## Compact Shelving

BY KEYES D. METCALF

The term "compact shelving" will be considered here in its broadest sense as any method of shelving that increases the number of volumes which can be shelved per square foot of floor space. The subject has been discussed comprehensively by Fremont Rider in his volume entitled Compact Book Storage, published by the Hadham Press of New York in 1949, as well as in two articles by Robert H. Muller, now associate director of libraries of the University of Michigan. The first of Muller's articles, comprising pages 79-93 of the Proceedings of the 1954 ACRL Building Plans Institute, appeared in ACRL Monograph No. 11, published in the spring of 1954; the other was printed in the July 1954 number of College and Research Libraries, pages $300-312$. These three items are recommended reading for anyone facing a shortage of storage space. This article attempts to supplement rather than to replace them.

It is not easy to define precisely what a "volume" is or to determine the average thickness of the volumes in a library. Here, in order to simplify matters, two formulas will be taken as a base; they are arbitrary and debatable, and are by no means satisfactory for all institutions, but they make it possible to compare book capacities of different arrangements.

The first of these formulas is that six volumes equals the average capacity of shelving per linear foot if the collection is classified and space is provided throughout for growth. This is a commonly accepted, conservative formula for a college, university, or research library. If a standard section is 3 feet wide and $71 / 2$ feet high, with seven shelves, it can then hold 125 volumes. The figure will

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vary, of course, from library to library, and from subject to subject within the same library; bound volumes of periodicals, for example, ordinarily take more space than monographs. It should be noted also that seven shelves of quarto or folio volumes cannot be provided in a section, but six volumes per linear foot is a figure conservative enough to make up for the extra space occupied by the approximately ten per cent of the ordinary collection that is oversize. The estimate should be adjusted if any considerable portion of the collection is made up of newspapers.

Experience indicates that 125 volumes per standard section is as good an estimate as can be made, as a basis for calculations of stack capacity, if space for reasonable growth is provided. Many variables can modify the figure in any specific instance, and it should be added that total volume capacity is a matter of great importance; possible means of inserting one additional volume or even half-volume per linear foot of shelf should be studied, and adopted unless disadvantages outweigh benefits. One extra volume per linear foot beyond the six provided by the formula, will increase capacity by $162 / 3$ per cent, which provides space for an additional 167,000 volumes in a one-million-volume stack. The construction cost for shelving that many volumes today may amount to $\$ 250,000$.

The second formula that will be used here provides that fifteen volumes can be housed per square foot of stack floor space. The author will deal with this
further elsewhere; this figure is possible and reasonable with ranges placed $4^{\prime} 6^{\prime \prime}$ on centers, if there is careful planning, and if the average capacity per section is taken as 125 volumes according to the first formula.

There are three basic approaches towards increasing storage capacity per square foot of floor space. Each has its advantages and disadvantages. The total cost of housing any given number of volumes may be reduced under some circumstances, if not all, by any one of the three, and savings in space and costs may be even greater if a combination of two methods is used, or even of all three. The problem, always, is whether or not these savings make up for the inconveniences that result.

These three basic methods can be characterized as: (I) methods of shelving more books in the existing sections; (2) methods of devoting a larger percentage of the available floor space to regular shelving; and (3) methods of increasing the capacity of a given floor space by using special kinds of shelving.

The first two methods have been in use for many years throughout the world. The third, with minor exceptions, has been developed during recent years under the pressure of high building construction costs.

## METHODS OF SHELVING MORE BOOKS IN THE EXISTING SECTIONS

There are five subspecies to be considered under this major heading. The first of these is:

Less space may be left for growth. This obvious procedure has been used everywhere, from the earliest times. It may take either of two quite different forms.

In the first of these forms, books are arranged chronologically by date of receipt and shelves are filled to capacity one after another as the collection grows. This has been the traditional plan in many large libraries, and often in small ones; it facilitates the use of each linear

Mr. Metcalf is engaged in preparing a book on the planning of college, university, and research library buildings. "Alternatives to a New Library Building" is the preliminary version of a chapter from that volume which CRL is pleased to publish here as the third of a series of excerpts from it.

Mr. Metcalf invites suggestions and comments for consideration for use in the final version of his work.

The research for his book and the writing of it is being done by Mr. Metcalf as the director of a special project sponsored by a grant from the Council on Library Resources (CRL, XI (1960), 136).
foot of shelving to full capacity; once shelved, a volume need never be shifted. The chronological scheme is not an essential feature of fixed-location shelving, but it is the obvious procedure. The arbitrary figure of six volumes per linear foot that has been accepted as a formula will fill a stack to no more than twothirds or three-quarters of the capacity obtainable if each shelf is completely filled. Under this system, if the first formula's 125 volumes was correct, a standard section will hold 168 volumes or more.

Alternatively, though fixed locations are not to be adopted, more than twothirds or three-quarters of each shelf may be filled. If seven volumes are shelved per linear foot, the shelves will be only seven-eighths filled, but capacity will be increased to 147 volumes per section. There will still be room for a fourteen per cent increase in the bulk of the total collection, before every shelf is completely filled. Experience has shown, however, that whenever shelves are filled on the average to eighty per cent capacity or more, a library begins to suffer from slower service. Constant shifting of books is required because of unequal growth; individual shelves and sections overflow, and space has to be found for expansion
of entire subject classifications that are growing more rapidly than the collection as a whole. Bindings will be damaged by moving and pulling books from shelves filled too full.

It should be added that institutions all too rarely provide additional shelf space as it is needed; often they delay until books have to be piled in the stack aisles and window ledges, which inevitably damages the books and impairs service. For this reason it is strongly recommended that, in estimating stack capacity, the conservative figure of 125 volumes per section be used. It is time to plan for more space as soon as a library stack is two-thirds filled or, at the most, three-fourths, assuming, of course, that a classified arrangement of books will be continued.
If a chronological arrangement is adopted, the only way to use the stacks is through consultation of the catalog; the advantages of classified collections must be forgone. While still possible to permit open access-to allow the reader to determine the arbitrary location numbers from the catalog and go to the shelves to obtain the books he wantsthe reader would be acting simply as a stack attendant, and an untrained one at that; the disadvantages of open access would result, without any of the manifold advantages it normally offers. There is yet another consideration. Many readers ask for several books at once, on the same or related subjects. Since these books would, normally, not have been acquired at the same time, the attendant, or the reader in a fixed-location stack may have to go to widely separated areas for them, taking more time than would be required under a subject classification system. This is one of the reasons for slow service in many libraries that do not shelve their books by subject.

To be weighted against these considerations, the great advantage of chronological arrangement is saving in space. In a building for one million volumes, the
space required for books in chronlogical order is at the most only three quarters that which a classified plan will need, if reasonable provision is made for growth. This might well save more than $\$ 335,000$ in construction costs. Most American scholars and librarians, however, are convinced that open access and subject arrangement are of vital importance, and that the cost is not unreasonable.
2. Books may be shelved by size. If books are shelved by size, and the system divides them into six or more groups (e.g., books less than 6 inches high, those between 6 and 7, 7 and 8, 8 and 9,9 and 11, and those over 11), it should be possible to place eight or nine shelves per section, in a stack of the standard $7^{\prime} 6^{\prime \prime}$ height in the clear. If the average is eight-and-one-half, compared with seven shelves on the average for regular shelving, the linear footage available has been increased by approximately twenty per cent. Rider calculated the figure at approximately twenty-five per cent, which would bring the average capacity per section up to at least 155 volumes; if combined with the chronological arrangement described above, the figure will rise further to 200, a total increase of sixty per cent.

The reference department of the New York Public Library is now shelving new acquisitions in its main stack chronologically as received, and by size. This has also been the arrangement for many of Harvard's books in the New England Deposit Library; other libraries following this procedure include the Midwest In-ter-Library Center, the Hampshire Library Center, and many of the reference and research libraries of the United Kingdom, on the Continent, and elsewhere. It often comes as a shock to an American librarian to discover the prevalence abroad of shelving by size; foreigners are often equally surprised to find that great American libraries shelve their books by subject.
3. Fore-edge shelving. A third means of increasing the capacity of a given shelf area is to shelve books on their fore edges as well as by size. This plan was adopted in parts of the Wesleyan University Library by Fremont Rider, and is discussed in pages $56-64$ of his Compact Book Storage. It has also been adopted to some extent for infrequently used material at Yale University, and elsewhere. A method of saving still more space was also proposed by Rider-who not only placed the books on fore edges but also cut down their margins with a powerdriven paper knife, and boxed them in inexpensive cardboard containers for protection, and to provide a good surface on which to inscribe call numbers.

It is estimated that fore-edge shelving, if used in conjunction with arrangement by size, will increase by at least fifty per cent the section capacity made possible by the chronological plan alone. It may bring capacity up to 250 volumes per section, an increase of one hundred per cent over the standard plan, and provide for 30 volumes per square foot of floor space, instead of 15. The procedure has all the disadvantages that have been noted above; in addition, many librarians observe that books are injured and bindings weakened when books are shelved on their fore edges. If they are also cut down to reduce size, the procedure may be likened to cutting off one's toes in order to wear smaller shoes. In fairness to Rider it should be reported that his books were placed on their backs when boxed, so there was less danger of weakening the bindings. To double the capacity per square foot by shelving books chronologically, and by size, on their fore edges may save more than $\$ 650,000$ in construction of a million-volume book stack, if construction costs approximate $\$ 20$ per square foot.
4. Shelving two- or three-deep. Books can be shelved two-deep (one row behind another) on shelves twelve inches wide, or three-deep on eighteen-inch
shelves. Many libraries, because of lack of space have occasionally resorted to the two-deep plan, temporarily at least. The inconvenience is extremely serious. When President Eliot proposed cooperative storage for the Boston area, which came into being forty years later as the New England Deposit Library, he suggested that the "dead books" be shelved three-deep, which is even worse-two or perhaps four times as unsatisfactory as two-deep. The procedure will, however, increase capacity materially. Two-deep shelving, where books are on twelve-inch shelving, with no change in aisle width, could bring the total up to 400 volumes per section, or 50 per square foot, assuming that the arrangement is also chronological and by size. If the three-deep plan were adopted and the distance between range centers were increased from $4^{\prime} 6^{\prime \prime}$ to $5^{\prime} 6^{\prime \prime}$, as would be desirable, if not necessary, capacity would rise to 600 vol umes per section and, in spite of the reduced number of ranges, more than 60 volumes could be housed per square foot.
5. Higher sections. There is one further method of increasing capacity per square foot of floor space, without abandoning standard shelving; this is to increase the height of the shelf sections. It can be done, of course, only if the stack area has ceilings higher than $7^{\prime} 6^{\prime \prime}$ in the clear. (Space "in the clear" is the space from finished floor to finished ceiling.) If, as in many multitier stacks, there is an $8^{\prime} 6^{\prime \prime}$ ceiling (which is lower than ceilings in most areas of modern libraries used for both book storage and readers), the capacity theoretically will be increased by more than eleven per cent. This does not call for giving up a classified arrangement with open access, but it places the top shelf out of reach of all but the tallest readers, unless footstools are used. In warehouse buildings where shelves are closed to the public the disadvantage is much slighter. The New England Deposit Library has $8^{\prime \prime} 4^{\prime \prime}$ ceilings throughout.

Five methods have been described by which, without changing standard stack installations, the capacity of a given area can be increased. As has been noted, various combinations of these methods are possible, so the total number of plans that might be adopted is considerably greater than five. Any such method will make construction considerably cheaper. Each institution must carefully consider its service methods and requirements before deciding to adopt any of these procedures, and, in addition, compare them with procedures of a somewhat different nature, described below.

## METHODS OF DEVOTING A LARGER PERCENTAGE OF THE AVAILABLE FLOOR SPACE TO REGULAR SHELVING

1. Shallower Shelves. If the width of shelves is decreased without changing aisle widths, it is possible to install more ranges in a given floor area, thereby increasing capacity per square foot. A large portion of all the shelving now being installed in college, university, and research libraries has ranges of at least twenty inches from front to back, often with even wider finished end panels. Indeed, in many cases, the shelving is on a base twenty-two inches from front to back, with end panels of at least that width; sometimes the width runs as high as twenty-four inches. The theoretical justification for these wide ranges is to increase stability, and to provide bottom shelves from which oversize books will not project into the aisles.

It should be remembered that a large proportion of all books in a college and research library measure not more than seven inches from spine to fore edge. If shelves are made only seven inches deep, with a two-inch space between those on one side and those on the other of each double-faced section, the total depth of the section will be sixteen inches instead of the twenty or more now prevalent. One of these seven-inch shelves with two
inches of space behind it is large enough for a nine-inch book unless another volume exceeding the seven-inch size happens to be immediately behind it, or unless there is cross-bracing in the two-inch gap between. More space is used for aisles than for shelves, and a decrease from twenty to sixteen inches in range depth increases capacity per square foot by 8 per cent. It is possible also, of course, to use narrower shelves in conjunction with chronological and size arrangements. Further, it should be noted that shallow shelves cost less than deep ones.

On the other hand, it has been estimated by Rider that some 6 per cent of the books in a library measure more than nine inches from spine to fore edge. Some of the volumes that make up this 6 per cent are too large for any regular shelving, so special provision will always have to be made for some portion of the collection. It is recommended that in designing a stack, the planners seriously consider installing ranges no more than eighteen inches deep, rather than the wider sizes now so frequently used.
2. Narrower aisles. The standard width of aisles in research libraries varies from 30 to 36 inches; in housing infrequently used books, particularly in closed-access stacks, the width may well be reduced considerably. When shallower shelving has also been adopted, ranges have been installed on 40 -inch centers instead of 54 inch, which increases capacity by 35 per cent. On this basis, without resorting to any of the other procedures that have been considered, capacity per square foot will become approximately twenty volumes instead of fifteen.

In Dublin, Trinity College uses a colonnade under its famous Long Room as a stack area, with ranges 40 inches on centers; the arrangement is by size there, with the result that more than 30 volumes per square foot are housed. In the New England Deposit Library, with shelving 44 inches on centers, capacity
has been increased by 23 per cent over standard shelving in addition to the gains resulting from arrangement by size; the aisles there are 26 inches wide. Much of the Newberry Library stack has ranges 48 inches on centers. Widener Library is an open-access, heavily-used stack, where books are classified by subject, with ranges 50 inches on centers.
3. Lengthening ranges and holding down the width of cross-aisles. There have been assertions that no range in an open-access stack should be more than five sections, or 15 feet long. This may be valid for a public library with open access, or even an undergraduate collection (though it could well be disputed), but it is hard to understand why this should be accepted as a rule for research library stacks open only to faculty members and advanced students. Indeed, short ranges only too often complicate shelving arrangements. If the ranges are properly labelled, and if floor plans are provided with class marks clearly indicated on them, long ranges may be more satisfactory than short ones because they may simplify traffic patterns and shelving plans. Ranges that extend 33 feet provide 10 per cent more shelving in the same square footage than two 15 -foot ranges separated by a 3 -foot cross aisle. A range 36 feet long will provide 20 per cent more shelving than two 15 -foot ranges with a 6 -foot cross aisle between.

Can libraries afford short ranges in a bookstack costing $\$ 1,250,000$, particularly since they make it easier for stack users to lose their way? Does anyone in a large stack experience real inconvenience because of long ranges, if the ranges are well labeled? These are questions to be considered and answered on the basis of local conditions, but, obviously, shallower shelving, narrower aisles, and longer ranges can increase square foot capacity materially, without any sacrifice of the advantages of classification and open access.

## METHODS OF INCREASING THE CAPACITY OF A GIVEN FLOOR SPACE BY USING SPECIAL KINDS OF SHELVING

Several special kinds of shelving can be used with the normal classified arrangement of books, or with one or more of the plans considered above. Not all combinations are practicable, however. Books cannot be shelved two- or threedeep in any of the three kinds of special shelving described below; in effect, these special shelving devices are a means of achieving the savings in space that twoand three-deep shelving provides, without most of the disadvantages entailed by two- or three-deep crowding on regular shelves. It should also be noted that special shelving is ordinarily designed for almost minimal aisle widths and shelf depths, hence further economies along these lines are impracticable. The height of ranges cannot safely be increased beyond the standard $7^{\prime} 6^{\prime \prime}$, because special shelving does not lend itself to use with footstools.

1. Hinged shelving. Hinged shelving used at the Midwest Inter-Library Center makes possible an increase in capacity per square foot of as much as 75 per cent over the standard 125 volumes per section; to this can be added savings that result from shelving by size, if that procedure is also adopted. Hinged shelves, designed by that great innovator, Angus MacDonald, were accepted at the Midwest Inter-Library Center before they had been completely perfected. They are not as satisfactory as they might have been if a rush order could have been avoided. These shelves consist of double-faced sections hung on each side of standard sections; each range therefore has threedeep shelving on both sides. Since the hinged sections are nearly 3 feet long, and deep enough to accommodate books on both sides, aisles had to be some 40 inches wide. This shelving is not now on the market.

A second type of hinged shelving,
made available by the Art Metal Manufacturing Company of Jamestown, New York, consists of swing units occupying a little less than half the length of the regular sections. These units are hung at both ends of each section; they swing out into the stack aisles and expose to view the regular shelves behind them. The swing units are offered in single or double-faced shelving. The latter, like the installation at the Midwest Inter-Library Center, makes it possible to shelve books three-deep on both sides of each range, and provide access to books on inside rows without handling the books on the outer row. Since the Art Metal units are only half as long as those designed by MacDonald, the aisles need not be widened disproportionately.
2. Drawer-type shelving. Drawer-type shelving, when first introduced by the Hamilton Company of Two Rivers, Wisconsin, was called "Compo." The W. R. Ames Company of San Francisco now offers "Stor-More" book units, and shelving of this kind is also produced by Clifford Brown, of Wauwatosa, Wisconsin, who designed the original "Compo" stack. The Ames units consist of "doubleheaded" drawers, approximately 6 feet in length, which can be pulled out into the aisle on either side. The drawers are designed to bridge alternate aisles in a stack area, making use of existing stack columns, but they can also be used in a free-standing arrangement.
The Hamilton "Compo" units are single-headed drawers in varying lengths from 3 to 4 feet, and in widths varying from 18 to 26 inches. Like an adjustable shelf, each drawer can be adjusted vertically on one-inch centers. If used to replace the 40 -inch sections in the multitier stack of the Widener Library at Harvard, they would be wider than those replacing 36 -inch shelves that are to be found in most libraries; this would reduce the capacity per square foot, but make it possible to accommodate relatively large volumes. They can be in-
stalled in place of shelving in old multitier stacks, or as free-standing stacks in new construction, if the floors are designed to support the extra weight.

Drawer-type shelving makes it desirable or, in many cases, necessary to increase the width of stack aisles, which reduces to some extent the saving they offer; but, as Muller has shown, they increase capacity per square foot by some 90 to 110 per cent over standard shelving. It should be added that Muller's figures referred to capacity increases obtained by special shelving in bays 23 feet square, and might be modified considerably in a bay size specially adapted for the particular type of shelving installed in it. Costs of construction and of steel for shelving vary considerably from time to time and from place to place.
3. "Compactus." The third special type of shelving has gone under the name of "Compactus." It originated in Switzerland but has been manufactured in England, Norway, the Soviet Union, Sweden, and elsewhere. It has been used on a fairly large scale in Australia, and an adaptation of it can be found in the National Library at Calcutta, where B. S. Kesavan has used it in the basement and in other portions of the old viceroy's mansion, in space that would otherwise be very hard to use advantageously for library purposes. An adaptation was used in the Treasure Room at Harvard during the 1930 's; and was removed because books occasionally fell and were damaged while ranges were being shifted.
Regular "Compactus" is made up of more or less standard stack ranges mounted on rails with ball-bearing wheels. These ranges can be pushed tightly together; rubber baffles are desirable to prevent damage from collisions when they are moved. Each bay or section of the stack can be almost filled with ranges, leaving only one aisle parallel to each ten or more ranges. The shelving is heavy, so when used in large blocks a motor must be installed to move the
ranges and open up an aisle through which one can reach the desired shelf. The weight is sufficient to require extrastrong floor construction; motor, rails, and other necessary equipment are expensive. Safety devices are required to prevent a user from being crushed if someone inadvertently starts the motor. Supporting columns seem to get in the way even more than in the case of standard shelving, and prevent use of as large a part of the total floor space as might be expected.
Still, it is obvious that this type of shelving makes possible a greater book capacity per square foot than any other method yet devised. In ordinary shelving, with ranges 55 inches on centers, twothirds of the space is given over to aisles, and only one-third consists of shelving. With very narrow aisles, as at Trinity College in Dublin (ranges 40 inches on centers, with 24 -inch aisles), the percentage of space devoted to shelving rises only to 40 . With hinged or drawer-type shelving, it may approximate 66 per cent. "Compactus," however, makes it possible to fill 80 per cent of the total space with shelving, leaving only 20 per cent for aisles between ranges and for cross aisles, which are of particular importance in this instance.

Against the advantages of special types of shelving the following drawbacks must be assessed:

1. Books are not as readily available to the reader as they would be on standard shelving. Hinged shelves must be swung out into the aisle; drawers must be pulled out. The manufacturers deny that this is a problem, pointing to installations in reading rooms and open-access stacks as evidence.
2. In swinging out sections or pulling out drawers, there is always some danger of books falling and becoming damaged. The extent of this danger depends on the design, and is greater with hinged shelving than with drawers.
3. All types of special shelving have moving parts and, unless it is as well made as the Rolls-Royce engine, anything with moving parts may sooner or later come to grief. Design and quality of construction are vital considerations. As noted, the Midwest Inter-Library Center has encountered difficulties that can be blamed on too hasty a job of design and production. Rollers and other moving parts in drawers, if well made, should be capable of standing heavy use for many years.
4. Inevitably, in view of moving parts and heavier construction, the cost per linear foot of shelf is much greater for any of these types of special shelving than for standard ranges. Costs of shelving will not be discussed here, but it can be noted that Muller found that the additional cost of special shelving cancels out a large share, but not all, of the advantages resulting from increasing the capacity per square foot. As he points out, the cost per square foot of construction of the building in which a stack is to be installed is of prime importance here.

## SUMMARY

Two major questions need to be answered in reaching a decision on whether or not to use any method of compact shelving.

1. Is the inconvenience that will result great enough to outweigh the saving in space that will be achieved? Capacity can be increased by leaving less space for growth or, if the classified arrangement is abandoned, filling each shelf completely. Shelves or aisles or both may be narrowed. Capacity also can be increased by installing moving shelves of one kind or another. If a combination of methods is used, both savings and disadvantages are compounded. It should not be forgotten that most of the world's great libraries outside the United States arrange their books by size and use narrow shelves and aisles; that moving shelves are in use at the Midwest Inter-Library Center, the

University of Wisconsin, and the New York Public Library's warehouse, as well as in many smaller libraries of all kinds. It is suggested that anyone considering the use of such shelving consult libraries that have had experience with it.
2. What is the actual monetary saving that can be anticipated from adoption of any specific plan? Few persons would consider installation of expensive moving shelves in a stack built in a Nissen hut, where construction costs come to perhaps $\$ 1.50$ per square foot, much less than the special stack will cost. In Wall Street, on the other hand, ground space alone may be worth hundreds of dollars per square foot, and it ought to be possible to save large sums by compact storage; a book may have to be heavily used to earn a place on standard shelves there. Most college and university libraries fall somewhere between these two extremes.

It is desirable once more to call attention to Muller's figures, which may not now apply to any specific library, but indicate clearly the considerations to be weighed. They demonstrate, in particular, that special shelving costs more per linear foot of storage space than standard library shelving, and much more than commercial shelving of the sort used by the New England Deposit Library. ("Commercial shelving" is metal shelving
that can be adjusted vertically only with a wrench for the nuts and bolts that hold it together; it is available from many manufacturers, and costs perhaps half as much as the bracket shelving now standard in libraries.)

Many mistakes have been made. There are libraries that could have used one or more of the methods of compact storage to advantage, but have failed to do so. Others have used one or more of these methods with unfortunate results.

It is not easy to estimate costs accurately; and it is difficult indeed to weigh costs against convenience. What is the dollar value of open access and classified collections? Also, special circumstances may complicate a situation. When a library is full and there is no possibility of constructing an addition or a new building, compact shelving of one kind or another may be the only practicable solution, but it is suggested that movable shelving be regarded as a last resort, and that the library first consider whether portions of its collections might be placed in a stack with narrower shelves and aisles, shelved by size, or perhaps transferred to a cooperative storage building like the Midwest Inter-Library Center or the New England Deposit Library. An article of this sort can provide no one with an answer; it can only indicate the questions that should be asked.

## Midwest Academic Librarians Conference

The seventh Midwest Academic Librarians Conference will be held on Friday and Saturday, May 11 and 12, at Saint Paul, Minnesota. The conference will be cosponsored by the College of Saint Catherine, the College of Saint Thomas, and Macalester College. Friday daytime meetings will start with a panel discussion, "Academic Librarians and their Professional Associations," followed by group discussions.

At the evening dinner meeting Reverend Terrence J. Murphy will discuss
"Legal Aspects of Book Censorship and Their Relationship to Academic Librarians."

On Saturday, "New Cataloging Rules and Their Impact of Readers' Services" and "Circulation Controls and Undergraduate Morality in the Use of Libraries" will be topics for group discussions. Mark Gormley, ACRL executive secretary; Katharine M. Stokes, MALC; and Frank L. Schick, Library Services Branch, U. S. Office of Education, will speak at luncheon.

