

Is Another National Network The Best Answer?

Rodger S. Harris

Because of recent interest in the formation of a bibliographic network with the primary purpose of serving major research libraries it seems pertinent to examine the role played by these libraries in an existing network of which they are a part. One way of examining the role of such a group is to select ARL members as the research libraries and study their participation in one of the regional networks of the OCLC system. The selection of ARL members is pertinent because they have mentioned specifically as the group which should form the nucleus of a new network, The Research Library Information (RLIN). In addition, these libraries are among the largest individual users of the OCLC system and generally are the libraries of research universities. Selection of a part of OCLC for examination also may be justified by the availability of system-use data for one of the regional networks while data for the entire system are not available as readily. Another justification is that to treat data representing the entire OCLC system manually would be a massive task. For one of the regional networks the task is not unreasonable. Therefore, the present study is based on 1978/79 data for the member libraries of the Southeastern Library Network (SOLINET) with special attention directed to the ARL members included in that group.

The 1978/79 compilation of data related to the use of the OCLC system by members of SOLINET includes data for 233 libraries, although in several cases two or more of these are part of a single institution. Of these 233 libraries, 195 are academic libraries and sixteen are members of ARL. The table and graphs which accompany this text present data indicative of the use of the OCLC system by the full SOLINET membership, the academic-library members, and the ARL-SOLINET members.

First-Time Use Charges

One category included in the OCL TOTCAT¹ list from which the data are taken indicates the number of First-Time Use charges attributed to each of the 233 libraries listed as SOLINET members. OCLC refers to these as "Billable FTU's" because they are the first-time uses of data-base records for which the members pay. Of the 233 members of SOLINET, 19 did not incur any Billable FTU's during 1978/79, five libraries each incurred less than 100, and a total of 32 libraries each incurred less than 1,000. Of these 32 libraries two should not have been listed because they are units within the computer profiles of other libraries, a third is a training terminal in a library school, and a fourth is the SOLINET office in Atlanta, Georgia. Of the remaining 28 libraries in this group 12 were members for the entire year, a total of 16 were members for more than six months, a total of 20 were members for more than three months, and the remaining eight libraries were members for three months or less. It should be noted that the listing of a library by OCLC in its monthly reports of system usage² indicates membership in SOLINET and OCLC but does not necessarily indicate either that the library has received its terminals or that the staff has been trained and is prepared to utilize the system. Many of the low figures for annual use of the system by individual libraries appear to be due to relatively recent additions to the membership of SOLINET and OCLC. Some

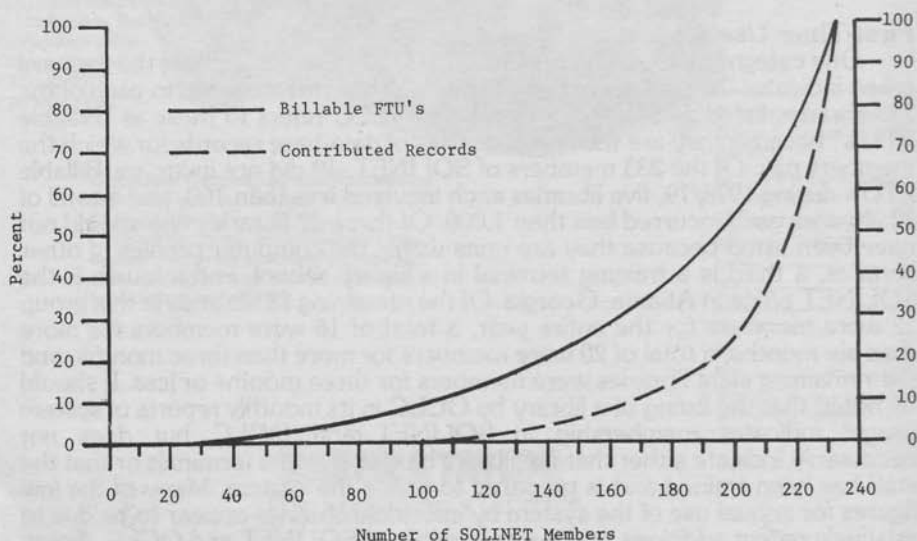
of the low totals represent use of the system by smaller libraries. Some of the low totals accrued by libraries listed as members for the entire year will require further investigation than is possible at this time to provide an understanding of the reasons for low usage of the system.

The total Billable FTU's for each of the 233 SOLINET-member libraries for 1978/79 were arranged in rank order and then examined. There is a slow but steady increase in the number of Billable FTU's through approximately the first 120 ranks. Beyond that point there is a noticeable increase in the rate at which the individual totals increase; there are fewer ranks listed for members using 12,095 to 12,932 records than are listed for members using 7,005 to 7,976 records. This rate increases as the totals grow until for the last 15 ranks the totals more than double, from 22,421 to more than 45,000.

To further facilitate the examination of these data they were divided into 23 groups each composed of 10 successive ranked totals and a final group of the highest three totals. The total number of Billable FTU's attributable to each group of libraries was then calculated. These totals were retained in rank order and the percentage of total SOLINET Billable FTU's attributable to each group was calculated. Cumulative percentages of these ordered groups are presented graphically in Figure 1. The smaller size of the last group was considered when plotting the lines. The line representing these percentages clearly indicates the increasing rate of Billable-FTU cumulation as the successively higher-ranked groups are included.

Figure 1

Cumulative Percentages of Billable FTU's and Contributed Records
Accrued by Total SOLINET Membership, 1978/79



Contributed Records

Data indicative of the number of records contributed to the OCLC data base by each SOLINET-member library were then examined in exactly the same manner. The list indicating the total number of records contributed by each library was arranged in rank order. These rank-ordered data were divided into 23 successive groups of 10 libraries and a final group of three libraries. The total number of records contributed by each group was calculated and the percentage of total SOLINET Contributed Records attributable to each group was calculated. Cumulative percentages for these ordered groups are presented graphically in Figure 1. These data obviously are weighted more heavily toward the higher ranks than is true of the Billable FTU's. The 14 ARL members which actively used the OCLC system for the entire year are concentrated among the highest 25 libraries in terms of Billable FTU's and they are among the highest 26 ranks in terms of Contributed Records.

The 16 libraries which were members of both ARL and SOLINET during 1978/79 comprise 7% of the total SOLINET membership of that period. The 422,831 Billable FTU's attributable to these 16 libraries are equivalent to 24.8% of the total Billable FTU's cumulated by the 233 members of SOLINET. The 40,533 records contributed to the OCLC data base by these ARL members are equivalent to 44.7% of the 90,615 records contributed by all of the members of SOLINET. It is obvious that the ARL members use the OCLC system at a far greater rate than might be inferred from their numbers as a proportion of the total SOLINET membership. These ARL members contributed to the data base to such an extent that 16 libraries contributed nearly 45% of the total records attributable to 233 libraries.

The libraries which are parts of institutions of higher education account for 195 of the total SOLINET membership of 233. These 195 academic libraries cumulated 1,513,625 Billable FTU's and 85,539 Contributed records; a mean of 7,762 Billable FTU's and a mean of 439 Contributed Records. The 38 non-academic libraries accrued 189,101 Billable FTU's and 5,076 Contributed Records during the 1978/79 period; a mean of 4,976 Billable FTU's and a mean of 134 Contributed Records. The 16 ARL members accrued 422,831 Billable FTU's, a mean of 26,427, while accruing 40,533 Contributed Records, a mean of 2,533. See Table 1. Comparing the totals of the ARL members to the totals of all of the academic-library members of SOLINET changes the percentage contribution of the ARL members only slightly from those calculated for comparisons with the entire SOLINET membership. The ARL members accrued 27.9% of the Billable FTU's for academic-library members of SOLINET and 47.4% of the Contributed Records for that group. These figures are each approximately 3% higher than for the comparison of system use by ARL members and all of the members of SOLINET.

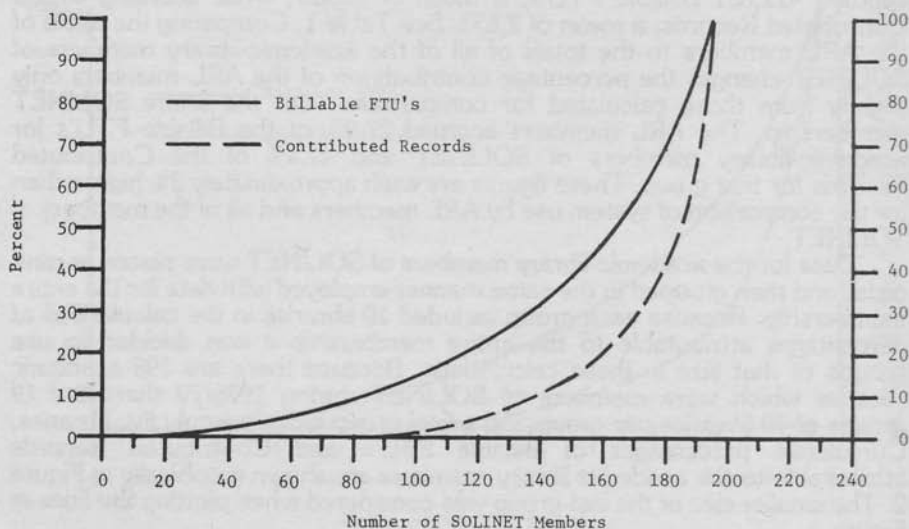
Data for the academic-library members of SOLINET were placed in rank order and then grouped in the same manner employed with data for the entire membership. Because each group included 10 libraries in the calculations of percentages attributable to the entire membership it was decided to use groups of that size in these calculations. Because there are 195 academic libraries which were members of SOLINET during 1978/79 there are 19 groups of 10 libraries per group and a final group including only five libraries. Cumulative percentages of Billable FTU's and Contributed Records attributable to the academic-library members are shown graphically in Figure 2. The smaller size of the last group was considered when plotting the lines in Figure 2.

Table 1
Partial OCLC System Usage by Selected Groups
of SOLINET Members, 1978/79

	A 38 Non-academic Libraries	B 179 Non-ARL Academic Libraries	C 16 ARL-member Libraries	D* 195 Academic Libraries	E 233 SOLINET Members
Billable FTU's	189,101	1,090,794	422,831	1,513,625	1,702,726
Mean Billable FTU's	4,976	6,094	26,427	7,762	7,306
Percent of Total Billable FTU's	11.1	64.1	24.8	88.9	100
Contributed Records	5,076	45,006	40,533	85,539	90,615
Mean Contributed Records	134	251	2,533	439	389
Percent of Total Contributed Records	5.6	49.7	44.7	94.4	100

* Column D is equal to the sum of columns B and C.

Figure 2
Cumulative Percentages of Billable FTU's and Contributed Records
Accrued by Academic-library Members of SOLINET, 1978/79



Import of Data

In analyzing the meaning and importance of these data and statistics the Contributed Records will be treated first. Although the 16 ARL members contributed nearly 45% of all the records contributed by 233 SOLINET members during 1978/79 it is not known how often these records are of use to other libraries. It is reasonable to conclude that at least some of them are records of such esoteric research materials that they are seldom used by other libraries. At best some of these records probably are limited in use to a relatively small circle of research universities. To record and preserve many of these items is part of the responsibility of the large university library in the same manner as is true of the Library of Congress. The number of times a record in the OCLC data base is used by other libraries gives an incomplete indication of the value of the record which includes location information. Presumably if the ARL members do not catalog these materials and record their locations no library will do so. Although some members of SOLINET find essentially all needed catalog records among those obtained from the Library of Congress most make at least occasional use of records contributed by other libraries. Because of the availability of these records (both MARC and records contributed by other libraries), the increasing number and coverage of MARC records, and the increasing number of Contributed Records, some libraries one day will have very little need to perform any local original cataloging. Therefore, it appears worthwhile to maintain a system which makes the widest possible range of bibliographic records available to as many libraries as possible.

These arguments do not represent the only reasons that libraries with widely disparate needs and interests have cooperated to form and maintain a single network. On-line systems are expensive. They are more expensive than most libraries can afford individually. Another reason for the formation of the present OCLC network was to share the cost among many libraries and the method selected was to charge each library for the use of records contributed by other libraries including the Library of Congress. It is a simple fact that if the 16 ARL members incurred 24.8% of all Billable FTU's attributable to SOLINET libraries, 217 non-ARL members incurred 75.2% of the Billable FTU's. The charges levied by OCLC for each Billable FTU are the largest single source of income to support that system. The surcharges levied by SOLINET for each Billable FTU comprise the largest single source of income for that organization. Although the libraries which use the network less heavily require a disproportionate overhead expenditure by both the regional network and OCLC, the non-ARL members are paying 75.2% of the First-Time Use charges and surcharges which presently make the entire network a working entity. Both OCLC and SOLINET obviously depend on the large number of First-Time Use charges paid by the non-ARL libraries to support the system and the regional network. In the same manner both depend on the ARL members and other large libraries to contribute records to the data base.

If any significantly smaller number of libraries attempts to form a national network providing all of the services presently available with the promise of additional services to be offered in the near future, the cost to the individual library will increase to some extent, perhaps to a significant degree. It is suggested that before upsetting what has proven to be a working balance, even if that is judged to be a balance with flaws and deficiencies and requiring a degree of compromise by all participants, more careful consideration is needed than is presently evident.

It appears that the formation of a second major bibliographic network will have two immediate consequences. First, if both networks are to continue with present levels of service and plans for additional services, every library participating in either network can anticipate somewhat higher costs, reduced service, or delays in implementation of new developments, or some combination of these consequences. Second, the sharing of bibliographic records and location information will be greatly reduced unless the two, or more, resulting networks develop cooperative rather than competitive attitudes. Perhaps a second network directed toward the needs of large research libraries is needed, but the formation of such a network should not be advanced at the expense of any part of what has been gained during the last decade.

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REFERENCES

1. OCLC, Inc. July 12. NETWORK BILLINGS (780701 to 790630). Columbus, Ohio.
2. OCLC, Inc. 1979 May 1. TOTCAT NETWORK BILLINGS. Columbus, Ohio. This specific reference is cited as an example of the monthly reports received from OCLC, Inc., by the writer. The writer wishes to express sincere appreciation to OCLC, Inc., for providing data in the form of the references cited which make possible the analyses reported in this article. The only restrictions placed on the use of these OCLC publications are that they not be re-published and that no individual institution be identified within the article.

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