

ALTEC[®]

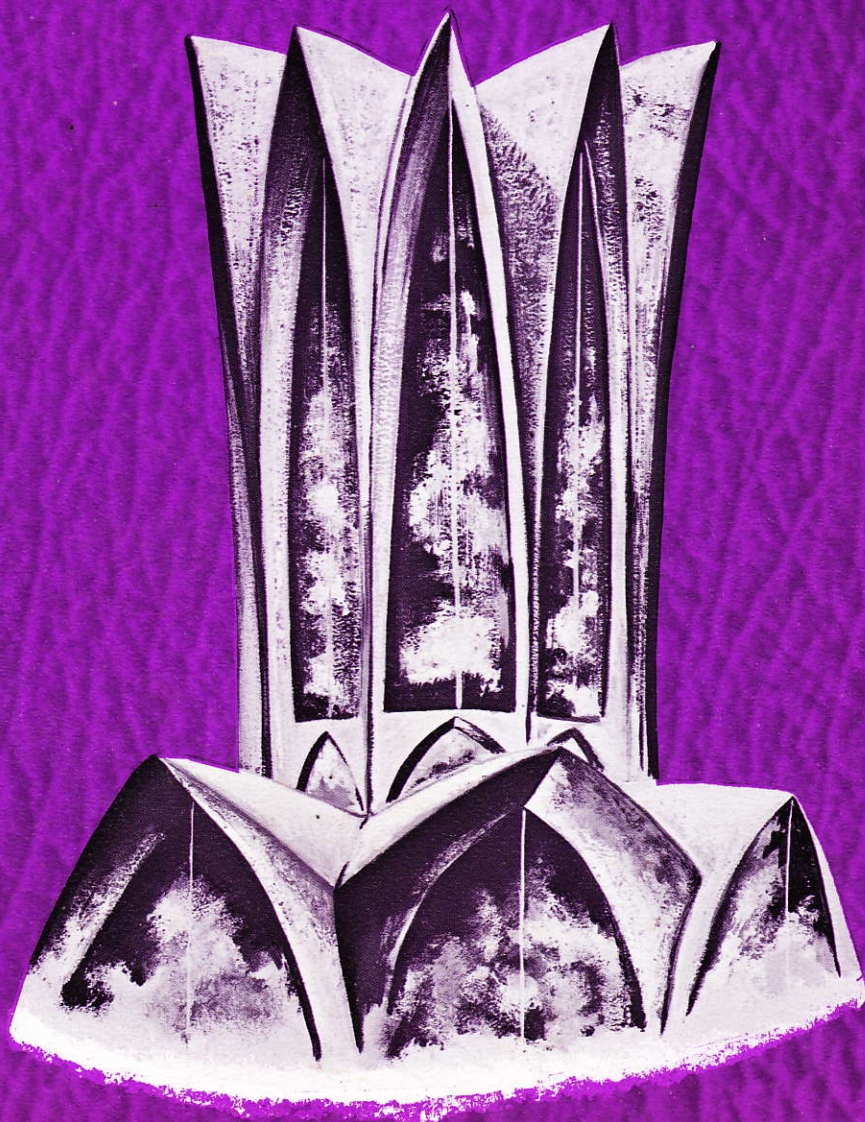
SOUND SYSTEMS

for

HOUSES

of

WORSHIP



*"When the spoken word
inspires the hearts and minds of men..."*

A SOUND SYSTEM CAN BECOME YOUR WILLING SERVANT

In no other place can a voice have as profound an effect as in a house of worship. For here is where man comes to obtain the solace that abides in the words of his own faith. In any church or synagogue, regardless of structural configuration or size, the control and distribution of voice and music becomes, therefore, a most critical consideration.

The problem is to reach every member of the congregation — the young, and particularly the middle aged* and elderly* — with intimacy, clarity and crispness that approaches person-to-person communication. It is by this critique that a church sound system should be selected. It has been the experience of many churches to install inadequate sound systems in the beginning — the ordinary, bargain "package-type" or do-it-yourself sound systems that later prove incapable of achieving a satisfactory delivery of the sermon or other requirements of reliable sound reinforcement. The same consideration that is given to the architectural structure of a church which is achieved with the proper combination of design, selection of materials and construction supervision... must be approached in the installation of a good quality sound system. Here is where a rare but essential combination of the correct sound components and technical know-how is most necessary to fulfill the requirements for faithful audio reinforcement of voice and music. To meet these qualifications, Altec Lansing has devoted the talents of its finest engineers to the development of equipment and the planning of church sound systems.

Equipment and Quality

To offer this most responsible service, each Altec sound system is guaranteed by a perfect-working integration of matched high quality sound components, all designed and constructed to provide the superior sound reinforcement that has led Altec to be selected by major churches in all faiths, as illustrated in this brochure. To provide a marked degree of individuality for each installation, Altec offers optional features, such as stereophonic sound to enhance the delivery of a sermon or the renditions of choir and organ. The use of stereophonic sound has been a new tool

in the hands of the clergyman, providing the church with a two-channel system for highly dramatic effects. Most convenient in church installations is Altec's patented "Revocon" control that permits remote adjustment of volume from the pulpit, sanctuary, narthex, choir loft or from the rear pew where an inconspicuous observer can monitor and adjust the sound system volume, as required, during the services. Altec's compressor amplifiers provide unique facilities of keeping the sound volume in churches at steady levels, even though the clergyman in his normal delivery varies his distance from the microphone, thereby giving him greater freedom of movement during his delivery. When more than one church official is scheduled to speaker during a service, the compressor will also compensate for any differences in natural voice intensities, thus eliminating any necessity for manual readjustments. Altec also offers equipment to enable direct connections for radio broadcasting of church services.

Planning and Installation

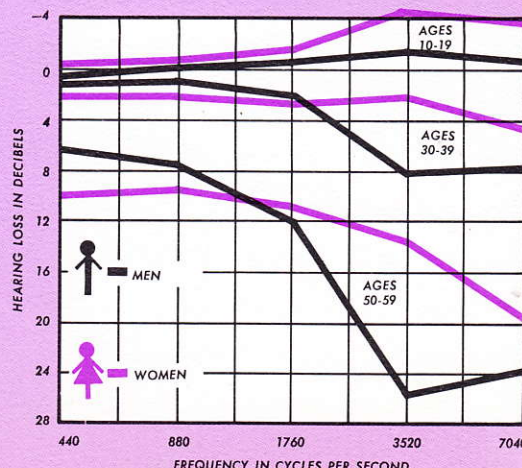
Altec engineering, working in coordination with your architect, consulting engineer and local Altec engineering sound contractor, will plan a sound system specifically tailored to your edifice. Next in importance to equipment selection and system design, is knowledgeable engineering experience and skillful installation. Altec sound contractors are the most highly trained in the nation. They are continually kept informed of new developments in engineering sound techniques direct from Altec's engineering staff and field force, and receive personal training annually from Audio Clinics conducted by Altec in different cities throughout the United States.

Every aspect and detail is surveyed to assure total sound coverage of the congregation for the truest reproduction possible. Consideration is given to situations such as overflow attendance, the elderly and hard-of-hearing, the possibility of recording or broadcasting services for "shut-ins," and the transmission of the service to other areas, such as Sunday School rooms, nurseries, dining rooms and recreation halls.

***CHART A**

Presbycusis is the impairment of hearing that occurs as people grow older. The ability to understand what is being said depends to a large extent on recognition of the consonant sounds in speech. These consonants relate to the higher frequencies beginning around 2000 cycles and up. These are the frequencies that impart intelligibility.

The U.S. Public Health Service chart to the right clearly illustrates the normal deterioration in average hearing that occurs as people grow older. The young, 10 to 19 years of age, show no deterioration. However, marked deterioration in the important 3520 cycle range begins to occur with the ages of 30 to 39, and in later years the ear's overall sensitivity begins to impair seriously with great accentuation in the critical 3520 cycle area. The above situation is normal to everyone. It emphasizes the importance of having the highest quality sound system if the entire congregation is to receive and understand every word of the clergyman's message.



Homogeneity vs. Heterogeneity

Altec is the only manufacturer in the United States who designs and manufactures in its own plant . . . all of the microphones, amplifiers, loudspeakers, transformers, and control equipment to make up a complete sound system. This assures working compatibility. Altec does not produce or sell marginal "packaged" systems made up of incongruous components from miscellaneous sources. Too, this Altec *reliability* provides the user complete confidence in system performance, eliminating concern over the possibility of problems arising during services — problems that are consistently characteristic in the bargain "package-type" sound system.



MICROPHONES

Altec manufactures 34 different models of microphones, from which any church microphone application can be specified. Included are small, slim, lightweight lavaliers that can be hung, unobtrusively, from a neck cord close to the chest — concealed under the robe — or can be hand-held for visitor interview, or used in a fixed position in the pulpit; miniature American-made condenser microphones that can be suspended (practically invisible) from the ceiling over the pulpit or altar, choral groups, or other strategic locations — installed in the steps leading to the altar — along the railing — or in the pulpit. This extensive line of Altec microphones offers a type for the most exacting requirements. Your authorized Altec Sound Engineering Contractor will assist you in making the correct microphone choice. Altec microphones have had an enviable reputation for quality and performance for more than three decades.

AMPLIFIERS

Altec power amplifiers are widely used in churches, auditoriums, theatres, etc., because of their reliability and uncompromising standards of precision, accuracy and broadcast quality. They have less than 2% distortion against 5% found in ordinary conventional type P.A. amplifiers.

Available in a variety of sizes ranging from 18 watts to 1/3 kW, Altec amplifiers are designed to economically accommodate every church sound amplification requirement, including 2-channel stereo, church classrooms, social and recreation halls, tower or belfry.

For churches requiring a number of microphone locations, sound operation and control, Altec's 250T3 broadcast and recording type control console or Altec's 9200A custom console constructed to your specific needs by an Altec contractor, consolidate all necessary features. All Altec Lansing amplifiers are approved by Underwriter's Laboratories, Inc.

LOUDSPEAKERS and HORNS

For the spoken word to unfailingly reach each individual in large groups of people with intelligibility, naturalism and dependability — superiority of Altec loudspeakers and horns has long been recognized and used as the standard in better than 50% of the motion picture theatres and auditoriums throughout the United States. Therefore, it made good sense to adapt the audible ability of Altec speaker components such as the full-size, two-way A7 "The Voice of the Theatre®" speaker system, and multicellular horns to upgrading the intelligibility of sound systems in churches. All of the churches illustrated in this brochure have installed these Altec systems.

The unique ability of sound projection from the exclusive Altec multicellular horn is concentrated in its collection of individual straight exponential high frequency horns that provide the most efficient and effective control of sound projection known today. The cells are arranged in a variety of configurations so that each individual cell literally projects a sound beam to cover a finite section of the seating area. Totally, all cells together can provide the most uniform coverage possible over any given congregational area, large or small — and at the same time prevent excessive unused sound from striking side walls and ceiling to generate reverberation and echos.

ACOUSTA-VOICING^{T.M.}... The final touch of perfection to a sound system!

Altec ACOUSTA-VOICING is a unique new method that "tunes" a sound system. Just as a pipe organ must be "voiced" and "regulated" to the auditorium or house of worship where it is installed, so the sound system can be "voiced" to match the design characteristics of the building in which it is installed. ACOUSTA-VOICING allows startling freedom from feedback and much greater acoustic gain from the sound system. This permits much greater distance between the speaker and the microphone and provides higher speech intelligibility in

auditoriums and houses of worship where reverberation has been a problem. ACOUSTA-VOICING assures optimum sound performance in the individual environment . . . everyone, no matter where he may be seated will hear both speech and music, clearly and distinctly. Specially trained Altec "CE" contractors can perform this vital service. You will be truly amazed at the results. Please write to our plant for the name and address of the nearest Altec authorized CE contractor.



FIRST PRESBYTERIAN CHURCH

Wichita Falls, Texas

This magnificent structure, has a seating capacity of 1,000 in the sanctuary and an additional 125 in the chapel. Gold carpeted floor, upholstered pews, Appalachian oak paneling, stained glass quatrefoil windows and marble narthex all contribute to the grandeur of this church. The Altec sound system, in its own way, also contributes to the congregation's appreciation of the services conducted there.

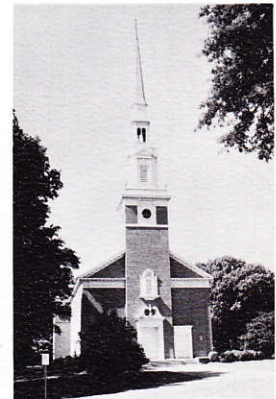
Seven 683A microphones are in use in the chancel area and the grille paneling enclosing the built-in Altec speakers, high above the 80-member choir, closely matches the oak paneling in color.

MYERS PARK BAPTIST CHURCH

Charlotte, North Carolina

An expansion and improvement program at Myers Park Baptist Church included replacement of an unsatisfactory sound system. The new sound system was to excel in voice-range services and had to offer quality that would meet critical FCC broadcast requirements so church services could be transmitted to a radio station for broadcast.

A customized voice-range Altec church system was installed. It provides the flexibility of single or dual (stereo) channel operation, clean signal for remote broadcasts, and automatic control of volume within a pre-set level, regardless of varying voice intensity at the microphones.

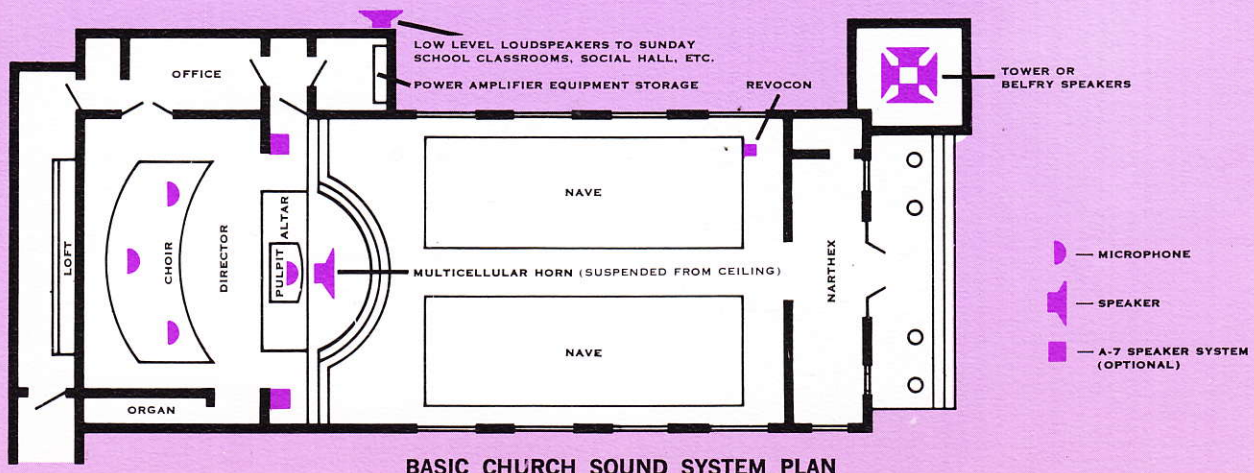


FIRST CONGREGATIONAL CHURCH

Los Angeles, California

The First Congregational Church of Los Angeles is a noble example of art in ecclesiastic architecture; one that may be expected "... to inspire passersby, wayfarers, and worshippers for generations, even centuries to come."

To complement the eloquent and unmistakable visual message of the Church, the pastor arranged for the installation of an Altec church sound system. Now, the congregation benefits from ultimate clarity in receiving the spoken message as well as faithful reproduction of vocal and organ music. What is most important about Altec is its distinctive ability to project the spoken word to all members of the congregation, no matter where he or she may sit.

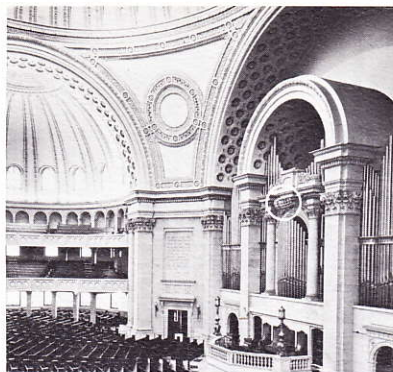




K.A.M. TEMPLE

Chicago, Illinois

1 - 352A Mixer/Power Amplifier, 1 - 803B H. F. Multicellular Horn, 2 - 288B Driver, 1003B H. F. Multicellular Horn.



FIRST CHURCH OF CHRIST, SCIENTIST

Boston, Mass.

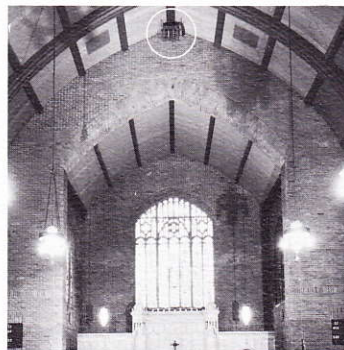
Seats 4,000

Speakers (Illustrated): 2 - 288 HF Units on 2 - 1505 Multicells, 2 - 515 LF Drivers mounted behind medallion on either side of pipe organ, 1 - A-2 "The Voice of the Theatre®". **Amplifiers:** 2 - 425B, 1 - 426B, 1 - 126, 1 - 256, 1 - 287, 1 - 250B Console. **Microphones:** M-11. (Speaker location circled.)

FIRST LUTHERAN CHURCH

Albert Lea, Minnesota

Microphones: 1 - 670B on pulpit, 1 - M20 on altar, 1 - 670B for choir and organ. **Amplifiers:** 1 - 230B Console, 1 - 127A Power Amplifier. **Speakers:** 1 - 288B H. F. Driver on 1505 Multicellular Horn.

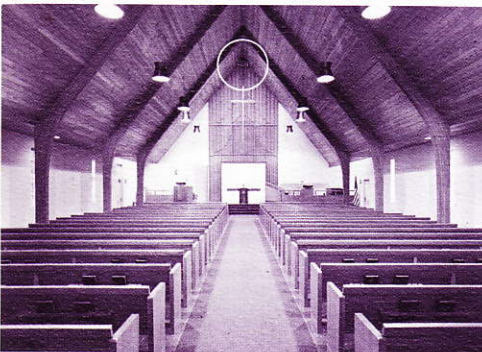


WASHINGTON HEBREW TEMPLE

Washington, D.C.

Seats 2,400

Speakers: 2 - 290C HF Drivers on 2 - H-1005 Multicells, 4 - 803A LF Drivers in 4 - 612 Cabinets behind the two grilles in slanting ceiling over pulpit. **Amplifiers:** 4 - 1510A Pre, 2 - 1540A Line, 2 - 1530A Power. **Microphones:** 2 - 670A on altar, 2 - 639 in choir loft, 1 - 633A in Ark. (Speaker locations circled)



HILLSDALE COMMUNITY CHURCH

Portland, Oregon

Seats 400

Speakers: 1 - 803B multicellular horn with 1 - 288C high frequency driver, 2 - 515B low frequency loudspeakers. **Amplifiers:** 1 - 342B mixer amplifier. **Microphones:** 3 - 683A cardioid microphones.



COLUMBUS BAPTIST TEMPLE

Columbus, Ohio

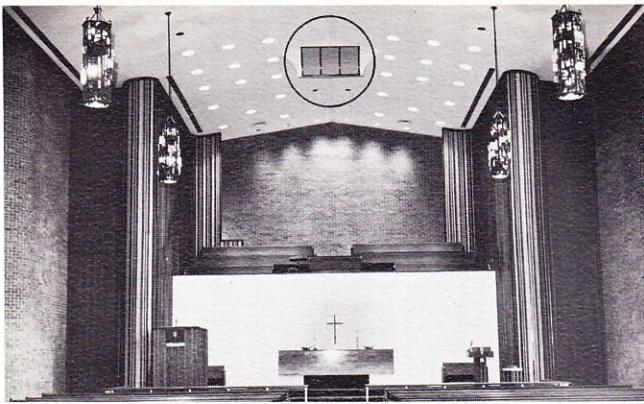
Microphones: 1 - M20 System (circled) above choir on platform, 4 - 683A at pulpit, piano, organ and baptistry. **Amplifiers:** 2 - 1568A, 1 - 1567A Mixer—in sound room at rear of auditorium above balcony. **Speakers:** 2 - 803B Multicellular Horns, 2 - 288C Drivers, 2 custom reflex housings (similar to A7) mounted behind vertical wood panels on either side of platform. 30 - 403A cone speakers in classrooms, cry rooms, lobbies and sound room.



CALVARY EPISCOPAL CHURCH

Pittsburgh, Pennsylvania

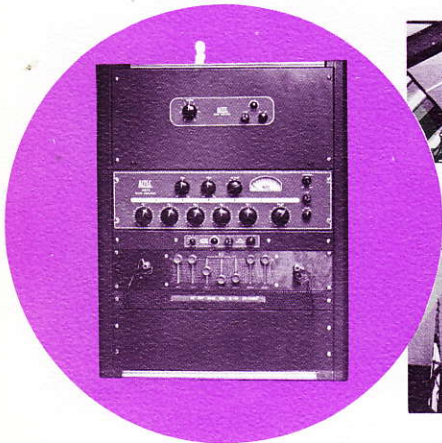
Microphones: 1 - M-30 Cardioid Microphone System, 3 - 688B Professional Omnidirectional Microphone, 14 - 689B Professional Cardioid Microphone. **Control Station (Switching and Amplifiers in two specially designed racks):** 2 - 128B Power Amplifier, 1 - 1561A Preamplifier, 1 - 1563A Line Amplifier, 1 - 1564 Power Supply, 1 - 1567A Mixer. **Speakers:** 11 - 288C Drivers on 11 - 803B H. F. Multicellular. Horn. (Illustrated).



ST. PHILLIP'S METHODIST CHURCH

Houston, Texas

Speakers: 1-311-60 Sectoral Horn, 1-288C H. F. Driver Unit, 2-416A L. F. Speaker, 1-N500C Network, all behind grille cloth drop down; 4-409B Speaker in entry hall. **Amplifiers:** 1-1569A Amplifier, 1-1567A Mixer Pre-amplifier. **Microphones:** 2-689B Microphone at lectern and pulpit. 2-681A Omnidirectional Microphone in choir, 1-686A Microphone at rail.



ST. MARK'S EPISCOPAL CHURCH

Houston, Texas

Speakers: 1-730C Driver Unit, 1-803B H. F. Horn, 1-N500C Network, 1-416A L. F. Speaker. Bass speaker is in enclosure. **Amplifiers:** 1-1567A Mixer Preamplifier, 1-1569A Amplifier, 1-9062A Graphic Equalizer, 1-1566A Preamplifier, 1-361B Amplifier, in equipment rack in closet. **Microphones:** 1-M49 Cardioid Condenser Microphone System on altar, 1-686A Microphone in railing, 3-689B Microphones at lectern, pulpit and prayer bench.



ST. PATRICK'S CATHOLIC CHURCH

Galveston, Texas

Speakers: 2-515B L. F. Speaker, 1-1003B H. F. Multicellular Horn, 1-288C H. F. Driver Unit, 1-N500C Network. **Amplifiers:** 1-1569A Amplifier, 1-1567A Mixer Preamplifier, 1-9062A Graphic Equalizer. **Microphones:** 3-689B Microphone at pulpit and altar.



FIRST METHODIST CHURCH

Houston, Texas

Speakers: 2-803B H. F. Horn, 2-288C H. F. Driver Unit, 4-515B L. F. Speaker, 2-N500C Networks in main sanctuary; 2-1003B H. F. Multicellular Horn and 2-290E H. F. Driver Unit mounted in bell tower to provide downtown Houston with Christmas music; 17-409B Speakers in meeting rooms. **Amplifiers:** 2-1590B Amplifier, in main sanctuary and horns in bell tower; 1-1569A Amplifier in banquet room; 3-1567A Mixer Preamplifier in sanctuary and banquet rooms; 1-436C Compressor Amplifier, 1-1555A Switching Panel, 1-9073A Graphic Equalizer. **Microphones:** 2-689B Microphones in choir.





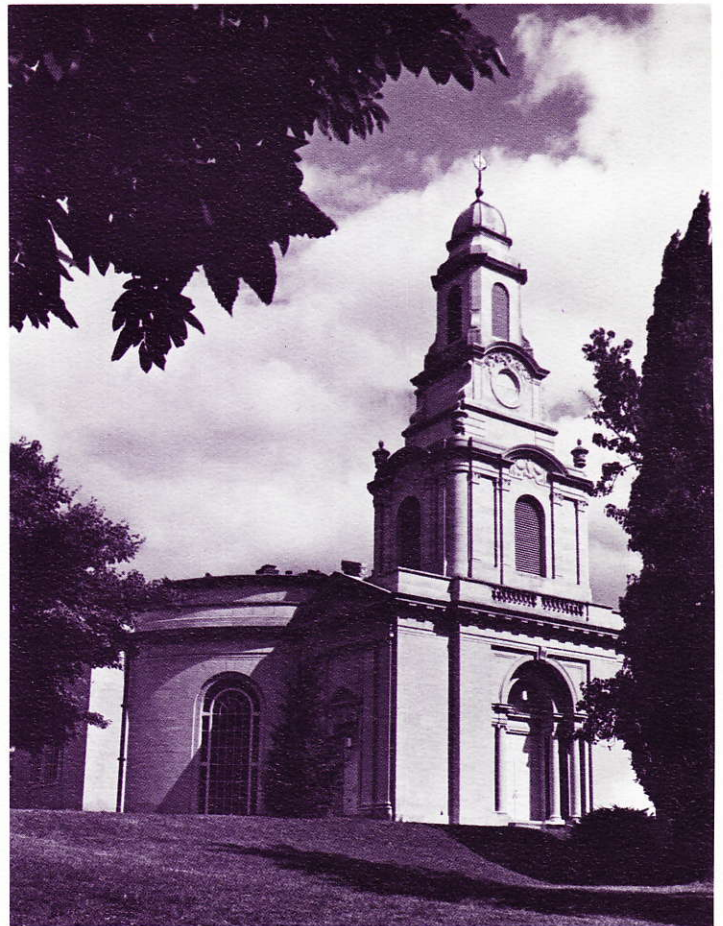
ST. MARK'S EPISCOPAL CHURCH
Houston, Texas



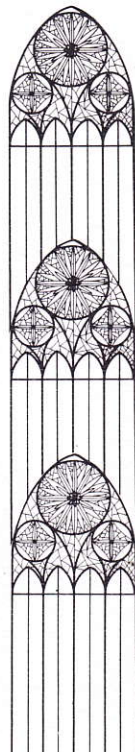
MEMORIAL DRIVE METHODIST CHURCH
Houston, Texas



ST. PHILLIP'S METHODIST CHURCH
Houston, Texas



COLTON CHAPEL, LAFAYETTE COLLEGE
Easton, Pa.



ST. PATRICK'S CATHOLIC CHURCH
Galveston, Texas



MOSQUE CHURCH, ISLAMIC CENTER
Washington, D. C.



ST. MARK'S LUTHERAN CHURCH
Charlotte, N. C.



FIRST BAPTIST CHURCH
De Land, Florida



ST. BONIFACE CATHOLIC CHURCH
Anaheim, California



FIRST METHODIST CHURCH
Santa Monica, California



ST. NICHOLAS GREEK ORTHODOX CHURCH
Bethlehem, Pa.



IMMANUEL CHURCH OF CHRIST
Shillington, Pa.



SEVENTH-DAY ADVENTIST CHURCH
Anaheim, California



ST. PAUL'S METHODIST CHURCH
Houston, Texas



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