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SOUTHERN ARCHITEC

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Cover photograph:

Exterior panel of American Red Cross Chapter and Blood Center, Charlotte.

Photo by Declan Haun.

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Associate Architect: Holloway-Reeves, Raleigh, North Carolina. Engineers: Watson Engineers, Greensboro, North Carolina. General Contractor: Rea Construction Company, Charlotte, North Carolina

From terrazzo floors to pyramid roofs... modern concrete brings dramatic beauty to North Carolina's new State House

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> Pittsburgh Laboratory – Test No. 135623 – August 30, 1962 STALITE Blocks - 2-Core 11/4" Shell Thickness

SPEC. NO.	WT. REC'D. LBS.	SI. HEIGHT	ze — inc width	HES LENGTH	GROSS AREA SQ. INCHES	TOTAL LOAD LBS.	UNIT LOAD LBS./SQ. IN.
1-P	25.93	75/8	7 5/8	155/8	119.1	191,500	1608
2-P	25.87	75/8	75/8	155/8	119.1	179,000	1503
3-P	25.93	75/8	75/8	155/8	119.1	194,000	1629
4-P	25.87	75/8	75/8	155/8	119.1	153,500	1289
5-P	25.81	7 5/8	75/8	155/8	119.1	141,000	1184
						Average	1443

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Drawer 1037 SALISBURY, N. C.



Phone 636-5231



Last summer members from the various professions throughout the state conducted a series of meetings to investigate the possibility of forming some type of an interprofessional organization. Information on such an organization was furnished by the "Michigan Association of the Professions".

The organization in Michigan has been in operation now for a little more than five years and began with five professional groups but has added two more to make a total of seven associations participating in their organization. They have a headquarters office with a part-time Executive Director. Michigan is one of five states having such an organization of professional associations. A National Association has been chartered but has only a few of the state professional groups represented at present.

After much study and several serious meetings it was decided to organize an Association of Professions in North Carolina. The North Carolina Chapter of AIA having taken part in all of the preliminary meetings was invited to become a charter member of this organization.

At the winter meeting in Greensboro last January the North Carolina Chapter AIA voted to become a charter member of this group on a one year trial basis. All professional associations in the new organization are to have six representatives on the board of directors.

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On February 16, 1963, the North Carolina Association of Professions met in Raleigh to organize. The following officers were elected at that session:

President:	T. C. Cooke, P.E., Durham
Vice-Pres.:	Jacob H. Shuford, M.D., Hickory
Secretary:	William W. Dodge III, AIA, Raleigh
Treasurer:	Earl L. Knox, DVM, Raleigh

There are four professional associations represented as charter members in the organization. However, there are several other professional groups that have indicated an interest to participate.

At a glance and after reviewing the By-Laws of this new organization, it is possible that this is the organization that has been needed for some time. The first of its purposes being "To foster and maintain the honor and integrity of the several professions".

The North Carolina Association of the Professions has a good start. The six members on the board of directors from the North Carolina Chapter AIA include your president, Bill Dodge, Fred Butner, Atwood Skinner, AI Haskins and Bob Clemmer. As architects we plan to do our part to help this organization succeed.

Arthur

RESIDENT'S MESSAGE



PITTS BU<mark>RG</mark>H



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post 149-S. Sculptured pattern shown. Available with a plain surface or inlaid natural wood.

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*Available On Request: Detailed Engineering Survey by Dewey R. Winchester, P.E., Charlotte, N. C.

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PHOTO BY SOUTHEASTERN ENGRAVING CO.

BABIES HOSPITAL RESEARCH CENTER wilmington

architects:

BALLARD, MCKIM AND SAWYER wilmington

general contractor: W. A. Simon, Inc. wilmington At the time the architect was awarded the commission for this project the owner had no specific requirements. The director had not been employed; but it had been decided that basic medical research would be carried on. After much research it was decided to plan for flexible type spaces in a building that would be expandable. The unfinished area adjacent to the animal quarters at the rear of the building will house the radiology suite when it is required. The space shown as future will house two more large laboratories and several office-labs for individual research projects.

After the contracts had been awarded and construction was well under way, a director was found and employed. After consultation with him several areas were revised.

The temperature in this area of the state averages 8 to 10 degrees above the state average, thus with the northeast winter winds blocked off, the courtyard can be used all year around for relaxation and meditation.

MATERIALS:

Floors: Animal quarters—Acid resistant quarry tile Toilets—Ceramic tile

All other areas—Vinyl asbestos tile

Wainscots: Ceramic tile in toilets.

Interior Walls: Non-load bearing steel studs with plaster on rock lath.

Ceilings: Acoustical plaster in corridors, auditorium and offices. Plaster in other areas.

Doors: Exterior—Metal in brick walls

Aluminum in window walls Interior—Wood flush

Windows: Aluminum window walls

MECHANICAL SYSTEMS:

Heating: Natural gas fired warm air furnaces. Air Conditioning: Mechanical refrigeration with air cooled condensers.

- Lighting: Fluorescent in laboratories, library, and offices. Incandescent in all other areas.
- Plumbing: Cold water, hot water, gas, air, and vacuum piped to all laboratories.

UNUSUAL SITE CONDITIONS:

The entire site is reclaimed marshland. Seven thousand yards of fill were required to bring the site to two feet above maximum hurricane tide level.

TYPE OF CONSTRUCTION:

- Foundations: Pressure creosoted wood piling with reinforced concrete grade beams.
- Floor: 2" concrete slabs on steel joists.
- Walls: 10" cavity walls—Brick and masonry block. Concrete columns and beams in window walls.
- Roof: All flat areas—Steel joists and poured gypsum decks. Broken roof areas—Rigid steel frames over steel beams.







PHOTOS BY DECLAN HAUN

CHAPTER AND BLOOD CENTER AMERICAN RED CROSS charlotte

architect:

CHARLES H. WHEATLEY & ASSOCIATES

proj<mark>ect</mark> designer: W. Murray Whisnant



The owners requirements were for the design of a building to house the Red Cross Chapter activities and the Regional Blood Center in a single structure within a limited budget. In order to meet this budget, it was necessary to select materials which would be economical and yet present a building which would be substantial and clean in appearance to represent the Red Cross.

The building was to be designed to allow for a smooth flow of blood donors through the center without interfering with the traffic to the other services and the processing, storage and shipment of this blood. The auditorium and kitchen were to be designed for large group meetings as well as for a training area for mass feeding and so located that they could be used for night meetings without allowing access to any other portion of the building.

The school children (Junior Red Cross members) were to have access to their training and work area and the bottle strapping area (which service they perform) without passing through other areas and interfering with other operations.

The structure was to be designed to house a variety of functions including offices, classrooms, laboratories, shipping and receiving spaces and warehouse facilities. The Red Cross program is constantly changing to meet the needs of the area and the building must be flexible enough to allow for such changes in the future.



SECOND FLOOR PLAN





GROUND FLOOR PLAN





DR. V. G. WATTERS OFFICE BUILDING sebring, fla.

architect:

HAYES, HOWELL & ASSOCIATES southern pines

Building designed to be used at this time by 4 doctors; 1 doctor and 3 interns. To be expanded later to include 4 additional doctors.

Located on the site adjacent to new hospital.

Materials: concrete floor with terrazzo corridors, soft tile in waiting and examining rooms. Plaster partitions with acoustical tile ceilings.

Structure: Reinforced concrete columns with precast concrete roof; exterior walls either precast concrete or block stucco.



VIEW FROM MAIN WAITING ROOM



PHOTO BY JOSEPH NESBITT



I 2 TH STREET

OFFICE BUILDING FOR THREE DOCTORS washington

architects:

ROBERT H. STEPHENS ALDO B. CARDELLI new bern

general contractor: J. T. Hardison & Son washington

This building is designed for a partnership practice of Internal Medicine for Clark Rodman, M.D.; Cornelius T. Partrick, M.D.; and Henry L. Stevenson, M.D. Waiting room, administration and service facilities are used in common. Each doctor has a private office and 2 examining rooms at his disposal.

The building is electrically heated and cooled with heat pumps.



THE MARCH 1963 SOUTHERN ARCHITECT



BRANCH HOSPITAL

wake forest, zebulon

architect:

HOLLOWAY-REEVES raleigh

general contractor: T. W. Poe & Son durham Here are two of the four branch hospitals constructed in Wake County with the 400-bed Wake Memorial as the parent plant. The branch hospitals provide basic medical services throughout the county. By an integrated county system, the branch hospitals achieve economies not available to most small hospitals. Provisions have been made for expansion from the present 20 beds to 40 beds in the two hospitals.



by

H. Carl Rowland

Field Representative Hospital and Orphan Sections The Duke Endowment, Charlotte, North Carolina

Areawide planning is a necessary adjunct to the individual state plans, and which, if done carefully and with the cooperation of responsible citizens interested in the health of the communities, can overcome some, but not all, of the problems of eliminating unnecessary and costly duplication of facilities and services, and of providing duplication of health facilities and services which may be necessary to duplicate, in the best interests of the health of the entire community. The areawide plan can be effective only after a thorough study is made of the various health services available and planned by profit and nonprofit general and special hospitals, acute and long term health facilities, rehabilitation and day care facilities, public health clinics, diagnostic facilities, home care programs, social services, and all related health and welfare agencies and organizations. This forms the basis for determining needs, needs met, needs unmet, priority of types of projects to be considered, and the requests which will be given high or priority when they are received.

Areawide planning can help stem the sharp rise in the cost of providing for **capital construction**; can help to slow the presently increasing costs of operation through elimination of unnecessary competition within an area for some of the same categories of trained personnel; and can be largely instrumental in developing facilities and services that will provide the highest quality of patient care to all facets of the population, at the lowest cost, on a continuing basis.

The metropolitan or rural area, county or combination of counties, that does not develop an authoritative local agency made up of persons of professional competence and wide representation in its membership that is capable of developing facilities in their proper perspective and proper interrelationships between these facilities and related health organizations and agencies, is today committing a very grave sin of omission. The importance, need, status, methods of organizing, data needed, developing and implementing of such planning are best stated in the publication "Areawide Planning for Hospitals and Related Health Facilities," a report of the Joint Committee of the American Hospital Association and Public Health Service, and available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

It is most important, as the next point of localization down from state plan to area plan, to develop a master plan for each individual hospital. The over-all master plan will necessarily change through the years, but the owners or trustees should have a general over-all plan for the next ten to fifteen years.

Although a few states including North Carolina require that Hill-Burton projects give evidence of master plans, all too few states have such a regulation, and even in those that do, the non-Hill-Burton projects are not affected. In North Carolina and South Carolina, over 70 per cent of the Hill-Burton general hospital projects have been for additions to existing facilities. Some of the hospitals built initially under the Hill-Burton pro-gram have in the past 12 years had as many as three and four additions. Since master plans were the exception until very recent years, all sorts of appendages were added to hospitals to take care of immediate needs or crises, with the end consequence that, like Topsy, they "just growed" without any sound planning for the next enlargement or need. These appendages have created extreme problems when programs of extending facilities and services in well thought out plans have been attempted. In many cases the investments in building such additions to meet immediate needs have been so great in recent years that the owners, trustees, and/or communities supporting the hospitals involved attempt to make the best of abominable situations and throw good money after bad in an attempt to salvage the funds already expended. This in turn puts an additional and unnecessary burden on the communities through more costly and inefficient operations of such facilities.

One gross error in master planning is that often the planning group grabs out of the air an arbitrary number of beds as an **absolute maximum** to be built on a given site and then as community needs require additional facilities, an attempt is made to provide adequate beds and services on a totally inadequate site, chasis, and structural design. Such facilities are extremely costly to construct and to operate.

Since there are so very many factors peculiar to hospitals, the development of a master plan and each phase thereof for the individual hospital should have the services of a competent hospital consultant. It is a grave mistake to depend solely on a hospital administrator and an architectural firm to develop a master plan; a plan for a new facility or service; or an addition to an existing facility of any consequence. The administrator, with few exceptions, has more than he can say "Grace" over, or he has had prior to coming to the project, without being expected to have any extensive knowledge of the newer concepts that are developing all over the world in hospital planning, in built-in and movable hospital equipment, and in construction and finish materials. He, of course, tries to keep abreast of these through reading hospital journals, attending institutes and hospital meetings, and through visiting as many hospitals as seems practical, but only a person devoting the majority of his time to study and research can achieve any real success in having the necessary knowledge of planning the modern hospital. On the other hand, a hospital is one of, if not the, most complicated structure an architect designs and although a firm of architects may have done many hospitals, we find that they, like doctors, do not know that anything is wrong unless the client, or patient, returns with complaints. Human nature being what it is, hospital personnel do not normally complain very vocally to those responsible for planning about errors or omissions in design, as they feel that once the hospital is built there is nothing that can be done about those mistakes. Thus, the oversights or errors are often not even brought to the attention of the administrator, much less the architect, and the same errors are repeated over and over with the architect feeling that these standards are tried and true, because he has heard no really serious complaints concerning them. It is no more reasonable to expect an architect to design a modern hospital facility without advice from one or more qualified hospital specialists than it is to think that any man licensed to practice medicine can competently perform complicated brain surgery without being supervised by a well qualified brain surgeon.

The competent hospital consultant stays with his projects until well after operation is begun, in order to assure himself that the philosophies, concepts, and procedures around which he has found a functional plan can be developed, are understood and utilized in the manner that they were conceived to be used. He works with the people who are themselves actually working with the equipment in the layout developed. He sees his own projects in detail, visits hospitals where new ideas are being tried, sees new equipment in its development and testing periods, and spends a great majority of his working hours with a single phase of the hospital field, that of planning. His time is not completely absorbed by the often frustrating day-to-day operation of a hospital as is the administrator, nor by the distractions of attempting to meet multiple deadlines on plans for innumerable varieties of structures, as is the architect. Too, the hospital consultant has available knowledge, resources, and his own experience as well as that of the operators of his projects, which are not readily available or known to the hospital administrator, or the architect.

Even when a hospital consultant is engaged, it should be realized that he or his firm are not infallible and there will be compromises that have to be made, and that some errors and omissions will be found once the project is in operation, but these will be greatly reduced for having such services available. It should be pointed out that the consultant should be employed by the hospital involved and not by the architect. This will give the owners the privilege to get as much time and service as they feel is necessary from the consultant. When the consultant is employed by the architect, there is a tendency not to utilize his services to the extent that they should be used, and the consultant **can** be placed in a position of possibly being under duress to compromise his better judgment.

The architectural firm's job captain should sit in on all meetings of the planning group or its subcommittees, as too often when only a firm's "front man" attends such meetings there is lack of communication between the firm's representative and the drawing board, as to the decisions of the trustees or owners. As another protective measure for the owners or trustees, it is wise in all discussions with the architect and consultant, to have the pertinent discussion, misunderstanding or contradiction of decisions made at such meetings when the drawings are being prepared.

In planning an immediate construction phase of a master plan, too often there is not enough research performed regarding financing. Too often cost estimates are based only on available average figures per square or cubic foot or per bed without regard as to type of structures, construction materials, types of services provided, or the extent of services provided in the projects included in the average, and without regard as to whether or not the projects used as a base for cost estimates included the latest developed labor and maintenance saving devices, which make a more costly project initially than do conventional methods. As happened to one large hospital in North Carolina the newspapers published the number of beds and cost without any authoritative source so the trustees are committed without intending to be. Thus, fund raising campaigns, bond issues, requests made to foundations and agencies are often based on insufficient cost esti-Then as contract drawings are developed, firmer mates. estimates are established, and/or bids taken and the shortage of funds becomes apparent, it is **impossible** to obtain the funds required to provide truly modern maintenance free facilities having the maximum of labor saving devices and factors providing efficient care and comfort to all patients. The end result is a project whittled down to available capital funds having a more costly, less efficient operation than was necessary.

Fairly often specifications are drawn around and/or bids awarded for equipment without regard for the servicability, life expectancy or maintenance service aspect. Thus, savings on initial bids are quickly surpassed through paying premium prices for early replacement, for service maintenance either from a far distant source, or through the necessity of employing a high salaried specialist to maintain highly technical equipment. Initial price is certainly no guage as to the end cost to the owners, and should never be the prime consideration in awarding contracts. Although when in general contracts Hill-Burton requires that low bidder get the award, normally.

Fairly often an undesirable site is chosen through lack of foresight. Hospitals are built without regard for there being virtually inaccessible from existing or proposed highways or access roads during peak automotive travel hours. Hospitals often overlook cemeteries, noisy ball parks, noisy and dirty railroads, or main national highways, and in some cases are built in the paths of prevailing winds bringing in terrible odors and smoke from industrial plants. These factors have disturbing effects on patients and create many housekeeping and maintenance problems. Often, too little regard is given to the area served and the accessibility of the hospital to the area, and as to whether an area is increasing or decreasing in population within the hospital's community of service.

In planning of new or additional facilities, too often, too little thought has been given to planning for **enough** site to take the required future expansion of an acute hospital and/or providing space for a nursing school and residence, interns' and residents' quarters, long term care units, minimal care units, private physicians' offices on the site, or even within reasonable distance of hospitals. If the hospital is to serve the community to its fullest potential, all facets of a complete center of medical service must be provided. With too many projects, be they new or additions, the area provided for physician, employee, and visitor parking is totally inadequate for today's needs, much less the needs of a few years hence. Hospital planners should, therefore, attempt to get much more property than they ever expect to need in developing their master plan; and the initial building or buildings should be so oriented on the site as to allow for efficiently located exterior traffic and parking paterns as well as providing adequately for expanded services.

Not only is inadequate total space for expansion and parking a problem, but too many hospitals are planned without proper consideration for the interior areas that are most likely to require expansion first. Diagnostic and treatment and outpatient facilities and services quite often require expansion before additional beds are needed. Too often the persons planning hospital facilities hem in these departments to the extent that entire departments must be picked up and moved which may remove them from the physical areas they are supposed to serve or with which they should remain in close physical relationship. These conditions create costly renovation and operational problems. Many, many hospital plans have been seen and reviewed by the offices of the Hospital Section of The Duke Endowment and by others rendering such a service within the past ten years, some of them in recent months, showing proposed radiological, laboratory, physical therapy, and outpatient departments that would be impossible to expand without changing their locations completely.

In the short-term general hospitals assisted by The Duke Endowment in the five years from 1955 through the fiscal year 1959-1960 the number of diagnostic X-ray procedures **per inpatient discharged** increased by 19 per cent, the total procedures for inpatients increased by 42 per cent, and the total procedures on outpatients increased by 21 per cent. The number of laboratory procedures during the same five year period increased by 24 per cent **per inpatient discharged**, total inpatient tests increased by 41 per cent. Physical therapy treatments for inpatients increased by 140 per cent while for outpatient tests increased by 155 per cent. In the five years ended September 30, 1960, outpatient visits increased only 11 per cent but during a ten year period ended that same date outpatient visits increased by The Duke Endowment increased by **only 39 per cent** and in the last five years of that period by **only 17 per cent**, which in no way compares with the spectacular rise of diagnostic and treatment procedures performed, or outpatient services rendered.

In the past few years hospital planning authorities have developed the concept of getting the supporting and diagnostic and treatment units as near the ground level as possible. This allows for fairly ready expansion of these facilities without disturbing efficiently arranged and sized nursing units above. These services have in the past been greatly hampered by trying to squeeze them into a narrower width and often shorter length dictated by the space requirements of the nursing floors, than these services require individually or collectively.

There are several departments, or services, that should logically be arranged together at the level most accessible to automotive transportation. Basically these are: (1) certain elements of administration and business functions, such as information and reception, interview for admission, collections and credit, etc.; (2) emergency; (3) outpatient service; (4) radiology; (5) surgery, in which the size of operating rooms have in very recent years required more area than formerly in order to cope with the advances made, especially in heart and neurosurgery, these rooms should be a minimum of 20' x 20' clear of built-in shelves; and (6) physical therapy. This arrangement controls outpatient and visitor traffic and prevents their tying up vertical transportation. It allows a logical horizontal traffic flow for patients and technical personnel between services which support each other, such as surgery and X-ray, emergency and surgery, outpatient and emergency service and X-ray, etc. This arrangement also provides maximum efficiency in case of a catastrophe or disaster as patients come in through entrances logically arranged in relation to parking and with proper internal arrangement patients can be sorted and routed (1) directly home; (2) to emergency treatment in emergency section, outpatient clinics, and/or physical therapy treatment units set up as emergency stations; (3) to X-ray for diagnosis of extent of injury; (4) to surgery for major procedures; and/or (5) to nursing floors. Such an arrangement would not have to depend on mechanical vertical transportation, of which all or part may be put out of commission by the same catastrophe, except for moving patients up to nursing units. However, at least the dependence and necessity for vertical mechanical traffic in case of disaster is cut to an absolute minimum.

Another grouping of services on another of the easily expandable lower floor levels is around vertical transportation for supplies, to the nursing units. This concept is one which Mr. Gordon Friesen, Hospital Consultant, is a strong advocate and includes clean linen supply, central sterile service, general stores, formula preparation, pharmacy, and sometimes laboratory and laundry. The individual demands for and return of items of these departments are more numerous and ordinarily

more time consuming on the nursing unit than are the requirements of surgery and delivery suites, which can be supplied a cartfull at a time directly from autoclave without transfer to another cart. Thus, these grouped facilities should have access to automatically ejecting dumb-waiters, which on floors above should be in, at, or close to the nursing station. These supporting services should also be near elevators leading to or near the nursing stations, delivery and surgical suites, and emergency unit. The use of exchange carts for normal demands, and central dispatching for emergency requirements from these services arranged around central sterile service, as advocated by Mr. Friesen, can produce a reduction in the number of expensive sterilizers and pieces of cleaning equipment ordinarily required, and in the number of steps, trips, and amount of time spent by personnel in moving to and from these supporting services. Mr. Friesen bases his concept on furnishing the doctor and the nurse "what they need, when they need it, and where they need it." As far as I am concerned, the so-called bedpan washer-sterilizer and sanitizer have no place in a hospital that has a central supply that can adequately sterilize patient utensils between patients discharged and admitted.

Some saving can be achieved by locating the delivery suite above the surgical suite as the same air-conditioning and humidity control system can be used without extended ducts or pipes with a resultant loss of efficiency, without being tied into a system that allows recirculation of air from any other part of the hospital, and without running compressors for the entire hospital when only operating and delivery rooms require cooling and humidity control. Since all areas where anesthetic gases are used should be on a completely separate ungrounded electrical system with a separate transformer, wiring can be made simpler. Too, being above the surgical suite, which normally requires much more floor space, the delivery-labor suite can, if so arranged initially, be more easily expanded when the predicted population explosion occurs. On the floor with the delivery suite should be the nurseries and obstetrical nursing floor. This will again reduce demands on vertical transportation and reduce the chance of cross infections between mothers and newborn and the non-obstetrical, nonnewborn passengers.

With proper planning of foundations, structural design, mechanical-plumbing-electrical design, additional beds can be added without disturbing those services that require grouping in close proximity of each other on one of the lower floors.

It is very important then that in the initial master plan, the internal relationships of departments be recognized and planned for, providing for normal expansion of those departments and services mentioned previously, plus administration and dietary departments, which are being expanded fairly rapidly to take advantage of newer developments in labor saving devices, and because of the space and personnel required to process insurance, Blue Cross, and agency sponsored patient forms and claims. These must be planned without disturbing the necessary relationships and without having to provide too many duplicated facilities within the hospital as "spur" facilities scattered throughout the plant, such as X-ray, laboratory, and fairly complete food service kitchens.

Too often even a master plan or an imminent phase of such a plan does not provide for expansion in such a manner as to best utilize the existing or planned mechanical transportation. Quite often no provision is made for extending the scope of either vertical or horizontal mechanical transportation beyond the extent of the immediate phase or without careful consideration as to how and where they can best be located for efficient utilization as future phases are built and put into operation.

At the present, new hospitals spend in operation, an amount equal to the total cost of construction and equipment every two and a half to five years. The smaller, less complicated the facility the quicker the operational cost reaches initial construction-equipment cost. Of this rapidly equalized construction-equipment cost through operating costs, the larger proportion is in salaries. In 1960, on an average national basis, in short-term non-federal hospitals salaries enualed over 62 per cent of total hospital expenses. Salaries are slowly but surely increasing as to the percentage of total cost. With this in mind it is vitally important that those responsible for hospital planning provide for the latest features of vertical and horizontal transportation; the most efficient internal and external traffic patterns, with minimum distances to be walked. and time consumed by personnel in daily routines; the latest equipment in automation and electronic and mechanical recording devices such a addressograph, pneumatic tubes, data processing machines, automated laboratory equipment, etc.; efficiently sized and arranged nursing stations and other de-partmental working units; physical arrangement for full utilization of personnel through dual assignment where possible; and finish materials that can reduce maintenance costs, all in an effort to hold back spiraling salary costs and in some measure reduce the slack between demand for and supply of much needed personnel. Many of these items can be built into existing facilities without too much cost or disruption of service.

Once one line drawings have been prepared so that all concerned can visualize the tentative total picture and thereafter in each progressive step up to working drawings, copies of drawings should be placed in convenient locations for key personnel and the members of the active medical staff to review. One representative from each of the departments or divisions of the active medical staff and each department, especially the engineer since 40% of the construction cost is in mechanical and 8% of operational cost is in housekeeping and maintenance excluding depreciation and replacement, should be elected or appointed and have the opportunity to make suggestions and criticisms to those concerned with detailed planning. While many ideas and requests will be presented that are not practical, some most valuable and productive new ideas will come from those actually working in specialized areas of hospital facilities. Unfortunately such free thinking is not done often enough and too many projects miss having the benefit of good advice as to ways of reducing costs, increasing efficiency, and providing what physicians and department heads know from experience, will render better patient care, and features that will bring the patients and their loved ones the ultimate in mental, spiritual, and physical comfort.

One fairly common occurrence is the omission of individual room controlled air conditioning in patient areas. There are extremely few locations in our nation which do not suffer from uncomfortable heat for long periods of time during the summer months. The patient is as entitled to being comfortable in summer as in any other period of the year and the hospital or unit of a hospital without individual patient room air conditioning today is as antiquated as the first horseless carriages were as compared to today's better automobiles.

While on the subject of patient comfort and ease of mind, there have been no modern or even semi-modern hotel or motel facilities built in many years that force guests, who do not request such accommodations, to share the same bedroom or toilet or bath facilities with others. There is no reason that hospitals should force less desirable accommodations on their patients who are ill, helpless, emotionally upset, and are there through no desire of their own than do hotels and motels, whose patrons are well, and are there by choice. Many authorities today feel that only private rooms should be built. Others feel that two-bedrooms should be held at an absolute minimum, if such have to be built, and there is almost universal agreement among hospital consultants that no rooms should contain more than two beds. A plan providing more private rooms not only allows more patients desirable privacy, but allows much more flexibility in bed usage. This arrangement would of course increase initial or remodeling cost, but, by the same token, income could be increased through better utilization of available beds. Dr. Ray E. Brown, Assistant Chancellor, University of Chicago; former President, American Hospital Association; and an internationally recognized authority on hospital matters, contends that empty beds are hospitals' most costly items. It has yet to be proved that multiple bedroom care is more economical than that in smaller units, except where large open wards are used and are staffed as independent units, in fact one study has proved that nursing care is given cheaper in all private rooms. By the same reasoning, there is no justification to unnecessarily inconvenience, sometimes harmfully, patients with locked toilet doors, embarrass the patient who is noisy in his use of the toilet, worry the patient who has a fear that the seat in the toilet is unclean and unsanitary, or take the chance of spreading an undiscovered staph infection from one patient to another through providing connecting or central toilets. Every patient room certainly should have its own toilet and should have its own shower or bathtub if at all possible. Each patient toilet should be provided with a diverter valve sprav head for reducing the time and energy of nursing personnel in cleansing patient utensils and for reducing the objectional odors in corridors that arise when bedoans and urinals are carried from patient rooms to "dirty" utility rooms some distance away.

The nursing unit should be laid out for the most economical and efficient number of beds that can be staffed from a centrally located nurses' station, and distances from the station and its supporting services to the fartherest patient should be held as near to 100 feet as possible. This will tend to improve dispositions and efficiency of personnel and instill a sense of security in patients, as the time between a patient call and a nursing service employee answering it can be reduced. The installation of a master system of audiovisual nurse call system and room television with pillow speakers and with patient controls from the bed can, if patients, and personnel are properly oriented to their use, increase efficiency, combat rising expenses, and give the patients a greater feeling of comfort and security.

One big mistake that is commonly being made rather universally as regards the patient is the building of intensive care units of 4 to 12 beds in an open barracks arrangement, or with all beds in cubicles open at the ends. Patients requiring intensive care are not necessarily unconscious to the noises or activities around them and these can be detrimental to both their physical and mental health. Patients in intensive care units are entitled to even more privacy than are those on nominal care units. With all private, or the majority private and a few other rooms, none larger than two-bed rooms, grouped around a nursing station: (1) patients can have family members or loved ones visit or be with them during their critical periods without disturbing an entire ward; (2) heart cases are not alarmed by the vision of a scurry of activity around another patient; and (3) the patients are not disturbed by the moans, groans, or noises of others. In these individual rooms of an intensive care unit, view panels with shades or thick draw curtains should be provided between patients and other patients, and between patients and nurses station, but view panels should be at such a height that one patient cannot see another bedridden patient when shades or curtains are open. The station should be designed with a work counter at a comfortable height to be used with a high stool-chair, as the nursing personnel are on their feet a great amount of their time in these units and getting up and down from a normal seat height is much more fatiguing than slipping onto an adjustable height stool-chair that operates in the normal, range length of female legs. Intensive care units should be provided with ample storage for special equipment easily accessible to the nurse; with patient toilets and high-low beds, as there is more strain on the heart in bedpanning a patient than in having them go assisted to the toilet on a commode chair slipped over the w. c. from a comfortably low, bed position; with all toilets having diverter valve sprays attached for readily accessible cleansing of patient utensils; with examining lights; audio-visual nurse-call system; piped oxygen and suction; necessary monitoring equipment and supplies for emergencies. Incidentally, the costs to the hospital will increase if an intensive care unit is added and no offsetting minimally staffed unit such as the "self-help" unit or minimal care unit is also added.

If intensive care patient rooms are built with patient accommodations on no lower a standard than other patient bed areas and with call systems built so they can be cut into a main nursing station in the nearby general area, these rooms can be used by the non-intensive care patients when there is no, or only limited, demand for intensive care beds. This gives the hospital a very desirable built-in flexibility and does not limit the use of bed areas to a type of care that at times may not be demanded or desired. Intensive care units located away from surgery will render care to all patients who need it and will not be inclined to be used primarily by patients of surgeons, whether or not they require this type of care.

For this same aspect of flexibility, it is not desirable normally to provide pediatrics units with view windows between rooms, or rooms and corridors, as the children often see each other receiving undesirable treatments, or even dying, since the blinds or drapes are constantly being pulled down or broken by the children, or they are left open by employees. Rooms should be made as private and as flexible as possible for the benefit of the parent who has to be provided sleeping accommodations in the room with a child; for emergency adult use; or for future permanent use by non-pediatric cases. Too often our specialized areas such as pediatrics and intensive care are so designed that they can be used for only one purpose, with the result that many beds lie idle for long periods of continuing costs without an offsetting income. Let us plan for more efficient use through providing as much flexibility throughout the hospital as is possible.

Adequate storage for central stores, film, records of all sorts, supplies used within a unit, and storage for patients' personal belongings are usually most inadeauate through either the planning group not being conscious of the importance of storage, or through cutting back on these areas in an attempt to stay within a fixed, inadequate budget.

Inadequate emergency power to carry the necessary lighting, elevators, refrigeration, boilers, cooking equipment, etc. has too often been a problem, and in some cases where the units are of adequate size they are so located as to be subject to flooding in times of heavy rains or high water levels in the areas.

With almost eight per cent of operating costs, excluding depreciation, linens and utilities, in building maintenance and

housekeeping costs there is ample reason to build in as many features as possible that will reduce costs, such as:

1. Forty-five degree **splayed bases** of terrazzo or tile in corridors and at the bed wall of patient rooms to keep rolling equipment, such as beds, bedside cabinets, stretchers, carts of all sorts, linen hampers, mop buckets and squeegees, buffing machines and the like from damaging walls or finishes. All kinds of substitute methods have been used, and none are so effective in preventative maintenance, nor ease of cleaning and keeping sanitary.

2. Stainless steel corner guards on all exposed corners of corridors and on columns in open areas.

3. Windows that can be washed without unnecessary expense or danger to the personnel washing them. This precludes use of fixed windows at levels above the ground floor and the use of home type **window** air-conditioning units.

4. Scrubbable tile floors with floor drains and tiled walls to the ceiling in janitors' closets, soiled linen rooms, food preparation areas, garbage refrigeration rooms, and can washing rooms for easy scrubbing down of entire rooms.

5. Undercut door bucks for ease of cleaning around doors.

6. An easily cleaned, **durable wainscoting** in corridors, elevator lobbies, utility rooms, medication preparation rooms, examination and treatment rooms, floor pantries, toilets and baths. This should be run to a height dictated by the most commonly soiled heights of these areas.

7. **Flush, windowless walls** with no projections or ninety degree corners where walls and floors meet in areas that are to be kept sterile, such as operating and delivery rooms, for ease of completely cleaning between procedures.

8. **Ceilings unaffected by heat and moisture,** or 20 air changes per hour in such areas as hydro and thermal therapy, food preparation areas and areas over and around autoclaves.

9. **Roofs** that are **properly vented** between their underside and the ceilings below, to prevent unnecessary condensate damage; and that are properly constructed to prevent leakage at any and all points.

10. **Outside walls** that have no unnecessary projections beyond their shallowest surface, proper caulking, no absorbent brick or materials, proper flashing, sufficient dead air space and/or waterproofing to prevent unnecessary damage from seepage and condensate.

11. **Doors** to areas necessary for stretcher movement opening against the interior partitions in a manner that will prevent personnel having to do unnecessary juggling of stretchers or furnishings which may cause damage to equipment and room finishes. There is no excuse now for having patient corridor doors and patient room toilet doors swing in the same dangerous and property damaging arc, since there are new types of panic hardware available for use.

12. Built-in clothes storage, lavatories, flower shelves, etc. in patient rooms to reduce furniture and equipment damaging projections out into the room proper, should be used insofar as is feasible.

13. **Glass curtain walls and doors** should be etched so that visitors and patients realize these are glass and not open spaces. This will prevent both breakage and injury.

14. **Diverter cleaning spray head valves** that are an integral part of toilets will save time, steps and operating costs.

15. **Grab bars** on two sides of toilets, tubs and showers that are secured to withstand 400 pounds of pressure will reduce maintenance costs and accidents to patients.

16. **Reading and general illumination patient room lights** that cannot be damaged by patients attempting to use them to change positions in bed, that do not themselves damage wall finishes, and that do not operate through easily broken pull-cords or pull-chains.

17. Adequate working space around, access panels to, and crawl space to electrical, plumbing, oxygen and suction, air conditioning, heating and ventilating lines, ducts and equipment.

18. Installation of two incinerators, one specifically designed to consume pathological waste and other matter consisting of a large proportion of water and one designed to consume dry trash. Where possible **these** and **boilers** should be located away from the hospital proper to reduce excessive heat, dust. smoke, odors, and danger.

19. **Trash and dirty linen chutes** the same size throughout, including vent through the roof, with automatic sprinkler and manually controlled wash down rings at the top. These chutes should be lockable and kept locked, and keys held only by responsible, authorized personnel. They should be electrically controlled so that only one door to a chute can be open at any one time.

20. Use of washable, non-absorbent, non-porous mineral acoustical ceiling tiles or plaster materials should be used in

noisy corridors and work areas. In most areas in the hospital it is necessary to clean thoroughly and often as a precaution against infections, and if ceilings are damaged or acoustical properties reduced through cleansing or through painting they must be replaced with new, effective ceiling materials.

21. **Sufficient zoning,** of heating, air conditioning, water, steam, oxygen, and suction to allow small areas to be cut off for maintenance.

22. **Proper insulation** of utility, supply and return lines and all ducts as necessary in order to prevent damage from heat, condensate, and/or loss of heat or cooling should be provided.

23. No unnecessary projections in patient rooms in the traffic pattern of stretchers or recovery beds such as columns recessed into rooms or lavatories on the wrong wall.

There are many other built-in features which should be incorporated in hospital planning, but they are too numerous to mention individually.

With the tremendous rise in our aged population and their susceptibility to prolonged illness, the short-term hospitals that do not make or have nearby provision for caring for this type case, at a lower cost than acute care, are neglecting a real responsibility to the community they serve. Hospitals with such factilities on the same grounds or in close proximity can generally render much better care at a lower cost to the patient than can a separate enterprise.

The planning of hospital facilities is no simple task. For those involved in planning, planning is quite a time consuming; frustrating; mentally and physically fatiguing; and thankless job, but there is nothing so stimulating, gratifying or satisfying as seeing a plan to which you personally can feel you have made a contribution develop into a modern, efficient, functional hospital that will in large measure alleviate suffering, cure the ill, comfort the worried, and improve the health of the entire community served.

A paper presented at the first annual meeting of The Hospital Planning Association of Greater Toledo, Toledo, Ohio, on April 26, 1962 and the quarterly meeting of District I, North Carolina Hospital Association, Asheville, North Carolina, August 15, 1962.

END

JOHN J. ROWLAND

John J. (Jack) Rowland, AIA, died suddenly of a heart attack on Sunday, February 17, enroute to a hospital in his hometown of Kinston. Mr. Rowland was a native of Philadelphia, a graduate of the University of Illinois and recipient of a degree in architecture from Yale University. Prior to coming to Kinston in 1937, he was as-sociated with George A. Platt and taught at Georgia Tech. He was senior member of the firm of Rowland, Simpson and Ferguson at the time of his death. Services were conducted from St. Mary's Episcopal Church in Kinston, Long an active member of the North Carolina Chapter, AIA, and a past president of the Eastern Council of Architects, Mr. Rowland will be greatly missed by his architectural colleagues. The Chapter extends its sincere sympathy to Mrs. Rowland and two sisters, who survive.

FATHER MICHAEL MCINERNEY

Father Michael McInerney, Honorary Associate Member of the North Carolina Chapter, AIA, died at Belmont Abbey, Sunday, March 3. A Benedictine priest, he spent a lifetime building churches, hospitals and schools. A native of Pennsylvania, educated at Duquesne University, he did his apprenticeship with the firm of Arthur Thomas and Company prior to coming to Belmont Abbey in 1900. A practicing architect until two years ago, he drew the floor plans for the \$2-million Sisters of Mercy Motherhouse in Belmont. He was associated on this project with Walter Hook Associates. The Chapter extends sympathy to two brothers and a sister of Mc-Keesport, Pa.

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We Recommend:

—That architects use the Certificate of Substantial Completion (tentative AIA Document No. G-704, December 5, 1962 as approved by The National Board of Directors, American Institute of Architects) and adhere to the definition of substantial completion which reads as follows:

"The date of substantial completion of a structure or building is the date when the construction is sufficiently completed, in accordance with the plans and specifications, as modified by any change orders agreed to by the parties, so that the Owner can occupy the building for the use for which it was intended."

This recommended definition will be added to the AIA General Conditions of Contract, Document A-201 when next published.

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CONSTRUCTION MANAGEMENT CONTROL COURSE SLATED

The critical path method (CPM) is something we have all heard about or read about in architectural and engineering periodicals during the last two years. Maybe you were curious enougn to look into this to see what it was all about or maybe you put it aside as something that the contractors snould concern themselves with rather than the architects. It is something that can be used against us to show liability for delay in a project if we take the negative point of view. If we take the positive outlook, it can mean better management of the job, shorter periods of construction, a more satisfied client, a fair profit for the contractor, and a greater service rendered by the architect.

A two-day course is being given on the Critical Path Method by the Civil Engineering Department of the School of Engineering at North Carolina State College on April 5 and 6. Two such short courses have already been given with great success and were wonderfully received. A demand for the third course has resulted in the recent announcement for the course in April. Every architectural office should avail itself of this opportunity to familiarize its personnel with a more up-to-date method of project management.

Effective management of construction projects requires utilization of successful new techniques tor planning, scheduling, and controlling all types of construction work. The Critical Path Method (CPM) offers such a technique; relatively simple of application, and yet extremely effective if properly applied.

Expressions of interest throughout the construction industry in the Carolinas demonstrate the need for a practical working knowledge of the relatively new Critical Path Method (CPM), about which much has been written and said in the last two years.

Don't miss this opportunity. For additional information write to Professor Carroll Mann, Civil Engineering Department, who will teach this course, or Mr. D. D. Stansel, P. O. Box 5125, State College Station, Raleigh.

MODULAR SEMINARS FOR ARCHITECTURAL FIRMS SCHEDULED

The Modular Building Standards Association announces a series of Seminars for principals of architectural firms, office managers and draftsmen in architectural offices. The Seminars offer a working knowledge and training in the application of Modular Design, demonstrating the system that has produced substantial savings for both architects and owners. The Seminars will be conducted by Melvin W. Isenberg, PE, Professor of Architectural Engineering, The Pennsylvania State University, and Robert S. Van Keuren, AIA, member of the architectural firm of Moulton & Van Keuren, Syracuse, New York. Previous seminars have had an enthusiastic reception in Houston, Cleveland, Chicago, Seattle, San Francisco, Boston, New York, Philadelphia and other leading cities.

The new series will be held at the Sheraton Park in Washington, D. C. on March 25, at the Sir Walter in Raleigh on March 26, at The Dinkler Plaza in Atlanta on March 27, and at the Biscayne Terrace in Miami on March 28.



Cathedral of St. Philip, Atlanta, Ga. Architects: Godwin & Beckett, Inc., and Francis P. Smith, Associate Architects, Atlanta, Ga. Bishop: The Right Rev. Randolph R. Claiborne, Jr. Dean: The Very Rev. Alfred Hardman.

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Visit the Church Architectural Conference in Seattle, Washington, March 5-7, 1963.

NORTH CAROLINA ASSOCIATION OF PROFESSIONS IS ORGANIZED

The organization of a North Carolina Association of Professions was announced Saturday, February 16, 1963 at a meeting in the North Carolina Bar Center, Raleigh, and the election of new officers for the forthcoming year was announced following a meeting of the Board of Directors.

Officers named include President, T. C. Cooke, P.E., Durham, Professional Engineer; Vice President, Jacob H. Shuford, M.D., Hickory, Surgeon; Secretary, William W. Dodge III, AIA, Raleigh, Architect; and Treasurer, Earl L. Knox, D.V.M., Raleigh, Veterinarian.

Charter member organizations include the North Carolina Chapter, American Institute of Architects; Professional Engineers of North Carolina; The Medical Society of the State of North Carolina and the North Carolina Veterinary Medicine Association.

According to President Cooke, the organization was issued a charter in December and lists among its purposes and objectives the following points: To foster and maintain the honor and integrity of the several professions; To promote the study of the professions and research therein, the diffusion of knowledge thereof, and the continuing education of the members of the professions; and to promote suitable standards of professional education and admission to practice.

He continued that other purposes of the organization as listed in the By-Laws include: To study, improve and facilitate the practice of the professions; To cause to be published and to distribute addresses, reports, treatises and other literary works on professional and public subjects; To maintain a library of professional works and a research center; and To acquire, preserve and exhibit rare books and documents, objects of art, and items of historical interest having significance or bearing on the practice of any and all of the professions represented by the membership of the association.

The first in a series of quarterly meetings featuring a planned program has been scheduled for March 30, 1963 at the Sedgefield Inn in Greensboro. The program is expected to feature outstanding speakers on current topics of interest to the professions. Individual members from the various participating organizations are being particularly encouraged to plan to attend the March 30th meeting.

SEMINAR ON RIGID URETHANE FOAM INSULATION TO BE HELD

E. I. duPont de Nemours & Co., Inc., Wilmington, Delaware, and Flexible Products Co., Marietta, Georgia, plan to hold a Seminar of the Various uses of Rigid Urethane Foam; spray-on technique, pour-in-place system, etc. This Seminar will be held through the agency of the William A. Pahl Co., Inc., Route #6, Raleigh, North Carolina.

It will be held at the Hotel Sir Walter in Raleigh, Elizabeth Room, Wednesday, April 10, 1963 and will begin at 1:30 p.m. Interested persons attending are invited to be the guests of the William A. Pahl Co. for lunch at 12:00 noon, same place.

Reservations for lunch and/or the Seminar can be made with William A. Pahl Co. prior to April 5, 1963.



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LETTERS TO THE EDITOR

Dear Mrs. Silver:

WP-G

Each month for some time now, I have enjoyed reading the current issues of Southern Architect and I have appreciated their being sent to me. In fact, I would gladly become a paying subscriber.

Your January issue has provoked some thinking which I have found interesting to put into writing, and which I am enclosing for your consideration and possible use.

Long association with outstanding architects in both the South and the North causes me to question whether the praise heaped upon the award receiving objects reflects the thinking of men practicing architecture.

I shall be interested in learning whether the "question" is suitable for your use and hope you will consider it constructive and not necessarily too critical.

Yours sincerely, WILLIAM PITKIN LANDSCAPE ARCHITECT CONSULTANT ON LANDSCAPE DESIGN AND LAND PLANNING P. O. BOX 1524, ASHEVILLE, N. C.

QUESTION

Perhaps the architects of North Carolina will think it presumptuous of a mere landscape architect to pose such an impertinent — or soul searching — question.

But here it comes! When in the privacy of their own thinking or when their artistic conscience is truly in control, do they really attribute any merit to those award winning paintings and sculptures published in the January issue of Southern Architect?

I fully anticipate that the response to my question will be that "he is just an old timer — ignorant of the finer things of today, the newer developments in every form of art". Yet it must be acknowledged that we men of the older generation even landscape architects — have acquired a rich background of taste, culture and artistic appreciation through study, travel and the ability to absorb and to understand the good in design. Also through our association with you architects!

So part two of my question is — are architects simply being taken for a ride like the more gullible public or are they relinquishing their individual judgment and merely following the crowd in pretending to approve something they don't understand and don't really like? Is there an influencing fear which causes them to hesitate to be as truly critical as they would like to be?

One cannot be really living today without recognizing the vast amount of dishonesty which exists in many many fields of human endeavor. Isn't it our obligation to our own professions to individually and as a group, question and even reject all design productions which are of dubious parentage, doubtful sincerity and questionable workmanship? Isn't it especially so when it is quite evident that the producing of these objects calls only for ability, training and experience so limited as to be in no way comparable to the requirements of architecture and the allied professions?

and the allied professions? I wonder if each of these award winning productions were set up as a quiz problem how many of your readers could give a satisfactory explanation of the meaning and purpose of any two out of the five and especially of the sculptures.

William Pitkin

WESTERN COUNCIL ELECTS OFFICERS

At a meeting of the Western Council of Architects held February 8 at the Catawba Country Club, Hickory, the following were elected officers for 1963:

President	C. L. Vaughn, Jr., AIA, Shelby
Vice President	Jack Baber, AIA, Asheville
Secretary-treas.	Allen J. Bolick, AIA, Hickory
Directors:	R. Holland Brady, Jr., AIA, Tryon Walter Boggs, Asheville Robert L. Clark, AIA, Hickory

NCAIA President Arthur Jenkins was the principal speaker for the evening meeting.

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1320 Coastline Building Jacksonville 2, Florida 22 February, 1963

Subject: 3rd Edition, Building Products Register

To: Corresponding members, Architectural-Building Information Services Committee, South Atlantic and Florida Regions, AIA

Gentlemen:

First I would like to "report" to you that more than 3500 copies of the 2nd edition have been sold and 77 copies placed in colleges of architecture. Plans are now in progress for production of the 3rd edition and distribution early in 1964.

New features will include 3 new categories, simplification of format and material, larger size type, vertical binding (to match Sweets Files), an alphabetical index of product types and alerts on product usage. Features of the current edition which will be continued include the index of Manufacturers, index of product trade names, directory of Organizations and manufacturers' associations and expanded sections of abstracts of standards, tests and reference material.

It is proposed to distribute copies of the 3rd edition free to all Institute members. With this virtual 100% coverage, (about 7,500 offices), complete support of manufacturers is desired. The more products listed, the more useful the Register will become. Our objective is to include more regional and local manufacturers, in order to make the listings truly comprehensive.

A Sales Manager will be employed to solicit listings from such manufacturers. But he will need names and addresses of whom to contact. Will you assist by making a list of firms in your area whose products you would like to see listed in the Register and send it to Ted W. Dominick at the Octagon? Preferably, include the name of the President, Vice President-in-charge-of-sales or other appropriate individual to be reached.

During the next four months, when manufacturers' representatives and sales engineers call on you, invite their attention to your copy of the Register. Show them how you use it and the advantage that their listing would be to you in making selections and writing specifications.

With your cooperation, this 3rd edition can be a real break-through in the field of technical reference material and a valuable aid to the architect in his practice.

Yours very truly,

Fred W. Bucky, Jr. AIA



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CALENDAR OF EVENTS

MARCH 26: Modular Building Standards Association Seminar, Hotel Sir Walter, Raleigh

MARCH 27, APRIL 3, 10, 17: Architect's Guild of High Point Marguerite's Restaurant George C. Connor, Jr., AIA, President

APRIL 3: Durham Council of Architects, Harvey's Kenneth M. Scott, AIA, President

APRIL 3: Charlotte Section of N. C. Chapter, AIA Stork Restaurant No. 2 Beverly L. Freeman, AIA, President

APRIL 4: Raleigh Council of Architects Y.M.C.A. G. Milton Small, AIA, President

APRI' 6: South Atlantic AIA Regional Council Meeting (All AIA members welcome)
10:30 A.M., Columbia Hotel Columbia, S. C.
W. E. Freeman, Jr., AIA, Regional Director

APRIL 15: Deadline for material for May Issue

APRIL 15: Carolinas Chapter, Producers Council Barringer Hotel, Charlotte L. E. Irvine, President

APRIL 16: Winston-Salem Council of Architects Reynolds Building Restaurant J. Aubrey Kirby, AIA, President

APRIL 18: Greensboro Registered Architects, Maplehouse Restaurant Carl F. Andrews, President

MAY 5-9: AIA 1963 Convention Miami, Florida

1963 HONOR AWARDS EXHIBITION March—Asheville Art Museum, Asheville April—Morehead Planetarium, Chapel Hill May—Fayetteville Arts Festival, Fayetteville Asheboro City Schools, Asheboro

NCAIA Executive Committee Meetings:

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