

NAME OF SYSTEM:

Battelle Dual Dictionary Index

ORIGINATOR:

**Radiation Effects Information Center
(REIC)**

**Battelle Memorial Institute
Columbus, Ohio 43001**

OBJECTIVE. To design and develop a simple yet effective coordinate indexing system that will enable the hundreds of users to conduct their own searches.

BACKGROUND. The Radiation Effects Information Center, one of Battelle Memorial Institute's many technical information analysis groups, investigates such scientific areas as radiation effects on humans, on space travel, and on various metal devices. This dynamic and expanding area of science, with its many new discoveries, prompts the writing and circularization of a considerable volume of literature.

Since its inception in 1957, REIC has been offering a "current awareness service" to its many sponsors such as the Air Force, the National Aeronautics and Space Administration, the Atomic Energy Commission, and numerous contractors and subcontractors. As part of this service, each sponsor is sent a monthly announcement of the documents accessioned during the prior month. These announcements include such information about the document as the title and author and an abstract or extract of the information.

To assist the users in assimilating this vital information and in conducting their own searches, a simple, inexpensive, and comprehensive dual dictionary (or index) system was developed.

THE NEW METHOD. The dual dictionary system is similar to the columnar card system except that the index postings are listed on pages instead of individual cards. The dual dictionary consists of two identical sets of

page listings, each a half-page wide and mounted side-by-side on a stiff backing sheet with a plastic ring binding at the top. Each side consists of a listing of all the indexing terms used in the system. Below each term are ten columns (final digits 0 through 9) of numbers identifying those documents that were assigned that particular term during the indexing process. Normally, each document is assigned more than one term. A copy of the Information Center's thesaurus of about 1,000 entries is attached at the back of the dictionary.

To conduct a search of the dual dictionary, the user must first determine which terms best describe his search question. He then locates his first term on one side of the dual dictionary and keeps that side opened to that page. Next, he looks up the second term in the opposite side of the dictionary and compares the document numbers, column-by-column, for matching numbers. Taking note of any matching (coinciding) numbers for these two terms, he again turns the pages on the opposite side to the next indexing term involved in the search to see if there is a further match. This process is repeated until all numbers under all the terms used in the search have been checked. The numbers that appear under all the indexing terms searched identify those documents that contain the answer to the search question. The searcher may refer to the abstract or extract contained in the monthly document announcement bulletin for a description of the document.

REMARKS. The dual dictionary system reduces the workload at the Battelle Information Center by providing each sponsor-user with a broader search capability. This capability permits them to handle many of their more routine information needs, thus reducing their reliance on the facilities of the Information Center. It also gives the searcher the opportunity to frame his search request in a wide variety of ways, thus permitting him to tailor the search to satisfy his particular needs and experience. The mechanization of the updating, together with the computer printout capabilities, assures faster announcement of newly accessioned material.

BATTELLE DUAL DICTIONARY INDEX

