

The New North Carolina Union Checklist of Scientific Serials — A Cooperative Project

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The new North Carolina Union Checklist of scientific periodicals and selected serials has just recently become available to librarians and researchers. Those who have benefited from the use of the 1954 edition of *A Checklist of Scientific Periodicals and of Selected Serials in the Libraries of Duke University, North Carolina State College, the University of North Carolina, and the Woman's College of the University of North Carolina* welcome the appearance of this revised edition. Listing the scientific periodical and serial holdings of the four original contributors and the neighboring library of Chemstrand Research Center, the new edition up-dates the 1954 edition to June 30, 1963. A limited number of copies have been printed for distribution by participating libraries.

The number of scientific serial titles reported in the new *Checklist* represents a 76% increase during the ten year period. The 1954 *Checklist* contains an estimated 7,700 different titles; the 1963 list contains 13,568 titles and 21,439 different statements of holdings. There are several reasons for this increase in the number of titles reported. Part of the increase is due to expanded coverage of the list. The new list covers not only pure and applied science, engineering, and medicine, as in the old *Checklist*, but also includes psychology, anthropology, archaeology, home economics. The larger number of titles reflects more complete reporting by the participating libraries since each contributor, with the 1954 edition at hand, has had an opportunity to submit titles that had been omitted earlier for one reason or another. There is also more consistent reporting of U. S. government publications in the new edition. A selected list of U. S. documents which are within the subject scope of the *Checklist* was circulated to the five libraries to enable all libraries to report holdings for the same U. S. government publications. However, the greatest portion of the increase undoubtedly represents the great proliferation of scientific journals during recent years, as well as the increased financial ability of the libraries to acquire a greater proportion of current serial output. There is evidence that the rate of growth will increase even faster in the years ahead. For this reason, it was necessary to devise a way to facilitate the up-dating of future editions.

The revised *Checklist* represents the use of new technology to facilitate this up-dating. IBM cards were punched for each title and holdings statement and the entire *Checklist* was printed out by a 1410 computer at the N. C. State College Computing Center. In the future, new information can be inserted easily on tape and the new editions will be printed out by computer without re-editing and retyping the entire list. The new method of computer production constitutes the main difference between the old and new checklists. Both checklists were printed by photo offset.

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The basic purposes and general format of the new *Checklist* remain essentially the same as in the 1954 edition. Therefore, one perhaps can understand best the new *Checklist* by considering the circumstances which prompted the compilation of the 1954 edition.

The predecessors of the 1954 edition were various editions of *A Checklist Of Scientific Periodicals And Of Selected Serials In The Libraries Of Duke University* which appeared in 1935, 1939, and 1944. The 1954 union checklist was conceived in 1953, when work on the fourth edition of the Duke publication coincided with an examination of the existing cooperative arrangements between the libraries of Duke University and the University of North Carolina at Chapel Hill. There was already a history of cooperative endeavor between Duke and the other libraries of the Consolidated University dating back to the mid-1930's. The Inter-University Committee on Library Cooperation decided to enlarge the scope of the Duke list to include also the scientific holdings of the libraries of the Consolidated University of North Carolina.

There were a number of factors which led to the original cooperative checklist. Certainly, the timeliness of serials literature and the problems of bibliographical control prompted the appearance of the 1954 *Checklist*. The high cost of scientific material and the expectation that scientific holdings would continue to increase at a prodigious rate were considerations of primary importance. Also, there was the knowledge that the creation of departmental and professional libraries, which already had resulted in the dispersal of scientific materials to widely-scattered locations, represented a trend which was likely to continue; already the planners were concerned for the individual scholar who worked primarily in a single departmental library, but who needed a convenient way of locating related materials in other departmental units elsewhere on the same campus.

Both editions of the *Checklist* originated in response to a sustained demand and perform a limited, but well-defined function. As their titles imply, the old and new *Checklist* are alphabetical listings of scientific serials of the reporting libraries. Entry consists of corporate author and title or of title only. Following each entry is a statement of holdings, coded to indicate the location on the campus. With bibliographical detail limited to entry, holdings statement, location symbols and "see-references" from earlier or alternate entries, both editions of the *Checklist* exemplify the compilers' intention to produce a practical finding-tool rather than a local or specialized edition of the *Union List of Serials*.

The 1954 *Checklist* has been a useful tool, but it rapidly became out-of-date and a new edition has been needed for some time.

With the prodigious increase of new scientific serials, the need for a method of rapid future up-dating of the list became almost as important as did the preparation of a new edition. Therefore, it was decided to computerize the *Checklist*.

Mr. I. T. Littleton, then Assistant Director of the D. H. Hill Library at N. C. State College, agreed in 1961 to edit the new edition with the assistance of Mrs. Gloria Houser, Serials Librarian at N. C. State and her staff. Cards listing holdings were received from reporting libraries in February 1963 and the editing continued until late summer of 1963. The edited cards listing titles and holdings were released to the Computing Center at N. C. State College in the fall of 1963 for the punching of machine readable cards. A total of 36,825 cards were punched. By the fall of 1964 a preliminary computer print-out was available for proofreading. The punched cards were in two alphabetic sequences

—one for the unchanged entries in the 1954 *Checklist* and one for the new and revised entries.

The possibility of interfiling these cards alphabetically by machine was considered, but this would have meant a change from American Library Association filing order to a straight alphabetical order. It seemed desirable to maintain the ALA filing rules, but in order to do so, it was necessary to interfile the two sets of cards manually. This procedure involved hundreds of man-hours of work, but the list is now consistent with library practice and, we hope, easier to use than a strictly alphabetical list. By means of computer, sequential numbers were assigned to each title holdings statement, with a gap of 70 between each title, and a gap of 10 between each holdings statement. These gaps facilitate future revisions, as provisions has been made for the insertion of additional titles and holdings in proper order on the magnetic tape. A computer program for the final print-out was written by Mr. Thomas Della and Mr. Allen Brady of the N. C. State Computing Center.

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Planning is now going forward for continuous reporting by participating libraries so that supplements and revised editions can be issued frequently. A supplement is planned within a few months in order to bring the list up-to-date. Hopefully, the more rapid production of future editions and supplements will be a valuable aid to scientific research in that current scientific information will be more readily available to researchers in North Carolina.

Elaine von Oesen Named Acting State Librarian

Miss Elaine von Oesen was appointed Acting State Librarian by the North Carolina State Library Board and has been serving in this capacity since March 1 of this year. A native of Wilmington, N. C., she received a B.A. from Lenoir Rhyne College and both a B.S. in library science and an M.A. in history from the University of North Carolina. Since 1956, Miss von Oesen has been Extension Services Librarian of North Carolina State Library. Prior to that appointment, she served for four years as Field Librarian for the North Carolina Library Commission. Her other professional experience includes five years as Instructor and Assistant Professor in the School of Library Science, University of North Carolina at Chapel Hill.