Fellowship Has A Purpose

By WILLIAM T. ARNETT
President, Florida Association of Architects

To organize and unite in fellowship the architects of Florida. So begins the new FAA statement of purpose adopted at the 50th Annual Convention in Jacksonville last November.

To many people, fellowship suggests some rosy, intangible kind of relationship with others that can be used to fill empty hours or possibly even to escape the pressures of everyday living.

But that is not the meaning fellowship has for us. In FAA it is and should be primarily a means toward an end.

It was to consider and to define the purpose of our fellowship in specific terms that the old and new Executive Committees of the FAA Board met early in December in Winter Park with the chairmen of the five new FAA Commissions. Out of this intensive two-day study period has come — among other things — a simple statement of ends, of purposes, of goals for FAA for 1965.

Our First Purpose

First, we will seek to build an even stronger and more effective Association, so that the profession may be of ever-increasing service to society.

The complete revision of the Association's Bylaws at the November Convention has made it possible to inaugurate a simplified and streamlined organizational structure, well suited to the needs of a rapidly changing profession.

No revision was made in the office of Vice President — President Designate, in which James Deen is serving, will give the Association the continuity of administration it has lacked heretofore. Of equal importance is the simplification of the FAA committee structure.

We have approximately 25 committees which are the life blood of the Association. These committees are now grouped into five functional Commissions: the Commission of the Professional Society, headed by Hilliard T. Smith; the Commission on Education and Research, headed by C. Ellis Duncan; the Commission on Professional Practice, headed by Francis R. Walton; the Commission on Architectural Design, headed by William K. Jackson; and the Commission on Public Affairs, headed by Herbert R. Savage.

The accomplishment of a professional association is probably measured best by the accomplishment of its committees. This year, each Commission and each Committee will have not only a long-range goal, but a simple limited objective to be carried out during the year.

We owe a great deal to those who man Commissions and Committees, unsparingly devoting their time and energies to the good of the profession and the community.

Our Second Purpose

Second, we will seek the establishment by the Florida Legislature of a comprehensive study committee to coordinate the efforts of the various segments of the construction industry so as to further the best interests of building owners and the general public.

Construction is America's largest production field. In Florida, construction represents annually a $2 billion segment of the economy, establishing it with agri-business and tourism as one of the state's largest and most important economic and social influences.

Our Third Purpose

Third, we will seek to deepen and strengthen communication between the eleven AIA Chapters, the two

(Continued on page 12)
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Fellowship Has A Purpose
By William T. Arnett, FAA President

FAA Special Award — 1964 Convention.

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THE COVER
Cumberland Sound as seen through a musket loophole in the Northeast Scarp. Feature in this issue is the partial restoration of Fort Clinch, Amelia Island, Florida which received a FAA Special Award at the 1964 Convention. The Honor Awards Jury commented, “Painstaking, sympathetic and inspired restoration of a magnificent historical monument, achieved with an incredibly low budget. We hope that the work so well begun will be completed.”

“We recommend that the story of Fort Clinch be published in The Florida Architect and—later in the AIA Journal as an inspiration to the profession and the public.”
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A Partial Restoration of Fort Clinch

By HERSCHEL E. SHEPARD, JR., Architect

Fort Clinch State Park occupies the northern tip of Amelia Island, Florida, located due east of Fernandina, Florida. Named for General Duncan Lamar Clinch, a veteran of the War of 1812, the Indian Wars, and the Mexican War, the park has become a popular tourist attraction, and offers campsites, picnic areas, and the impressive remains of Fort Clinch to the public.

The Florida State Board of Parks and Historic Memorials has always recognized the historical value of the Fort, as well as its potential as a major tourist attraction. Therefore, in 1963 funds were made available for the first steps of restoration, and my office was commissioned to begin the work.

Unusual and challenging problems were soon encountered. However, before discussing these problems, it is necessary to review the original design criteria and construction history of the Fort, in order that our solutions may be clearly presented and understood.

The Design of The Fort

In 1816 the Federal Government began construction of a series of permanent coastal fortifications. The necessity for such defense had been voiced by George Washington, but the War of 1812 was necessary to impress this fact upon Congress. By the outbreak of the Civil War, closed forts protected most important harbors on the Atlantic and Gulf coasts.

Fort Clinch was one of these closed forts. Designed and built by the U. S. Army Engineers, its primary purpose was to prevent passage into the deep water harbor of Fernandina by way of Cumberland Sound. Its general disposition was based on defensive principles first perfected by the French engineer Vauban in the 17th cent-

(Continued on Next Page)
tury, and it was intended to withstand the effects of smoothbore artillery.

The plan is that of an irregular pentagon, formed by scarp walls connecting five Bastions, or protected gun emplacements. Within each Bastion at approximately ground level were located flanking howitzers, which fired parallel to the face of the scarp walls as a defensive measure; atop each Bastion was to be located an eight-inch Columbia, or a high-trajectory weapon also used primarily in defense of the Fort proper.

On the immediate exterior of the scarp walls was located a ditch, from which graded fill sloped sharply upward to form a crest, the elevation of which was a few feet lower than the top of the scarp wall. The graded fill then sloped gently from the crest to natural grade beyond. This immense sand structure was known as the Glacis, and it was to completely encircle the Fort. The Glacis shielded the scarp walls from the breeching action of cannon by absorbing or deflecting the shot, and provided a clear field of fire from the musket loopholes and parapets.

Within and parallel to the scarp walls were placed high embankments of sand, called the Ramparts. Original plans called for the mounting of fifty-nine guns, placed on the Ramparts, located behind parapet walls. These weapons were to furnish the basic protection from Cumberland Sound. A passage-way, known as the Chemin-des-rondes, was provided between the Ramparts and scarp walls, in order that muskets might be fired through loopholes in the scarp.

The interior space surrounded by the Ramparts was known as the Parade. (See photo No. 1) Here were located the one-story Guardhouse, Prison, Latrines, Lumber Sheds, Blacksmith Shop, Bakery, and Kitchens; the two-story Storehouse and Soldiers' Barracks, and the three-story Officers' Quarters. Rainwater was collected for drinking purposes and was stored in several underground cisterns. All structures necessary as support facilities were located within the scarp walls, and the Fort was designed to be self-sufficient while under siege.

The designers of the Fort selected materials that had been proven through long usage, as is indicated by the original plans, dated 1851. Brick was chosen as the basic construction material, probably for its availability, resistance to shot, and adaptability to the vaulted construction required in the Bastions, covered passageways, and second floors of the Storehouse, Soldiers' Barracks, and Officers' Quarters. (See photo No. 2). Most floors on grade, possibly all roof surfaces, and a few lintels of short span were to be of slate. The lintels and sills of all large windows and door openings, the treads of all exterior stairs, and all gun platforms were to be of granite. (See photo No. 3) The original plans called for wood roof structures over all buildings not vaulted, with lesser spans employing rafters, and greater spans employing purlins and rafters over heavy trusses. It should be noted that a relatively new material, cast iron, was used in the design of columns, second floor girders, and in a unique beam made of cast sections bolted together and placed above the porch of the Soldiers' Barracks. (See photo No. 4)

The Construction History of The Fort

Property for Fort Clinch was acquired in 1842, and construction began in 1847. By 1850 the major portions of the Seawall and the North Bastion were complete. Just
prior to occupation by Confederate forces in April, 1861, major parts of the construction had progressed to the following point: the North and Northwest Bastions were virtually complete, with the exception of gun platforms, but the East, South, and Southwest Bastions were complete only to the springing of the gunroom arches; vaulted galleries to the Bastions were virtually complete; the scarp walls between the North, Northwest, and East Bastions were virtually complete, but the remaining three scarp walls were approximately fifty percent complete; all Ramparts were virtually completed, but without parapets, gun platforms, and armament; and the Prison, Guardhouse, and Lumber Sheds were complete. Construction had not begun on the Glacis, Ditch, Storehouse, Soldiers' Barracks, Officers' Quarters, Blacksmith Shop, Bakery, or Latrines, and only a few walls of the Kitchens were in place. There is no evidence that any armament had been delivered to the site.

The Confederate forces occupied the Fort for approximately eleven months. With the exception of the erection of a temporary parapet on the Northwest Bastion and other minor modifications, no attempt was made to continue construction. There is no clear evidence that the Fort proper ever received Confederate armament, although temporary shore batteries totalling thirty-three heavy ordnance pieces were located on both Cumberland and Amelia Islands. The shortage of men and armament, plus the incomplete condition of the fortifications, compelled the Confederate forces to view their position as untenable. They withdrew without resistance when a Union naval task force made its appearance offshore.

Union forces reoccupied the Fort and town of Fernandina on March 2, 1862, and remained throughout the balance of the war. Thus Fort Clinch is historically significant for its passive, rather than active, role in the Civil War. It was the first Union fort occupied by the Confederacy to be reoccupied by Union forces.

Construction work proceeded soon after reoccupation. Labor and materials were brought in from the North, and during the period 1862-1865 almost all structures were substantially completed, in remarkable accordance with the original design.

However, a few important modifications were made during construction. Construction of the Officers' Quarters was halted after a few first floor walls had been erected, and was never resumed. The roof construction of the Bakeries, Blacksmith Shop, and Latrines was changed in design, possibly in 1863, from wood rafters supporting slate shingles to wrought-iron angles and tee sections supporting galvanized corrugated iron. The records indicate that this was expensive, but it may have been necessary for increased protection against fire.

Also, the arrangement and type of armament was redesigned in 1863 and again in 1865. The latter arrangement called for four fifteen-inch guns and thirty-six eight-inch or ten-inch Rodman guns or equivalent rifles to be mounted on the ramparts. Furthermore, two-story bomb-proof structures were to be constructed against the northwest, northeast, and cast parade walls; three vaulted passageways were to be constructed from the parade through the ramparts to the Chemin-des-rondes; and the Bastions were to be cut down to allow the guns mounted behind the parapets to fire over them. These last changes were substantially completed during sporadic construction beginning in 1865. The four fifteen inch guns were installed, probably in 1867. This was the only permanent armament ever placed, except that in the Bastions, although almost forty guns of various descriptions were stored within the Fort for many years.

In 1867 all construction work was halted, and the Fort was placed on caretaker status in 1869. Additional armament modifications were proposed in 1879 but never accomplished. Except for changes made during the Spanish-American War, and for armament and facilities removed since then, the Fort stands today as completed in 1867.

From 1869 to 1898 something less than minimum preventive maintenance was provided. Cisterns and magazines in the Bastions developed leaks, as did the roofs of almost all structures within the Fort. Sometime after 1879 the slate roof of the Soldiers' Barracks were replaced with wooden shingles, which subsequently deteriorated. Sand, weeds, unmounted cannon, rubbish, and rattlesnakes were noted during periodic inspections. The Fort was in this condition when occupied by troops in April, 1898, during the Spanish-American War.

Few modifications were made during the occupancy of the Fort from April to September, 1898. Temporary repairs were made to gain adequate shelter, two shallow wells (Continued on Next Page)
and one artesian well were driven, and a concrete emplacement for an eight-inch breech-loading rifle was constructed on the rampart behind the North Bastion. The partially completed walls of the Officers' Quarters were demolished and the brick used as aggregate in the concrete of the eight-inch rifle emplacement. Two of the four fifteen-inch rifles installed during the 1860's were placed in limited service, but no records have been found indicating attempts to provide additional armament.

The Fort was virtually abandoned from 1898 to 1936, when the site was designated Fort Clinch State Park. In 1937 the Civilian Conservation Corps began constructing roads and campsites, and undertook the monumental task of removing large amounts of accumulated sand and debris from the existing structures. Many objects of historic value were found to be missing, and it is believed that a number of cannon were dynamited and sold for scrap during the period of abandonment. A similar fate seems to have befallen the original cast iron columns at the Prison and Guardhouse porches.

The existing conditions of the Fort were thoroughly inspected by my office in 1963 as a necessary prerequisite to further research and preparation of drawings. In general, almost all masonry was in good condition, but repointing was required in most exposed surfaces. However, the outer courses of brick in the North Bastion were in poor condition due to the action of sand-carrying wind and high tides, and portions of walls and chimneys in the Kitchens and masonry gables and chimneys in the Soldiers' Barracks were missing. Masonry in the Latrines, Bakery, and Blacksmith Shop was intact, and recent partial restoration of the Storehouse (now the Museum), the Prison and the Guardhouse had placed them in good condition.

All roofing, windows, doors, frames, trim, interior finishes, furnishings, and equipment were missing from the Soldiers' Barracks, Bakery, Blacksmith Shop, and Kitchens, with the exception of a few doors and frames in the latter. It was evident that freezing rains were causing these structures to deteriorate rapidly, and that work in these areas should receive first priority.

The scant remains of corrugated iron roofing, supported by angle and tee sections, were found over the Bakery, Blacksmith Shop, Kitchens, and Soldiers' Barracks. A similar roof, almost intact, was found in place over the Latrines. Limited information available led us to assume that these roofs had been erected by the C.C.C., a conclusion reinforced by the discovery of a portion of an original wooden truss, still in place at the Soldiers' Barracks, which obviously antedated the metal roof system installed above it.

The ramparts, guns platforms and Chemin-des-rondes were found to be in good condition. Granite and slate surfaces had not visibly weathered. Cast iron gun pintles and tracks were found in fair condition, but all cast iron used in the bastions was in very poor repair. However, the original cast iron columns and beam over the porch of the Soldiers' Barracks were found in place and in good condition.

Outside the scarp walls, the Glacis was no longer in evidence. The ditch, now of most proportions, existed opposite the Southeast scarp only. Although reduced to rubble by the action of the ocean, the Seawall was functioning in a limited manner.

Upon completing the survey, an attempt was made to limit the scope of the work, and we began research of construction records and the preparation of drawings. At this point our problems began, also.

The Problems of The Architect

The first and most obvious problem was that of meeting the budget of $35,000. The long-term intention of the State was to restore all structures as completely as practicable, to include furnishings, finishes, and perhaps facsimile armament. It was immediately evident that our work had to be limited to the preservation of critical areas, and that the funds available would make even this drastically limited scope a difficult problem in itself. However, preliminary cost estimated indicated that we should attempt to repair the masonry of the North Bastion, restore the roofs, windows, and exterior doors of the Soldiers Barracks, Kitchens, Blacksmith Shop, and Bakery, and repaint the masonry of these buildings and part of the North-west Scarp.

At this time photostats of the original plans of the Fort, related drawings, and some documents were located in the Museum files. Careful comparison of the plans and the existing buildings indicated the plans had been followed with remarkable accuracy. Due to the limited scope and nature of our work, further investigation seemed necessary, and it was decided to use the original plans as a guide for all detailing and reconstruction. This seemed particularly fortunate, for a construction history of the Fort had never been compiled.

The original plans presented problems of their own. Many details were vague: since the Army Engineers both designed and built the structures, the finer points were evidently solved in the field. Other details had to be modified due to the scope of the work. As an example, rainwater from the roofs of the Soldiers' Barracks, Blacksmith Shop, and Bakery originally drained to underground cisterns, now completely filled with sand. As excavation was not possible, downspouts were provided.

The greatest problem presented by the original drawings concerned the original design of the wooden roof trusses of the Soldiers' Barracks. The trusses spanned forty feet, were ten feet on centers, and were essentially king post in design. The design was not only a poor original choice; our calculations proved it to be structurally unsound, and it was necessary to add flitch plates to the bottom chord. (See photo No. 5.) It is possible that tension rods were added to the original trusses; at any rate, field modifications of some type must have been necessary.

Our drawings and specifications were subsequently completed and let for bid. The lowest bid, including five deductive alternates, was well over the budget. Conversations with the bidders revealed that the scope of the work was still too large for the quality demanded. Furthermore, the bidders were wary of the unusual repointing and masonry work required, and bid accordingly. In preparing for rebidding, we further restricted the scope of the work by eliminating all windows, doors, hardware, and the repointing of the Northwest Scarp; and various details were modified, without impairing accuracy. The scope of repointing work was indicated in terms of square feet required per building; and masonry work was indicated in number of brick required per building. Also, contractors were requested to provide unit costs for all repointing and masonry work in order that extras or credits could be easily deter-
mined and adjusted as the work progressed.

The results of the rebidding were successful. The State decided not to accept a deductive alternate eliminating the Kitchen roofs, and accepted the low bid for the increased amount of $38,814.00.

Shortly after construction began, the greatest architectural problem of the entire problem was encountered. Preliminary demolition indicated beyond doubt that the metal roof over the Kitchens, Bakery, and Blacksmith Shop had been erected during the original construction. Fortunately, demolition also indicated that the original roof of the Soldiers' Barracks had been supported by wooden trusses, but the metal roof, obviously installed at a later date, was much older than we had assumed.

As work was in progress, it was necessary to decide immediately whether to proceed with the wooden roofs called for on the original and restoration drawings, or whether to issue a major change order, changing all roofs to metal construction, with the exception of the Soldiers' Barracks. After careful deliberation, we decided to proceed with the wooden roofs, for several important reasons.

First, it was evident that the metal roofs were installed as a relatively minor modification of the original drawings, for the masonry parapets had been built almost exactly as detailed for wooden roofs, except that the angles, tees, and corrugated iron extended a considerable distance into convenient mortar joints. However, in order to replace the metal roofs, it would be necessary to remove large quantities of the excellent and irreplaceable original brick construction. The loss seemed greater than the gain, particularly since the installation of the wooden roofs would leave the original masonry intact.

Another factor was the lack of detailed information concerning the design of the metal roofs, for the existing remains left a great deal to conjecture. The existing roof of the Latrines spanned a much shorter distance than the other roofs, and was of little help in furnishing details. Furthermore, original detailed drawings of the modification, if existing, were not immediately available. These drawings would have to be sought in the National Archives, and time did not permit this effort prior to making a decision.

A third factor was that the pattern of the original corrugated iron was no longer standard, and the wrought iron tees and angles would have to be replaced with steel. This fact, plus the lack of detailed information, indicated that restoration of the metal roofs might well be less accurate than the restoration of wooden roofs that had never existed!

Other important considerations favoring wooden construction were those of future maintenance and, of course, the budget. These two considerations ended our review of the problem; the Contractor was notified to proceed with the wooden roofs, and the work continued.

The problem created by the roofs made it clear that more information concerning the construction history of the Fort should be sought immediately. Many basic questions had arisen and were unanswered. Therefore, numerous construction documents were located during a visit to the National Archives in the early part of 1964, and much more information has been assembled since then. Research is not yet complete, but most questions have been answered. To the best of my knowledge, the brief construction history contained in this article is the first ever published regarding Fort Clinch.

The construction phase of the work proceeded smoothly, for the general contractors, the subcontractors, and particularly the superintendent were interested in, and sympathetic to, the work. The matching of the existing brick was typical of most of the field problems encountered: it was time-consuming but not too difficult, and was solved satisfactorily. (See photo No. 6)

The erection of the trusses in the Soldiers' Barracks proved to be a major construction problem. The narrowness of the main entrance to the Fort proper would not allow the passage of a fabricated truss, and it was not practical to lift the trusses over the scarp walls by dragline. The Contractor chose the only alternative: to assemble them in place, piece by piece. However, each truss was completely pre-assembled at the fabricator's yard, each member was number-coded, and the trusses were then disassembled and shipped to the site.

The restoration work was substantially completed in September, 1964. Due to the unit costs of masonry and repointing work required by the specifications, the Contractor returned a credit of $1,364.43 to the State at the time of closing.

Sources

Almost all information in this article regarding the design criteria and construction history of the Fort has been derived from the original documents on file in the National Archives, Washington, D. C. However, several important documents were found in The War of The Rebellion, A Compilation of the Official Records of the Union and Confederate Armies, 1868-1869, U. S. Government Printing Office, Washington, D. C. Background information has been taken from The Encyclopedia Britannica, 1946 Edition.
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Don Fay, owner of Piggly-Wiggly Store in Panama City, says: "In this highly competitive business we can't be bothered with continual maintenance and costly repair work on our heating and cooling system. It's not good for business or our pocket book. This is one of the main reasons we chose year-round reverse-cycle electric air conditioning for warmth in winter and comfort-cooling in summer. It's 100% clean and trouble-free!"

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in summer

PERFECTLY SUITED FOR FLORIDA

Charles Healey, Healey and Hargan, Inc., Tampa, consulting engineers on the Elbert Elementary School at Winter Haven, says: "All-electric design is a natural for schools... particularly year 'round reverse-cycle electric air conditioning which is perfectly suited for Florida use. These heating and cooling systems are efficient, compact, and require only a minimum of maintenance," Mr. Healey and architect Braxton Bright of Lakeland worked closely on this project and on other all-electric schools in Mulberry and Haines City.

BELLAIR APARTMENTS, DAYTONA BEACH

Melvin Fields, vice-president of this 130-unit apartment, says: "Our Medallion-certified deluxe apartments will be occupied by discriminating clientele. Therefore, we must have the best equipment available. Naturally, we chose electric appliances throughout—and year-round electric air conditioning that provides cool comfort in summer and cozy warmth in winter."
Philosophy ...
(Continued from 2nd Cover)

Student Chapters, and the Association on the one hand, that the profession may function with optimum unity of purpose; and between the profession and the general public on the other, so that the architect may become known as the professional playing the leading role in the struggle for a better physical environment.

Our internal communications will be strengthened by two projects established this month: the Presidents’ Workshop, and the Newsletter.

The Presidents of the eleven AIA Chapters and the two Student Chapters in Florida will meet early in January for an intensive Workshop session with FAA Officers and Commission Chairmen. This meeting will provide opportunity for discussion of objectives and purposes for the coming year, and should fill a genuine need in Florida.

The Newsletter will be a new medium of internal communication. Simple in format, lively and up to the minute in content, it will be circulated initially to the FAA Board of Directors, Chapter Presidents, and others on a “need to know” basis. If it is successful, the Association may wish to consider wider distribution at some future time.

Among our vital media of communication is The Florida Architect, the official Journal of the Association. This publication, long recognized as among the outstanding publications of its kind in the Nation, is read not only by architects but by other segments of the construction industry, public officials, and selected members of the general public.

And Finally

This brief view of the purposes of FAA for 1965 does not answer the question of what the Association accomplishes. The answer is that in the manifold activities of the Board, the Association’s Commissions and Committees, and the Executive Director and his staff culminate the combined efforts of the architectural profession in Florida.

But all these FAA activities to advance the aesthetic, scientific, and practical proficiency of the profession do not end with improving individual proficiency alone. They are a dynamic indication of the Association’s (Continued on Page 20)
In the design and construction of religious edifices, as in commercial construction, the prime criteria should be: the needs, requirements and preferences of the people for whom the facility is being created. Let us then analogize by engaging in a brief bit of "market research" similar to the initial steps normally taken in the planning of a business establishment. True, the religious edifice must accommodate (and oftentimes house) the proprietor and his staff and must, therefore, satisfy their basic requisites; but a church without a clientele, as a business enterprise sans customers, cannot long endure and does not justify its creation. It is, thus, essential that the requirements of the consumer hold precedence over those of the management and employees.

In analyzing the requisites of our consumer we must first establish precisely who the consumer is. Let us begin with the whole: all religions and all religious structures (which, for simplicity, we shall refer to as "churches").

Churches are patronized by two distinct platoons: the permanent church members and the non-affiliated church goers. The church members are relatively consistent in nature and attendance. The church goers are the occasional patrons. Members are obtained from the ranks of the "goers" and in order for the church to grow and flourish, both segments must be catered to. In the most recent statistical evaluation it was disclosed that, throughout the United States, some 63.4% of the population professed church affiliation (membership) while an overwhelming 96.4% declared a religious preference. From these fairly accurate figures we arrive at the hypothesis that only approximately 3.6% of the population will never, never, set foot into a church and that our "market" encompasses almost ALL of the public. If we must build to satisfy ALL then we must dissect the "all" and determine their make-up, their predilections and their necessities.

Today's church goer-member is from all walks of life, from all ethnic and cultural levels, from infant to oldster, and relatively impossible to personalize or classify as to his likes, conceptions of ecclesiastical beauty or utilitarianism, or his reaction to motif or basic style. He does have, however, one fundamental and inherent demand. If he is to be attracted to a church, if he is to be offered the incentive to return, if he is to be enlisted into permanent and continuing membership, he must find the church safe, accessible and convenient. Fortunately, the factors that make a church, or any facility, safe/accessible/convenient do not affect nor depend upon the period, style or mode of architecture. They neither detract, nor con-

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Church

(Continued from Page 13)

lict, nor oppose, nor upset.

What are Mr. Church Goer-Member's physical requirements? Today, he is a composite of the very old and the extremely young, of robust health and faltering gait, of alertness and predisposition, of high elation and deep despondency, of vitality and senility, of euphoria and pain, of accident-awareness and accident-proneness. Today, 10 out of 100 suffer permanent pathological limitation of activity and another 10 of the remaining 90 are over age 65. Tomorrow, because of medical advances and improving economic conditions, the lame and the halt and the elderly will number 50 out of every 100 (this based upon sound and qualified projection to the year 1980). Surely the church structure is to endure until and beyond 1980. It will weather the years better than Mr. Church Goer-Member will. It is reasonable to assume that these 1 out of 2 (the limited, impaired, aged) are more in need of spiritual comfort and counsel than their more dexterous counterparts. If the church is to serve ALL the people, and particularly the spiritually needy, it must be equipped to do so. It must be designed for the consumer of today and tomorrow.

The very same physical factors that make a church accessible to the physically limited make it considerably safer for everyone and offer more convenience to all. The more convenient it is to go to church the more enjoyable the rite will be and the greater the attendance. After all, this is why churches are built, and they are being built at the rate of 1400 per year.

What can be done to insure Safe/Accessible/Convenient construction? What determines Safety, Accessibility and Convenience? We know for a fact that totally accessible construction permits easy access to even the most extremely limited BUT it does not impose any hardship or inconvenience upon the non-limited. We can safely design for the extreme and satisfy all, and it can be done without increased cost. Physical limitation runs the gamut from poor vision and high blood pressure down to those incapable of walking. The extreme is the non-ambulatory, the wheelchairite. This same wheelchairite could be the Parson himself with a leg fracture, a sprain or post-operative limitation. So, keep the pews filled and the Pastor in the pulpit, design all churches to accommodate the wheelchairite and everyone will benefit. Technically this can be accomplished rather simply. Most architects have been given a copy of the American Standards Association "Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped (ASA:A117.1-1961)." If you do not have a copy, or if you desire additional copies they can be obtained, without cost, from: S. A. C., P. O. Box 7368, St. Petersburg, Florida 33734. These specifications spell out, to the letter, all of the technical aspects; but it is left up to the individual architect to synthesize these requirements into an aesthetic and acceptable composite.

Primary features to incorporate into all construction are: mono-level construction from street (or parking area) to all points within the structure (whenever possible); both stairs and gently rising gradients in combination.

(Continued on Page 20)
The revolutionary CELLON* process is proving to be the most valuable development ever to come out of Koppers Company, Inc.'s relentless research for better pressurer-treated wood preservatives. This impregnating treatment, applicable to any wood or wood product, provides 100% penetration of pentachlorophenol into every cell of the wood. The preservative is deposited in non-leaching crystalline form, and the treated product emerges dry.

Among many improved qualities, this new treatment is colorless, odorless, practically weightless and non-swelling. Materials treated are paintable, unchanged in dimension and free from raised grain. They retain the same strength, weight and appearance as untreated wood.

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For more than a year Alger-Sullivan Company in Northwest Florida has been CELLON treating long-leaf yellow pine and other species for industrial, commercial and residential uses. If your next plan calls for a combination of natural wood beauty with long service life, even under risky humidity and decay conditions, contact Alger-Sullivan Company, Century, Florida, AC 305-256-3456. Brochures on request.

*Koppers Company, Inc. Trademark

ALGER-SULLIVAN COMPANY
**New & Notes...**

**UCLA Competition...**

The Regents of the University of California have authorized a competition to select an architect for the proposed new University Arts Center in Berkeley. The competition has been approved by the American Institute of Architects. The preliminary stage is open to any architect resident and licensed to practice in any of the United States. Registration forms are available by addressing: Eldridge T. Spencer, FAIA, Professional Advisor for the University Arts Center Competition, 251 Kearny Street, San Francisco, California 94108. Registrations must be postmarked by January 30, 1965, with preliminary stage entries due March 13. The proposed new structure will have 61,800 square feet of net assigned floor space, and a budget of $2,825,000. Other final competitors will receive $5,000. The winning entry will be awarded either a cash prize of $25,000 and licenced to practice in any of the states. Other final competitors will receive $5,000.

**Chapter Presidents Meet...**

A Presidents’ Workshop will be sponsored by the FAA in Tampa on Saturday, January 9, 1965. The presidents of the eleven AIA Chapters and two Student Chapters will be guests of the FAA for luncheon and a series of talks by FAA officers and commissioners. The purpose of the workshop is to talk over mutual problems and (Continued on Page 18)

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APRIL 27-30, 1965

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**FOR MORE INFORMATION CONTACT...**

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Bartow, Central Florida Gas Corp.
Blountstown, City of Blountstown
Boca Raton, Florida Public Utilities Co.
Boynton Beach, Florida Public Utilities Co.
Bradenton, Southern Gas and Electric Corp.
Chattahoochee, Town of Chattahoochee
Chipley, City of Chipley
Clearwater, City of Clearwater
Clermont, Lake Apopka Natural Gas District
Cocoa, City Gas Co.
Crescent City, City of Crescent City
Cutler Ridge, City Gas Co.
Daytona Beach, Florida Gas Co.
Deland, Florida Home Co.
Delray Beach, Florida Public Utilities Co.
Eau Gallie, City Gas Co.
Eustis, Florida Gas Co.
Fort Lauderdale, Peoples Gas System
Fort Meade, City of Fort Meade
Fort Pierce, City of Fort Pierce
Gainesville, Gainesville Gas Co.
Geneva, Alabama, Geneva County Gas District
Haines City, Central Florida Gas Corp.
Hialeah, City Gas Co.
Hollywood, Peoples Gas System
Jacksonville, Florida Gas Co.
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Opa Locka, City Gas Co.
Orlando, Florida Gas Co.
Palm Bay, Palm Bay Gas Authority
Palm Beach, Florida Public Utilities
Palm Beach Gardens, City of Palm Beach Gardens
Panama City, Gulf Natural Gas Corp.
Pensacola, City of Pensacola
Perry, City of Perry
Plant City, Plant City Natural Gas Co.
Port St. Joe, St. Joe Natural Gas Company
St. Petersburg, City of St. Petersburg
Sanford, Sanford Gas Co.
Sarasota, Southern Gas and Electric Corp.
Starke, City of Starke
Tallahassee, City of Tallahassee
Tampa, Peoples Gas System
Titusville, City Gas Co.
Umatilla, Florida Gas Co.
Valparaiso, Okaloosa County Gas District
West Miami, City Gas Co.
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FLORIDA GAS
WINTER PARK / FLORIDA
goals for 1965, to suggest ways in which chapters and the association may work together, and to prepare the new presidents to be more effective in office. Of particular importance will be the orientation on upcoming problems in the Florida Legislature.

Church Conferences . . .
January 4-15, 1965 — Institute of Church Design sponsored jointly by the Pittsburgh Theological Seminary and Carnegie Institute of Technology, 616 North Highland Avenue, Pittsburgh, Pennsylvania. March 8, 10, 12, 1965 — Church Architecture Conferences sponsored by the Florida Council of Churches and local AIA chapters in St. Petersburg, Miami, and Orlando-Winter Park.
April 27-29, 1965 — “Architecture for Education and Mission of the Church,” sponsored by the Department of Church Building and Architecture of the National Council of the Churches of Christ; to be held in Chicago.

CALENDAR

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<tr>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>January 9</td>
<td>FAA Committee on State and Chapter Coordination—International Inn, Tampa—Time 10:00 a.m. (All AIA Chapter Presidents.)</td>
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<td>January 12</td>
<td>Monthly Meeting—Florida South Chapter, AIA. Dupont Plaza Hotel, Miami—Time 7:30 p.m.</td>
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<td>January 15</td>
<td>Monthly Meeting—Broward County Chapter AIA. Ocean Manor Hotel, Ft. Lauderdale—Time 12 Noon</td>
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<td>January 22</td>
<td>FAA Executive Committee Meeting—Cabana Motel, Bradenton—(Time to be announced)</td>
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<tr>
<td>January 23</td>
<td>FAA Board of Directors Meeting—Cabana Motel, Bradenton—Time 10:00 a.m. Monthly Meeting—Gulf Coast Chapter, AIA—Cabana Motel, Bradenton—Time Executive Committee 1:00 p.m.; Chapter Meeting 3:00 p.m. Cocktail Party and Dinner at 6:00 p.m.</td>
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<td>January 26</td>
<td>Miami Chapter Producers Council Information Meeting sponsored by Dunan Brick Yards for Federal Seaboard Terra Cotta Corporation.</td>
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<td>March 20</td>
<td>Dedication of College of Architecture and Fine Arts, University of Florida, Gainesville.</td>
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<tr>
<td>March 21</td>
<td>FAA Board of Directors Meeting—Holiday Inn, Gainesville—Time 10:00 a.m.</td>
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<tr>
<td>June 5</td>
<td>FAA Board of Directors Meeting—Langford Hotel, Winter Park—Time 10:00 a.m.</td>
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<td>June 1</td>
<td>AIA National Convention and 11th Pan American Congress of Architects, Sheraton-Park Hotel, Washington, D. C.</td>
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<tr>
<td>September 11</td>
<td>FAA Board of Directors Meeting—Miami.</td>
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<tr>
<td>November 17-20</td>
<td>FAA 51st Annual Convention—Jack Tarr Hotel, Clearwater.</td>
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WOOD is Stronger for Longer, for Less
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THE FLORIDA WOOD COUNCILS
Treaty Oak . . . a "little plan"

In spite of the view held by some of our learned colleagues that "little plans are a menace" in any approach to urban redevelopment, it appears that a study small in scope can serve a useful purpose to illustrate the principles of total urban planning. The Metropolitan Planning Committee of the Jacksonville Chapter took this position when asked by local authorities to prepare such a study.

Perhaps a brief explanation of local progress in community planning efforts would clarify our main purpose in participating in this study. Several years ago a number of leading architects, with unanimous support of the Jacksonville Chapter, worked in close union with the Chamber of Commerce and interested legislators to establish the Jacksonville-Duval Area Planning Board. Although the Area Planning Board has made remarkable progress, under the circumstances, toward achieving its rightful position as the recommending planning authority for the metropolitan area, it has yet to obtain the funds and staff necessary to fulfill its ultimate purpose. In the meantime, the haphazard building machine crunches on, unguided by any comprehensive plan.

Many large scale developments are being planned in Jacksonville, some of which are adjacent to retarded or depressed areas. These new developments will no doubt bring about rapid change in the surrounding properties, and such are the characteristics of the area chosen for this study. We fully realize that spot planning of various areas of the city and county will not bring about the total solution that is being sought, and this study was not presented to the public as a recommended solution to part of our complex planning problem. It was done to illustrate the possible orderly development that can result from intelligent urban planning, and mainly, it served as a catalyst to stimulate community awareness of the need to step up the development of a fully functioning planning authority.

When the City Planning Advisory Board, which mainly provides zoning recommendations, asked the architects to prepare a redevelopment study of a retarded area, we considered the possibilities of such a study and decided to accept, if we could select the site. In a joint meeting with representatives of the Planning Advisory Board, the Area Planning Board and City Building Department we selected a number of blocks surrounding the recently proposed Treaty Oak Park. Since this area bordered on the planned Gulf Life Insurance complex, expected to be the largest building complex in the history of the city, we felt that our point would be well taken and meaningful to the business, governmental and general community. In addition, the famous Treaty Oak, a natural beauty of huge proportions and historical significance, struggling to exist among a shambles of meaningless one and two story clutter, had at last been saved by the decision to open a park around its sprawling limbs. Community interest in this section of the city was high.

The Area Planning Board prepared a program, specifically, a land use study to guide our thinking. Much information had already been assimilated for this area in anticipation of its rapid change of complexion, but no specific building development requirements had been set down. The program recommended the elimination of several minor streets and the combining of multi-block areas into superblocks. Not only was land use of the superblocks diagrammed, but population density, number of residential units, parking requirements, business and light industrial distribution and general economic feasibility were carefully delineated. This aspect of our study was on sound footing and the stage was set for our big production.

A team of nine architects was organized to make our presentation. A large drafting space high in the City Hall, overlooking the proposed site was arranged for our use thru the City Commission. We set our schedule to produce the entire project in one week end. We felt that the study would have more dramatic impact if it were done thru a continuous, around-the-

(Continued on Next Page)
clock effort from start to conclusion. A broad concept in the rough was prepared before the week end by the project coordinator, to give initial direction to the work. The work began on Friday night as the news media stood by to make public pronouncement of our progress. With the team working in shifts, the study was methodically produced and drew to a beautiful conclusion on Sunday evening. The Jacksonville Chapter had performed a community service with the expenditure of some 250 dedicated man-hours, and we all anxiously awaited the reaction. Three of the larger drawings are shown here, and nine more ground level sketches were presented.

The response was immediate and we knew that we had greased the wheels of progress. Several important business interests and governmental leaders reacted enthusiastically to our work, and the Chapter Committee was asked to make several special presentations. Since that time, we have made eight such presentations, and other requests for similar studies have been suggested to us. The Florida Times-Union asked the Jacksonville Chapter to participate in the preparation of their Centennial issue and delineate a 30 to 40 year projection of change and growth in the Metropolitan Area. We are currently hard at work on this new project, making plan studies and sketches, and preparing the copy for the study. Eleven architects are writing individual articles, expressing their views on various aspects of urban and suburban growth.

Only Father Time will reveal the true value of this work that we have done, but there is no doubt that the community feels our presence and willingness to provide leadership in a solution to this important problem.

Philosophy . . .

(resolve, as the Bylaws phrase it, “to make the profession of ever-increasing service to society.”) For the people of Florida, the combined efforts of their architects mean professional competence speaking with a clear, united voice on building a better environment for all of us.

Church . . .

(when uni-level is impossible); safe, wide tread, low riser, stairs with rounded nosings and with adequate handrails (whenever stairs are necessary); wide (36" or wider) doors that are easy to operate and easy to see; ample landings at entrances and at frequent intervals on stairs and ramps; drinking fountains, telephones, towel dispensers, etc. within easy reach of both small child and wheelchairite; no split-level flooring; well lighted interiors (at least theatre safelights near the floor); ample corridors; elevators for multi-storied buildings; visual warning for the deaf and touch / audio warning for the blind (at all danger areas); ramped access to all stages and participation areas; adequate provision (according to ASA Specifications) in restrooms and washrooms.

These requirements, which each architect must meet in buildings for the public, do not inhibit nor restrict the architect. They offer him new challenge and new opportunity to create effective and attractive “totally accessible construction.” It has been proven, time and again, that Safe/Accessible/Convenient construction can be an artistic triumph as well as a functional utopia. This concept of “total accessibility” must be adhered to throughout the entire church complex. Churches are more than mere temples of worship. They double as class rooms, recreation halls, meeting halls, theatres, lecture halls, youth centers, arts and crafts centers, concert halls and dining halls. Offer complete and total accessibility, not merely token accessibility. Of all forms of construction for the general public, religious construction should, above all others, provide SAFETY, ACCESSIBILITY and CONVENIENCE for all.

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THE FLORIDA ARCHITECT
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• Samples of CV DURATHIN are easily available to you. A new brochure “Fifty Favorite Colors” is available.
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It’s edited solely for these men whose work controls the spending in Florida’s huge building business. They’ve been called “the brains of building”—for through drawings and specifications they tell the great body of construction what to use, and where, to develop the final form of the building designs they constantly create.

Here is the 1965 Program for THE FLORIDA ARCHITECT. Each month’s issue will feature Florida architecture as indicated.

**February** — Organizational Issue
   a. Newly revised Bylaws of FAA.
   b. Organization Chart showing the new Commissioner structure with the committees of each as well as the makeup of the committees.
   c. FAA Architectural Honor Awards.

**March** — FAA Membership Roster Issue
   b. Schools and College Buildings.

**April** — Residences and Apartment Buildings

**May** — Office Buildings

**June** — Preservation of Historic Buildings

**July** — Hospitals and Medical Buildings

**August** — Public Buildings

**September** — Commercial Buildings

**October** — Pre-Convention Issue
   a. Hotels and Restaurants

**November** — Convention Issue
   a. Industrial Buildings

**December** — Religious Buildings

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