Precasting simplifies design and construction of balconies. Five towers, each with 24 floors of apartments, are included in the huge James Whitcomb Riley Center in Indianapolis, Indiana. Each apartment (studio, one- or two-bedroom) will have its own sun terrace.

The architectural firm, Perkins and Will, suggested precast concrete balconies as an alternate to cast-in-place balconies. The principal benefits they expect from precasting on this project are:
1. Rapid forming of the main structure.
2. Reduction of dead load by casting balconies in lightweight concrete. (Structural frame is conventional-weight concrete.)
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Installation and connection details are shown at right.

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John F. Torti, a 21-year-old student at the University of Notre Dame, is the national winner of the 1964 fourth annual Reynolds Aluminum Prize for Architectural Students.

The $5,000 prize, to be divided equally between the student and his school, was won for Mr. Torti's design of a "Dynamic Clear Span," a shallow dome constructed of identical aluminum rings enclosing glass or translucent plastic. The design is intended to span large areas without shutting out natural light. The aluminum rings are joined by single bolts at the points where they touch. The size of the rings is determined by the area to be spanned and other design factors.

A fourth-year student, Mr. Torti is the son of Mr. and Mrs. John Torti, 20 Agnola Street, Yonkers, New York. He is a 1960 graduate of Archbishop Stepinac High School, White Plains, New York.

Announcement of the prize selection was made by The American Institute of Architects, which administers the annual competition for "the best design of a building component in aluminum." The program is sponsored by Reynolds Metals Company.

The prize jury also selected for Honorable Mention the design entries of seven other students, as follows:

Eddy Bejar, Rice University, for design of a Multi-Purpose Roof Structure. He is the son of Louis Bejar, Corpus Christi, Texas.

Sam Leonard Condit, University of Nebraska, for design of an Aluminum Arched Building. He is the son of Mr. and Mrs. Ernest L. Condit, Grand Island, Nebraska.

Daniel Eugene Decker, University of Ohio, for design of a Light and Air Control Grid. He is
the son of Mr. and Mrs. H. E. Decker, Newcomerstown, Ohio.

Jacob Joffe and Kyim Kim, Virginia Polytechnic Institute, for design of a Flexible Display and Exhibition System. Mr. Joffe is the son of Mrs. Bluma Joffe, Richmond, Virginia, and Mr. Kim is from Seoul, Korea.

Roger Marshall, California Polytechnic Institute, for design of an Aluminum Bridge. He is the son of Mr. and Mrs. S. T. Marshall, Bakersfield, California.

James Sarantitis, City College of the City University of New York, for design of a Modular Aluminum Structure System. He lives at 100 Park Terrace West, New York City.

Richard Lee Sullivan, University of California, for design of Expanding Frames. He is the son of Charles R. Sullivan, Los Angeles.

The prize checks will be presented to Mr. Torti and the University of Notre Dame during the 1964 convention of The American Institute of Architects in St. Louis, June 14-18. The AIA stipulates that the student winner must use his prize for further education, and Mr. Torti plans to do graduate studies in city planning.

The Notre Dame student’s design was selected from among entries submitted by 27 architectural schools of the nation. Each of the entries had won a competition within its own school for a cash prize of $200.

The entries were judged by an AIA jury consisting of chairman Joseph D. Murphy, FAIA, practicing architect of St. Louis; Sam T. Hurst, AIA, Dean of the School of Architecture, University of Southern California; and W. G. Lyles, AIA, practicing architect of Columbia, South Carolina.

The jury report cited the winner for his “concern for the technicalities necessary to demonstrate that the structure is feasible” and noted that “the design is within the capability of manufacture by practical industrial processes.”

“The jury was impressed with the thoroughness of study, with the potential simplicity of erection, and with the possibilities of practical application,” the report stated.

The Reynolds Aluminum Prize for Architectural Students was established in the 1960-61 school year “to encourage creativity in architectural design and to stimulate the interest of America’s future architects in the design potential of aluminum.”

Previous national winners were:
1963—Manuel A. Fernandez, University of New Mexico.
1962—Jon H. Starnes, University of Texas.

The “Dynamic Clear Span dome was originally designed to cover an underground chapel. In its use over the chapel the dome performs aesthetically as well as functionally.

Initially, by nature, a dome has the capabilities of spanning large distances without the use of intermediate columns. This dome is constructed of identical rings making it less costly to produce and simplifying the construction. Within these rings the glass or translucent plastic discs allow a large amount of natural light into the interior, enhancing the aesthetic value, while limiting the use of artificial light to evening. Finally, the use of circular members instead of the conventional linear members achieves a smoother and less harsh appearance.

This dome was designed using only that part of a hemisphere which is completely in compression. This permits the dome to be constructed with use of a minimum number of members, while giving the dome a shell-like appearance (evident in the photographs of the model).

The hexagonal plan stems from the geometrical arrangement of the identical rings. Six equilateral triangles composed of these ring elements form the dome, which is part of a sphere, resulting in six points of support. The compression force originating at the center ring, transmitted by a beam around the perimeter to these six supports.

Theoretically no connecting fastener would be needed, since the dome is entirely in compression. For means of construction a single bolt is used where rings are tangent.

A triangular shaped piece is used to cover the opening where three circles meet. Along with the structural ring, this piece is the only other form used. It, like the ring, remains the same throughout the dome.

The potential of this dome lies in its use to span large areas without shutting out natural light and still retaining a simple external expression.
Just after World War II, a new era was born. The electronic age had begun to bud forth, and today blooms in all its elegance and glory. Were it so simple, how wonderful.

This media has opened to our children a classroom as wide-reaching as the human imagination. Airborne TV brings new concepts in education that is yet in its infancy.

The centralized sound system with its center of educational wealth flows through the veins of extending wires to the far-reaching extremities of the modern school. The lowly P. A. system and intercom of yesteryear are no longer luxuries, but necessities.

Audio and visual education is today being accelerated by colleges and universities throughout the world.

The demand placed upon engineers and architects of school buildings are ever increasing. Flexibilities to extend the facilities of audio and visual education must be a prime factor in construction of new schools.

Selection of electronic materials goes beyond the comprehension of the radio and TV technician. Industry has advanced the use of electronics to the extent of creating many specialists.

Education has also created a new group of highly specialized personnel. These organizations are in daily contact with factory design engineers, building engineers, and architects, and with educational leaders.

Name manufacturers have equipment that will meet specifications outlined by the architects in routine installations, but to achieve the versatility necessary for special applications or future expansions, alterations or accessory equipment is needed.

The audio specialist is qualified to assist in writing the specifications, obtaining factory engineering assistance for redesigning to accomplish the deviation necessary for specific applications, and to install and maintain the electronic nervous system of the modern school.

1. Determining the functions that the centralized sound equipment will be expected to fulfill at present and for future expansion must be itemized.
2. What equipment will perform these functions?
3. Is the equipment "performance" acceptable?
4. Can alterations be performed for specific needs and/or expansions?
5. Are installation and maintenance assured by competent personnel?

At first glance, these items may seem to be trivial, but too often have been responsible for costly repairs or changes only a few years after installation was completed. In fact, our own firm enjoys a substantial volume of business for replacement of inadequate equipment.

Unfortunately no formula can be given to insure that only proper and accepted equipment will be readily obtainable to fill every need. The seemingly minor requirement may be the major factor in proper selection of equipment.

Probably one of the largest single contributing factors to improper or faulty operation is price. It is today, as in the past and the future, absolutely essential that we economize. The contractor furnishing and installing the centralized sound equipment must also guarantee and maintain this unit for a given time. No reputable business man can do this at a loss.

Another contributing factor is the insistence that the contractor must furnish equipment he quoted rather than substitute later models or makes. Many times final installations may be one or two years after contract was awarded. Other equipment of equal ratings may be found to function better under the conditions existing in a particular application much more efficiently than that earlier recommended.

Substitution of equipment in most cases is an additional cost to the supplier, but pride of a "job well done" and possibly less service justifies the difference.

Planning a centralized sound system to meet every requirement is virtually impossible. However certain basic needs must be followed:

1. Is AM reception required?
2. Can FM educational stations be received in the locality of the school? (FCC regulations on power radiation may prohibit reception of certain stations).
3. Will disc jockey-type operation be used in such a method as to require more than a single turn table?
4. In an all-grade school, will use of equipment for high school and lower grades require multiple channel operation for simultaneous use?
5. Is intercom required between central station and classrooms?
6. Is call origination from classroom to central station needed?
7. Would a dial type telephone system in the various rooms that would enable the same telephone usage inside the school that we use at home be a time-saving system?

Other questions that would fill volumes are asked and must be answered before finalizing and bid-taking.

We are in a changing world, but with better schools and better educational aids being used, we build better communities and a better country.
That Stock Plans for school construction have not worked satisfactorily, where tried throughout the nation over the years, is well-documented in AIA School Plant Study for Jan.-Feb. 1953. But advocacy of such plans for schools continues in many quarters.

Such advocacy comes, among other sources, from legislators, staff members of taxpayers associations, representatives of Grange & Farm Bureau Federation, school board members, educators, interested school patrons & taxpayers. On numerous recent occasions, stock plans have been proposed seriously & vigorously as a means of saving time & money in capital outlay programs for schools.

These proposals have, with equal vigor & seriousness, been opposed by those who place high value on problem-solving type of planning for school construction, & the right, & even obligation of a school system to use each new construction project as an opportunity to improve school design and construction.

A True Evaluation:

It is our purpose here to explore merits of this controversy. Upon what basis should such proposals and opposition to them be evaluated?

Most obvious and important differences between using or not using stock plans for schools, is in time taken to prepare plans and specifications — in timing of professional attention to layout design and specification — and in functional appropriateness and economy of layout and design of a specific construction project at a specific time at a specific location. It appears, therefore, that proper and valid basis for decision would be clear and comprehensive understanding of function and importance of planning school buildings.

What values, both educational and financial, are expected to accrue to a school project from thorough, competent planning, done immediately prior to construction? In brief, what is function of planning?

Why Do We Plan?

- To prepare plans and specifications to reflect best current thinking in educational requirements and in educational trends obtained from school district staff members, educational and school plant consultants.
To prepare plans and specifications for a project that incorporates best current knowledge of school building design and specifications, and best construction procedures and practices obtained from architects and engineers.

To give adequate attention in design and specifications to local conditions such as temperature, rainfall, direction and velocity of prevailing and storm winds, snow load, earthquakes, available fuels, neighborhood noises, access roads, utility connections, load-bearing value, workability and fertility of soil, contours, drainage, and presence of safety hazards.

To coordinate conflicting desires for floor space and construction quality in order to establish priorities so that funds available for project can be most wisely expended to accomplish best specific purposes for which project is intended.

To relate present construction needs and financial ability of school district to its estimated future needs and financial ability — in short, to relate present project in terms of quality level of construction and services supplied to carefully worked-out master plan for total site utilization at some future date.

To determine paint at which urgency of need for building dictates that further planning should cease and construction proceed.

To meet local and state school construction code requirements with least cost and least interference with educational service of building.

To make it possible for construction bidders to be really competitive because of directness, clarity and completeness of plans and specifications.

**Who Plans? Who Makes Stock Plans?**

Whoever plans a school building exercises considerable control upon type and cost of educational program to take place in proposed building. Education in this country is a state responsibility but task of providing and managing educational enterprise has been assigned to local agencies — school districts. As an important part of that assignment, school district officials are responsible for planning school buildings. It would follow then, that local school officials may properly decide whether or not to use stock plans for a given project. These decisions, however, should be based upon thorough knowledge of implications of using such plans.

In first place, when stock plans are used, many crucially important planning decisions are made by persons not responsible to the school district concerned.

Stock plan proposals usually provide that they be prepared and made available by the state. State agency having this responsibility would of course, include only such plans as it chose. It would follow therefore that their use by local school districts would be tantamount to increasing state control of education at expense of local decision and control.

Another inescapable implication of use of stock plans is that genuine functional planning suffers. For example, when plans for a project are being developed on an individual problem-solving basis, inclusion of a recommended feature is easy and a natural part of planning procedure. However, if recommended feature is not found in the stock plans, it becomes necessary to determine if its incorporation will, because of plan changes required, nullify cost and time-saving intended when decision was made to use stock plans.

**How Much Planning?**

Since degree of thoroughness and completeness of planning is one of principal issues in deciding whether or not stock plans should be used, it becomes necessary to explore question "just how much planning does a school construction project deserve?" In general, amount of planning justified for any type of construction is related to:

- Importance of enterprise — it is important to society to have a school building that does best possible job for education.
- Magnitude of construction program — total national need for school construction is so large that improvement in efficiency and lowered unit costs when applied promptly to entire program, constitutes significant total — conversely, if im-

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The text contains a detailed discussion on the importance of planning in school construction. It highlights the risks of inadequate planning, such as increased costs, lower quality of service, and lost time. The text also outlines ways to prevent these losses, such as selecting the right project site, making efficient use of site fluidity, and ensuring comprehensive planning. Additionally, it advises on the benefits of using stock plans, which can save time and money, but requires careful consideration of their appropriateness for the specific project. The text concludes by emphasizing the importance of competent planning and the consequences of inadequate planning.
Mr. Forrest R. West, AIA, South Bend architect, has been appointed Building Commissioner for the City of South Bend.

Mr. West also serves as Treasurer of the Northern Indiana Chapter, AIA.

ISA President Al Porteous and NIC President Bill Rammel jointly represented Indiana at a meeting of state association presidents at the Octagon late in February. Every state in the Union was represented.

The three day meeting covered a wide variety of topics, both organizational and professional. The need for increased membership was stressed, with a goal of 2,000 new members for 1964 established.

Burnet-Binford Lumber Company, Inc., of Indianapolis, has announced the appointment of Mr. Robert B. Klein to their commercial sales staff. Mr. Klein was with the firm for twelve years before leaving in 1959 to form his own window sales organization.

The Historic Landmarks Foundation announces that Mr. John T. Windle of Madison will speak on "Details and Furnishings of the Federal Period" at the Foundation's next meeting on Wednesday, April 8th. The meeting will start at 8:00 P.M. in the Glendale Center Auditorium.

Mr. Windle is the owner of the famous Shrewsbury House in Madison, which he uses both as a residence and an antique shop. He is a well-known historian specializing in the early and late 19th century period.

Admissions to the talk is free.

Saturday, March 28th, is the date for the Indianapolis District's annual Student Recognition Program. Architectural students from Indiana who are attending various schools throughout the country have been invited, along with interested high school students from the greater Indianapolis area.

The entire program will be held on the campus of Butler University, starting with a tour of the Butler Library designed by Minoru Yamasaki. There will also be a tour of the Clowes Memorial Hall (designed by J. N. Johansen and Evans Woollen), dinner in the Krannert Room of Clowes Hall, with remarks by Mr. Woollen, and optional attendance at the Indianapolis Symphony Orchestra Concert.

The Women's Architectural League is participating in this year's program, and wives are invited.

It is most important that a good turn-out of practicing architects be on hand to welcome the students, so mark the date now and be sure to attend.

Mr. Fran E. Schroeder, AIA, Indianapolis architect, was honored at a luncheon at the Indianapolis Athletic Club on Monday, February 17th. At the luncheon, Mr. A. M. Davis, Regional Manager for the Portland Cement Association presented Mr. Schroeder with an engraved plaque and check for $500.00 for his regional award-winning design of the Indianapolis Horizon Home.