. of Haddonfield, as our attorney.

Mr. Bashaw is a graduate of the University of Pennsylvania, Wharton School and Temple Law School. He is also a Certified Public Accountant in New Jersey and Pennsylvania, a member of the State and National Bar and CPA Associations, the Association of Attorneys-CPA, and Treasurer of the Rotary Club of Cherry Hill.

SHORE ARCHITECTS URGE LOW **INCOME HOUSING**

The Community Concern Committee of the Shore Chapter, NJSA, has urged the Monmouth County Planning Board to include low income housing in its

In a letter to the Board, Thomas G. Smith, AIA, Chairman of the Committee, stated, "The need for low income housing is a problem which demands the urgent attention of planning officials. Under the present conditions it is a problem which can only be dealt with effectively on a state or county level. We therefore urge that the Monmouth County Planning Board address itself to the lack of adequate low income housing in the county."

Charles M. Pike, County Planning Director, did not comment on the letter but said, "The Board will discuss it and will formulate a reply."

The architects' Community Concern Committee studied the county master plan and its lack of provision for low cost housing at the request of the Monmouth County Coalition, which has cited the absence of specific recommendations with respect to low income housing.

Mr. Smith further stated, "We would hope that the Board will find funds, perhaps under Federal programs, to make a thorough study correlating its own information with that of the many groups involved in specific aspects of this problem of planning for people. On the basis of such inquiry we would further hope that the Planning Board could give some overall direction in this area which would be ultimately pivotal in all county planning."

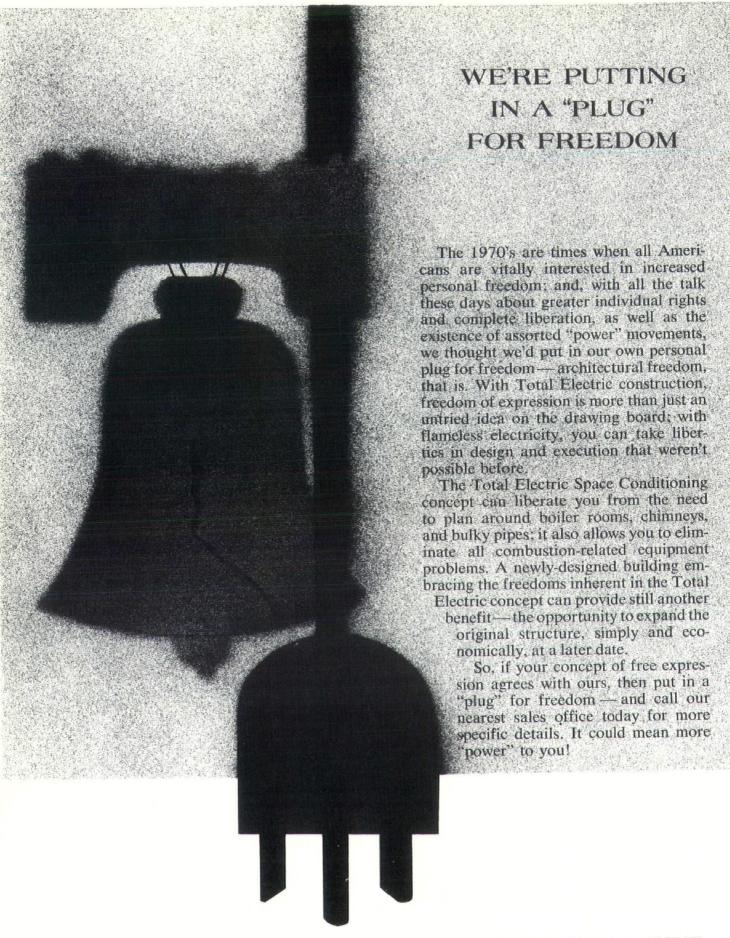
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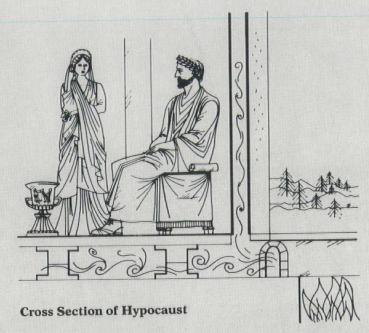
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FORUM ROMANO

NEW HEATING SYSTEM

Dateline POMPEII, 79 A.D.-Contractors here today completed a new type of heating system in the home of one of the city's leading citizens. Said to provide even, com-fortable heat on the coldest days, the innovative system involves a hollow wall through which heated air is circulated. The warmed masonry wall radiates heat throughout the house. Local contractors claimed the system-called a hypocaust-is "far superior to the bronze stoves conventionally used to fend off the winter chill." They predicted a glowing future for the contracting business in the installation of such systems.

Flavius Fabricatus, head of the Pompeii Contractors' Association, said that "barring



unforeseen events, the installation of these heating systems will give our present business a dynamic new dimension." He predicted that "immense consumer demand would one day make such systems commonplace."

Despite an "unforeseen event" which made Mr. Fabricatus one of the earliest authors of "famous last words" (Mt. Vesuvius erupted shortly after he spoke, inundating Pompeii), our industry's forebear couldn't have been more right. Today the heating system is almost as commonplace as the bathtub throughout the civilized world.

While we're spoofing about the fabricated Fabricatus, somebody did install that first heating system. Along with plumbing and process piping systems, our industry is still doing this essential job today. The difference is that today's interior climate control systems include—in addition to heating—cooling, air filtration, tempering and humidity control. We install these increasingly

complex systems in buildings ranging from the tallest skyscrapers to the corner drugstore. To accomplish this efficiently requires a surprising array of technical and management skills.

What we will face tomorrow will require even greater expertise. We're preparing now for this challenge with sustained programs of advanced technical and leadership training for our skilled union craftsmen as well as management education for our mechanical contractors.

These accomplishments make the mechanical contractor a good man to know. You might say he is truly a Man for All Times—Yesterday, Today and Tomorrow.



The Mechanical Contracting Industry Council of N.J. 134 Evergreen Place, East Orange, N.J. 07018