Hundreds of thousands of passengers have now experienced the new Houston Intercontinental Airport the airport for people as well as planes. The Texas Architecture 1969—award winner by architects Golemon and Rolff and Pierce and Pierce utilizes the unit terminal concept where super-sonic planes come to the passenger.

Enthusiastic and alert children and teachers at two elementary schools near Dallas attest to the fact that there can indeed be new life for old schools. Additional new space combined with modernization of existing space provide flexible, innovative schools on limited budgets.

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TEXAS ARCHITECT
HOUSTON
INTERNATIONAL AIRPORT
TEXAS

HOUSTON
TEXAS

GOLEMON & ROLFE AND PIERCE & PIERCE
ARCHITECTS

TEXAS ARCHITECTURE 1969

Editor's Note: One Hundred and Seventy entries were narrowed down to ten finalists by the Texas Architecture 1969 awards jury. The jury selected three projects from the finalists to receive Honor awards. The three Honor award projects were featured in the January, February and March 1970 issues of The Texas Architect. This month The Texas Architect is pleased to feature one of the other seven finalists.

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JUNE, 1970
Located north of Houston between two major freeways lies the Houston Intercontinental Airport — a building complex providing one of the freshest concepts yet bearing on the problem of major mass transportation. With the elimination of long walking distances from car to terminal and terminal to plane, and the apparently simple lineal organization of the various elements insuring operational efficiency and orderly future expansion, one might wonder why such a concept has not surfaced before. The fact is that thousands of hours of planning, discussions, and study were required before a viable alternative to the time-worn design approach was formulated, an approach which called for parking the traveler’s vehicle on the ‘land side’ of the terminal, forcing him to walk to and through a ‘terminal building’ and his plane on the ‘air side’ of the terminal. This sometimes involved a total walking distance of a mile or more.

In designing the Houston airport consideration was first given to the passengers’ need — a charter from which proceeded ideas which were to give birth to ‘the Houston Concept.’ Fundamentally these ideas were to create a drive-in terminal which brings everything close together . . . shorten walking distances by using both sides and the roof for parking . . . bring planes to the passenger . . . cluster them at all four corners of the terminal, again slashing walking distances and increasing curb space for ground transportation.
After numerous studies and conferences, the unit terminal concept was adopted. Each terminal provides for two floors of drive-in parking on the roof, allowing spaces for 773 cars per terminal with additional spaces for 1,600 cars at ground level at either side. Provisions were made for the future addition of one more parking level, and the grade level parking can be double-decked. Planes "come to the passenger" and cluster about flight stations situated at all four corners of the terminal.

Initially there will be two terminals providing 20 gate positions each. Future terminals will be added as demands increase. One terminal contains the International area which includes customs, public health, and immigration facilities. The second terminal provides space for airport administrative offices. The Hotel Complex, which will be built next, is located in the center of the Terminal Area and will be connected directly to the unit terminals by an underground train.

In this day of overcrowded and confused airport facilities, it is a welcome relief to a traveler to know he has only to conveniently park his car on the roof, take an elevator down to the ticketing level, walk 80 feet to the ticket counter and, after purchasing his ticket, take a quick one minute and forty second walk to his plane seat.
TERMINAL
Photos by Bert Brandt & Associates

CONCOURSE

Photo by Richard Payne

FLIGHT STATION
JUNE, 1970

Article Layout By V. Raymond Smith
Two elementary schools in the suburbs of Dallas, Texas, show that innovative schools can be built step-by-step on limited budgets even in existing schools that seem to defy change. Additions are the key. Both projects benefited from area school districts who believe that good school design can only result from a partnership of a courageous board, enlightened administration, and a creative architect.

CENTRAL ELEMENTARY SCHOOL, DUNCANVILLE

ARCHITECT: JARVIS-PUTTY-JARVIS
SUPERINTENDENT: W. HUGH BYRD

Teaching areas allow for any imaginable arrangement for instruction whether it be small groups of 5 or less or large groups of 90 or more.
Lights may be turned off in one or more sections for audio visual presentations.
ROOFING BETWEEN BUILDINGS

Administrators often wait until the prospect of a new school is in view before introducing new approaches to education or making innovations in design. But this delay is unnecessary since innovations can be incorporated in any remodeling or expansion program, no matter how modest in scope:

When an elementary school in Duncanville, Texas, needed to be enlarged, the administration wished to combine team teaching with open planning. This called for a new building to house the equivalent of 16 classrooms in one single space: The architect located the building to one side of the existing building and roofed over the space between them to form a large room for dining and activities: With doors opening onto an entry court, the room is accessible to the community without passing through the school building: As soon as this section is completed, the old cafeteria will be converted to teaching spaces. In addition, the school’s administrative offices were modernized, and a group of classrooms changed into an open area shared by the entire first grade. Another wing is slated to be modernized, and, like all the current remodeling and additions, it will be air conditioned:

<table>
<thead>
<tr>
<th></th>
<th>Area</th>
<th>Cost</th>
<th>Unit Price</th>
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</thead>
<tbody>
<tr>
<td>Remodeling</td>
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<td>$ 5.92</td>
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<tr>
<td>Addition</td>
<td>22,754</td>
<td>257,836</td>
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</tr>
<tr>
<td>Site work &amp; Demolition</td>
<td></td>
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<td>7,000</td>
</tr>
</tbody>
</table>
Corridor space is skylighted and provides non-disruptive flow of traffic in and out of class areas.

The library is an integral part of the teaching areas and can be contracted, expanded or simply rearranged (as can the teaching areas) by relocating to movable cabinets.
INTEGRATED ADDITION

Plano High School typifies schools that within a few years of opening become nearly obsolete. Although built in 1961, it was not air conditioned, and its construction made the addition of air conditioning difficult. Furthermore, the layout offers little opportunity to rearrange the interior for team teaching.

Despite these drawbacks, when Plano's population growth necessitated doubling the school capacity, the architect developed a plan that permitted classrooms to be grouped in clusters around a learning center and air conditioning to be installed in new and existing parts of the building.

New buildings are being added between and around two of the old classroom wings: Construction continues without interrupting classes, and during the summer vacation the contractor will remove the walls separating the old and new buildings.

The solution developed for Plano is not necessarily the cheapest; it might have cost less to build a separate structure unattached to the existing school. But with integrated construction, the value of the school is enhanced much more than with separate buildings.

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<thead>
<tr>
<th>Area</th>
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<tbody>
<tr>
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<tr>
<td>Addition</td>
<td>43,700</td>
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</table>

A list of publications related to this series, "New Life for Old Schools," are available from EFL. New Life for Old Schools Project Suite 1734, 20 North Wacker Drive, Chicago, Illinois 60606.

Educational Facilities Laboratories, Inc., is a non-profit corporation established by The Ford Foundation in 1958 to help schools and colleges in the United States and Canada solve their physical problems by encouraging research, experimentation, and the dissemination of knowledge regarding educational facilities.
When Completed the court-yard between the wings will be filled in—old walls will be removed and new team clusters will emerge. Classes continue while work goes on outside during the summer. The present exterior walls will be removed to create team clusters.
During the late 1870’s, while the capital building was under construction, the first important theater in Austin was built by Charles A. Millett on Ash Street (now 9th Street), between Congress Avenue and Brazos Street, where his lumberyard then existed. This was the beginning of a new era which brought with it a theatrical culture which Austin had never yet experienced.

Little is recorded of Captain Millett’s family tree, or educational background, but it was known that he was one of the wealthiest and most influential men in Austin during his lifetime. His wealth lay in the lumber and construction business, and it is suspected, although not confirmed, that Millett might have been an architectural designer, and the opera house may have been his creation. On the corner of Ash and Brazos Millett had built his three story mansion, and later added another portion to it, which filled the space between his home and the opera house.

In 1878, five years before the University of Texas opened its doors, and ten years before the state capital was completed, the Millett Opera House began entertaining the public. The construction consisted of two foot thick, load-bearing, limestone walls, and completely spanned by massive timber trusses which supported a gambrel roof. These trusses spanned fifty-six feet, making the greatest clear-spanned space in Texas at that time.

In the eighteen years following its construction, the Millett Opera House played an important role in many varying phases of Austin’s needs besides theatrical entertainment. Until 1896 the opera house was used for inaugurations, political conventions, and legislative sessions of the state government. Besides being used for important balls and other social activities, you could pay a nickel to go roller skating in the auditorium when the summer heat was too unbearable for other uses. So, basically the opera house was the meeting hall of Austin. The entertainment varied from the famous Strakosk Opera Company and Hamlet, starring Edwin Booth, to traveling minstrel shows and local amateur productions.

In 1896, when the opera house was sold to John Phillips, its stature slowly sank, and in 1898 when the Hancock Opera House opened, its glorious era ended. In 1901, the windows on the second story facade were lowered and squared. A third floor was added in the front portion of the building as living quarters for the Phillips family, and the balcony was ripped out, and boarded over as flooring for a dance hall. The main floor was a full time roller skating rink.

When the Knights of Columbus bought the building in 1911, the first floor was a junk heap, and the rest of the building in little better shape. This fraternal lodge spent $15,000 to add a new facade and remodel the interior.

The lodge maintained ownership until 1929, when the Von Boeckman-Jones Printing Company acquired ownership. The changes which they made were insignificant, amounting to adding fire escapes and enlarging some of the windows in the rear.

The present owner is the Austin School Board, but when the building was threatened with destruction in 1956, the Maverick-Clarke Stationery and Office Supply Company obtained a lease (which will expire in 1980) in an attempt to save the old building. To the face of the building they added a wrought iron leaf patterned decoration about all of the four original ground floor openings. Then they transformed the door to the stairs into a showcase, and turned the stairs, cutting an opening through the wall, towards the retail area on the ground floor. The new stairs are a short flight, consisting of five steps, and leading to an eight by eight landing where a graphic and historical display of the old building is set up. Here, the history of the Millett Opera House ends, but through the spirited efforts of Maverick-Clarke a portion of the historical significance of this building has been preserved.

In the Millett Opera House several decorative elements were used in a structurally illogical form. First of all, there are no end columns or pilasters on the outskirts of the facade, so the entablature
Millett Opera House as originally constructed in 1878.
DRESSING AREA

FLOOR PLAN (THEORETICAL)

New Facade Added in 1911
reads as being cantilevered from the two central pilasters. Secondly, the pediment should project outwardly into a central block, or else cover the entire entablature in order to be archeologically correct. Also, although there is a balcony above, the central pilaster on the first floor suggests that it is supporting a void on the second floor, which is the door opening onto the balcony. And last of all, the entablature projects out where the pilasters meet it, and looks as though it is a second capital, although there is nothing for it to support. I can see logical reasons why the designer might have done all these things, but I can also see that with a little more careful planning, none of these situations would have occurred.

Of the things I particularly enjoyed in the building, a few remain. The first thing I appreciated was the magnificence of the wood carving in the entablature and pendiment. This high quality of craftsmanship seems unusual for the basically primitive (architecturally) era in which it was built. Secondly, I enjoyed wandering through the truss structures in the roof, because in their own way, they were very beautiful.

As far as the actual style of the opera house is concerned, I cannot accept the label “Texas Style” which one author gave it, for except for the construction materials used which were abundant to this part of the country, all of the detail was borrowed from styles already in existence. Millett might not have needed to be familiar with anything that he could not find in Texas to design this building. First of all we will consider the existing architectural works in Austin. There was the French Legation which had square columns in its portico which resemble the double pilasters on the second floor of the facade. There was also the Governor’s Mansion which was Greek Revival, and its architect was from outside of Texas. If Abner Cook was in Austin, Millett who was a builder, may have had discussions with him about northern trends or even received books or graphic information through him. As we have already mentioned, the Spanish influence was close at hand. The railroad could have played an important factor, because Galveston and Houston, probably possessed some of the finest architecture in Texas at that time, and were now easy to reach.

In 1965 the Millett Opera House was dedicated as a Texas Landmark, and thus it would seem that its preservation is guaranteed and can reflect the cultural and historical significance which is our heritage.
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Exhibit of School Architecture

The Joint Annual Convention of School Boards and Administrators will again feature an exhibit of school architecture. The exhibit of architecture will be viewed by approximately 2,500 school administrators and board members at the September 27-28 Austin convention. It is anticipated that the exhibit will be, as it has been in the past, one of the most popular attractions at the convention.

The entries will be judged by a jury composed of representatives from the TSA Committee on School and College Architecture, the Texas Association of School Boards, and the Texas Association of School Administrators. Preliminary submissions in the form of slides and photographs should be sent to TASB, 405 West 8th Street, Austin 78701.

The Texas Architectural Foundation offers scholarships in architectural education and sponsors research in the profession. Contributions may be made as memorials: a remembrance with purpose and dignity.

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