

University of Mississippi

eGrove

---

Guides, Handbooks and Manuals

American Institute of Certified Public  
Accountants (AICPA) Historical Collection

---

1982

## NAARS, National Automated Accounting Research System

American Institute of Certified Public Accountants (AICPA)

Follow this and additional works at: [https://egrove.olemiss.edu/aicpa\\_guides](https://egrove.olemiss.edu/aicpa_guides)



Part of the [Accounting Commons](#), and the [Taxation Commons](#)

---

### Recommended Citation

American Institute of Certified Public Accountants (AICPA), "NAARS, National Automated Accounting Research System" (1982). *Guides, Handbooks and Manuals*. 709.

[https://egrove.olemiss.edu/aicpa\\_guides/709](https://egrove.olemiss.edu/aicpa_guides/709)

This Book is brought to you for free and open access by the American Institute of Certified Public Accountants (AICPA) Historical Collection at eGrove. It has been accepted for inclusion in Guides, Handbooks and Manuals by an authorized administrator of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

# NAARS

## NATIONAL AUTOMATED ACCOUNTING RESEARCH SYSTEM



AMERICAN INSTITUTE OF CPAs  
1211 Avenue of the Americas  
New York, New York 10036

(1982)

**NAARS**

**NATIONAL AUTOMATED ACCOUNTING RESEARCH SYSTEM**



AMERICAN INSTITUTE OF CPAs  
1211 Avenue of the Americas  
New York, New York 10036

•

•

•

•

•

•

•

•

•

•

*TABLE OF CONTENTS*

What's NAARS? .....	1
Financial Report Surveys Produced Through Use of NAARS .....	2
AICPA's Computerized Research System Available to Practitioners .....	4
<i>Excerpts from Computerized Research: An Advanced Tool</i> .....	5
A Breakthrough in Disclosure Retrieval – How NAARS Aids CPAs in Research .....	9
Accounting Library .....	14
Other Available Services .....	16
User Cost	
Full Subscriber .....	18
Associate Subscriber .....	23
Individual Inquiry .....	24
University Subscribers .....	25
Distributorships .....	28
MDC Shared Subscription Policy .....	30



## What's NAARS?

by Hortense Goodman  
Manager

### *National Automated Accounting Research System (NAARS)*

Computer systems have come of age in accounting research, via NAARS, a computerized information retrieval system. NAARS is an acronym for National Automated Accounting Research System.

Through the computer it is now possible to research the financial statements, footnotes, and auditors' reports from the published annual reports to shareholders of over 7,000 companies. Customized terminals in major cities throughout the continental United States can be used to access the data base, which is on a computer in the Dayton, Ohio, offices of Mead Data Central, Inc. (MDC).

Using a typewriter keyboard linked to MDC's headquarters, a researcher addresses questions directly to the computer, which searches the full text of all programmed documents, and — in seconds — retrieves the requested information.

The researcher then can

broaden or narrow the line of inquiry to extract precisely the information being sought. The data is reproduced on a video terminal (television screen) and, if desired, reproduced on a high-speed printer.

NAARS was developed through the joint efforts of an AICPA committee and Mead Data Central, Inc. After a pilot program period that ran from November 1972 to October 1973, during which the committee members tested the system with a limited data base of annual reports, prospectuses, and accounting policy statements; NAARS went operational with a data base that included thousands of annual reports for listed and over-the-counter companies, supplemented by a literature file containing such material as APB Opinions and Accounting Research Bulletins together with related interpretations, Accounting and Auditing Standards, SEC

Regulation S-X Accounting Series Releases, FASB Statements and Interpretations, and selected material from the Accounting Standards Executive Committee and from the Cost Accounting Standards Board.

AICPA members, corporate executives, researchers and others need not have their own terminals to take advantage of the Institute's NAARS; inquiries can be directed to the AICPA staff for research, with a printout supplied on a fee basis. This service, designed primarily for the firm or executive with only an occasional need for this type of search, supplements the existing subscriber programs.

The Institute itself has made extensive use of NAARS in the production of its series of Financial Report Surveys.

## FINANCIAL REPORT SURVEYS

This continuing series of studies is designed to show in detail how specific accounting and reporting questions are actually being handled in the financial reports of companies in a wide range of industries. The surveys include numerous illustrations drawn from the AICPA's National Automated Accounting Research System which stores data from thousands of published reports. They also include the texts of official pronouncements wherever applicable.

1. <b>Accounting Policy Disclosure.</b> Application of APB Opinion 22 (1972) . . .	No. 037607	\$ 9.50
2. <b>Reporting Accounting Changes.</b> A Survey of Reporting Under APB Opinion No. 20 (1974) . . . . .	No. 037611	N/A
3. <b>Reporting Results of Operations.</b> Reporting Under APB Opinion 30 (1974) . . . . .	No. 037626	\$ 9.50
4. <b>Interperiod Tax Allocation.</b> Application of APB Opinions 11, 23, 24 and 25 and SEC Release 149 (1974) . . . . .	No. 037630	\$10.00
5. <b>Statement of Changes in Financial Position.</b> Reporting Under APB Opinion 19 (1974) . . . . .	No. 037645	\$ 9.50
6. <b>Summary of Operations and Related Management Discussion and Analysis.</b> Application of Rules 14a-3 and 14c-3 of Exchange Act of 1934 (1975). . .	No. 037650	\$12.00
7. <b>Departures from the Auditor's Standard Report.</b> Application of SAS 2 (1975) . . . . .	No. 037664	\$10.00
8. <b>Disclosure of Related Party Transactions.</b> (1975) . . . . .	No. 037679	\$ 9.50
9. <b>Disclosure of Subsequent Events.</b> Application of Sec. 560 of SAS 1 (1976) . . . . .	No. 037683	\$ 9.50
10. <b>Accounting for Contingencies.</b> Application of FASB Statements 5 and 11 (1976) . . . . .	No. 037698	\$ 9.50
11. <b>Disclosure of "Pro Forma" Calculations.</b> Application of APB Opinions 15, 16 and 20 and SAS 1 (1976) . . . . .	No. 037700	\$ 9.50
12. <b>Accounting for Marketable Equity Securities.</b> Application of FASB Statement 12 (1977) . . . . .	No. 037715	\$ 9.50



13. Disclosure of Unaudited Financial Information in Audited Financial Statements. (1977) . . . . .	No. 037720	\$ 9.50
14. Accounting for Employee Benefits. (1977) . . . . .	No. 037734	\$10.00
15. Updated Illustrations of Accounting Policy Disclosure. Application of APB Opinion 22 (1978) . . . . .	No. 037749	\$10.00
16. Accounting for Leases. Application of FASB Statement 13 (1978) . . . .	No. 037753	\$ 9.50
17. Accounting for Debt Under Four Pronouncements. Application of APB Opinion 26 and FASB Statements 4, 6 and 15 (1978) . . . . .	No. 037768	\$11.00
18. Illustrations of Auditors' Reports on Comparative Financial Statements. Application of SAS 15 (1979) . . . . .	No. 037772	\$11.00
19. Management Reports on Financial Statements. Application of the Conclusions and Recommendations of the AICPA Special Advisory Committee on Reports by Management (1979) . . . . .	No. 037787	\$ 9.50
20. Illustrations of Selected Proxy Information. Application of SEC Requirements to Disclose Auditors' Services and Management Perquisites (1979)	No. 037791	\$ 9.50
21. Illustrations of Accounting for Joint Ventures. Application of Various Methods of Accounting for Joint Ventures in the Financial Statements of Venturers (1980) . . . . .	No. 037804	\$ 9.50
22. Illustrations and Analysis of Disclosures of Pension Information. A Survey of the Application of the Requirements of FASB 36 an Amendment of APB Opinion No. 8 (1981) . . . . .	No. 037819	\$14.50
23. Illustrations and Analysis of Disclosures of Inflation Accounting Information. A Survey of the Application of the Requirements of FASB Statements No. 33, 39, 40, and 41 (1981) . . . . .	No. 037823	\$30.00

**AICPA MEMBERS:** Please deduct 20 percent AICPA member discount from prices shown.

To order contact:

American Institute of Certified Public Accountants  
Order Department  
1211 Avenue of the Americas  
New York, New York 10036  
(212) 575-6426

## **AICPA's Computerized Research System Available to Practitioners**

By David L. Reklau  
Member of Committee on Report and Peer Review, NCACPA &  
Former Member of AICPA Information Retrieval Committee

A computerized information retrieval system called NAARS can provide fast, accurate answers to technical or disclosure questions. NAARS, an acronym for National Automated Accounting Research System, is a sophisticated research tool developed in the early seventies through the joint efforts of an AICPA committee and Mead Data Central, Inc. Information concerning almost any single or combination of accounting issues or disclosures can be retrieved almost instantly through a search of the NAARS data base. This computerized research tool is available to any North Carolina practitioner or other interested party through the staff of the AICPA.

The accounting information data base of NAARS contains two major files. The first of these is a literature file that consists of the full text of all current and superseded authoritative accounting literature, including APB opinions and interpretations, FASB statements and interpretations, statements on auditing standards and interpretations, statements of position and SEC regulations and accounting releases.

The second file, and the most significant part of the accounting information library, is the annual report file. Each year NAARS includes in its data base the complete text of the financial statements, notes and auditors' reports from the published annual reports to shareholders of approximately 4,000 companies. Incorporated in the data base are the reports of substantially all New York and American Stock Exchange companies and other *Fortune* 1,300 companies, as well as the reports of several hundred of the larger companies whose securities are traded over-the-counter.

NAARS uses a unique key work in context indexing system through which each word in every document is individually accessible. To explore the data base, a subscriber types any word or phrase, or combination thereof, on a special terminal console. The system responds by searching the full text of all documents in the data base for those documents that meet the parameters of the request. The data can then be displayed on a video screen, and, if desired, the entire document or a portion of it can be reproduced on a high-speed printer.

NAARS offers flexibility not found in other indexing systems. Initial requests may subsequently be broadened or narrowed by direct interaction with the computer to locate documents containing precisely the information sought. In addition, the user may limit the search to companies operating only in certain industries, companies listed on a stock exchange or having a *Fortune* ranking, or companies having a specified range of assets, stockholders' equity, revenues or net income.

This computerized system can be helpful to local practitioners or others. Sometimes it is helpful to determine how others are disclosing compliance with certain authoritative pronouncements. The system may be helpful in determining accounting policies within industries or determining possible acceptable alternative ways to handling certain transactions. Also, the accounting, classification and disclosure of many types of transactions are not covered in authoritative literature;

therefore, annual reports in the data base may provide precedent.

NAARS can be useful even for smaller clients, even though the annual report file is comprised only of published reports of SEC-filing companies. Generally accepted accounting principles apply to all entities, regardless of their size or whether they are publicly or privately owned. The data base does, however, currently include the reports of several hundred companies having revenues of less than \$25 million, and there are numerous examples of reporting problems sometimes thought to occur only in privately held companies (e.g., related party transactions).

Current subscribers of NAARS include the Big 8 firms and certain other large accounting firms who provide the funding for the system, several universities, the FASB, the SEC, the AICPA, and several financial and industrial organizations. Practitioners and others who are not subscribers have the system available through the staff of the AICPA. An individual can call the Institute's offices in New York City and discuss his accounting issue with a trained staff member who will structure a search request to achieve the desired result. The search request is processed under the observation of the staff member, and the resulting printout is sent to the practitioner by mail. The only charge for this service is that of computer time at a rate of \$200 per hour; however, do not be alarmed at the rate. Most search requests can be completed in less than one hour.

NAARS provides a convenient means to catalog and gain access to the information contained in the thousands of annual reports prepared each year. In many cases, NAARS can render obsolete the painstakingly slow, frustrating and expensive process of researching accounting issues manually.

Reprinted with Permission from the November 1980 issue of *The Profit* published by The Continuing Professional Education Division, North Carolina Association of Certified Public Accountants.

# COMPUTERIZED RESEARCH: AN ADVANCED TOOL

How accountants can use on-line data bases to gain immediate access to key business information.

by Andrew P. Gale

The perennial problem of quick retrieval of relevant information to aid accountants in helping clients make financial reporting decisions and in formulating firm policies has intensified, making traditional retrieval methods inadequate.

Due to the recent multitude of accounting pronouncements, guides and decisions by standard-setting bodies, governmental organizations and the courts, CPA firms of all sizes must have rapid access to an increasing amount of information. Corporate annual reports now contain detailed business segment footnotes, interim data, information on the effects of inflation, more detailed lease disclosures and reports of managements' financial responsibility for the financial statements as well as the traditional financial statement-footnote presentation. Proxy statements now disclose broader and more detailed management remuneration information including perquisites and contain information on the corporate governance process including shareholder communications, shareholder participation and board of directors' committee activities.

The volume of an accounting firm's internal information also is rapidly expand-

ing as firms try to disseminate and explain the many new pronouncements to field personnel and handle individual client-related situations reflecting accounting standards. Keeping pace with new business, tax and accounting developments and requirements are a proliferation of periodical articles chock-full of explanations, analyses, examples, recommendations and projections, which also must be accessible.

## Computerized Research

Because accounting research is necessary for large and small firms to stay abreast of trends in financial reporting and authoritative pronouncements, many accounting firms are now using recently developed "space age" digital computer information retrieval systems for research purposes. These firms have discovered that traditional research methods are no longer efficient for gathering data on a particular situation—for example, trying to recollect similar situations and then locate the documentation to reconstruct the issues and conclusions; leafing through numerous annual reports to find disclosures by companies in the same industry to see if they might have experienced the same situation; consulting various reference books, professional literature or a compendium of disclosures such as *Accounting Trends and Techniques*;<sup>1</sup> searching files in an attempt to find earlier documented decisions; and discussions among the staff. Traditional research methods could cause a firm to spend a lot of time—yet overlook vital information—and arrive at erroneous conclusions.

Computer research systems can provide immediate access to much of the information that the CPA firm needs, such as the following:

Examples from annual reports to use as a precedent in the preparation of a client's financial statements.

ANDREW P. GALE is research associate/NAARS coordinator with Touche Ross & Co.'s New York executive office. Mr. Gale is a member of the National Association of Accountants. He is the author of "A Breakthrough in Disclosure Retrieval," an article on the National Automated Accounting Research System, which appeared in the September 1978 *Journal*.

<sup>1</sup>Jack Shohet and Richard Rikert, eds., *Accounting Trends and Techniques*, 35th ed. (New York: AICPA, 1981).

- Authoritative pronouncements that specify the accounting for a certain situation.
- Details from companies' 10-K filings other than disclosures from financial statements or footnotes, such as types and dates of filings, lines of business, officers, directors, stock exchange, parents, subsidiaries and the states in which the companies are incorporated.
- Accounting articles on a certain subject.
- General or specific business articles to provide background information for speeches or to develop expertise on a particular topic.
- Industry-related information for serving groups of clients within a certain industry.
- Up-to-date corporate information, such as a company's management changes, earnings, dividends or various news items on the company.
- The firm's own policy on a certain topic, especially needed when rule-making bodies have adopted or changed rules and the firm's manuals must be updated.
- Details of how the firm may have handled similar problems in the past.
- Articles referring to a particular client, accounting firm, litigation, person or event.

For success in computerized research, the CPA firm's researcher must know which resources (data bases) are likely to contain relevant information as well as how to formulate searches efficiently. The search strategy should achieve a proper balance of recall (the percentage of relevant items retrieved from the data base) and precision (the percentage of relevant items among those retrieved). Formulating an efficient search strategy is the researcher's chief challenge, and it requires a knowledge of accounting and business principles and associated "buzz" words; a familiarity with the search protocol;<sup>2</sup> hands-on experience with the system; and careful analysis of the problem and possible alternative approaches before operating the terminal.

In any system the researcher must decide which words will express the concepts being researched and structure a search strategy of these words and appropriate synonyms as they are likely to appear in the texts of relevant documents. The researcher combines the words with connectors or

<sup>2</sup>The particular commands, the search strategy construction and the special features of the data base being used. Protocol varies from system to system.

operators (e.g., the terms *and*, *or*, and *not*, etc.), which operate with Boolean logic<sup>3</sup> according to the system's protocol. The selected data base is searched automatically for documents satisfying the search criteria, and the retrieved documents may be examined or printed or both.

The system's protocol allows great flexibility in formulating and modifying searches, printing out and storing the results, printing out a list of the search statements or strategy and entering various files.

### **Computer Research Systems, On-line Data Bases, Equipment and Costs**

CPA firms may use various computer research systems and data bases to expand their research capabilities. In most cases, an in-firm computer terminal is needed. However, firms without in-house terminals may gain access to various data bases by having libraries or universities (or, in the case of one system described later, the American Institute of CPAs) do the research for them.

### **LEXIS, NAARS, NEXIS and DISCLO**

Accounting firms most frequently use the data bases of Mead Data Central (MDC). They contain the full texts of materials rather than abstracts; they are free-text searchable, e.g., the words appearing in the actual text (as opposed to controlled vocabulary or index terms from a thesaurus) can be searched; and they are user interactive, e.g., searches may be modified continuously depending on previous results. MDC's data bases currently include the following:

1 LEXIS. The name LEXIS is derived from *lex*, Latin for law, and IS, for information system. The legal data base consists of federal law libraries, state law libraries of all 50 states and United Kingdom law libraries.

The federal law libraries include the general federal library containing the United States Code, cases and decisions; the federal securities library containing securities cases, regulations, administrative determinations and legislative history; the federal tax library containing the Internal Revenue Code, tax regulations, the *Cumulative Bulletin*, private rulings, tax cases

<sup>3</sup>A system named for George Boole, a nineteenth century mathematician and logician who elaborated mathematical or symbolic logic. In search strategy, the logical operators (*and*, *or*, and *not*, etc.) connect the search terms to combine them.

and legislative history; the federal trade regulation library containing administrative determinations and trade regulation cases; the federal patent, trademark and copyright library containing patent, trademark and copyright law cases; the federal communications library containing communications administrative determinations and cases; and the federal labor library containing National Labor Relations Board administrative determinations and federal court labor cases.

The state law libraries contain state supreme court decisions; state court of appeals decisions; state reports; various state constitutions; and Delaware Corporation Law cases and decisions.

The U.K. law libraries include the English general library of statutes, statutory instruments and cases; and the English industrial and U.K. tax libraries containing tax statutes, tax statutory instruments, Inland Revenue publications, tax cases and industrial relations statutes, statutory instruments and cases.

LEXIS also includes Auto-Cite (which permits verification of case-law citations, provides parallel citations and lists cases affecting a case's validity as precedent) and the Encyclopaedia Britannica, which was added recently. In addition, a CPA firm's own manuals or dockets may be maintained in a private library in LEXIS.

**2 NAARS.** The National Automated Accounting Research System (NAARS) is the AICPA library of LEXIS. It contains between seven and nine thousand annual reports of approximately four thousand companies and subsidiaries listed on the New York Stock Exchange, the American Stock Exchange and traded over the counter. The on-line annual reports are in two files, by date, going back to 1979, with an additional seven years of earlier annual reports stored off-line, which can be made available for searching at extra cost. The annual reports include financial statements, footnotes and auditors' reports, plus other information such as the company's *Fortune* number, Standard Industrial Classification (SIC) code, balance sheet date and auditor. All annual reports have been divided into segments, for example, the balance sheet, the income statement, the auditor's report, the current assets portion of the balance sheet and the stockholders' equity portion of the balance sheet. NAARS can perform certain arithmetic operations on dates, SIC codes, *Fortune* rankings, total assets, net worth, total sales and net income or loss.

Companies may be searched for any of the above items equal to, greater than, less than or between specified values. NAARS also contains extracts from approximately two thousand proxy statements.

In addition, NAARS contains an accounting literature file of the full texts of updated authoritative and semiauthoritative pronouncements by the AICPA, the Securities and Exchange Commission, the Financial Accounting Standards Board, the Cost Accounting Standards Board and the International Accounting Standards Committee. Superseded documents also are available; they may be searched separately or together with the current literature.

**3 NEXIS.** The NEXIS library provides current and recent news articles from newspapers, magazines and wire services. These include the *American Banker*; the Associated Press world, national and business wires; *Business Week*; the *Congressional Quarterly Almanac*, *Weekly Report* and *Editorial Research Reports*; *Dun's Review*; *The Economist*; Jiji Press Economic News Service; Kyodo English Language News Service; *Newsweek*; PR Newswire; Reuters European News Service and General News Report; United Press International bibliographical data, world, national, business and sports wires; *U.S. News & World Report*; and the *Washington Post*.

**4 DISCLO.** The DISCLO library, prepared by Disclosure, Inc., contains extracts from 10-K and 20-F filings and information from proxy statements and initial registration statements filed by approximately nine thousand publicly owned companies required to make filings with the SEC. The data are presented as a number of searchable segments or index fields for each company. Each record includes a profile of the company containing the company name, Disclosure number, address, state of incorporation, stock exchange, ticker symbol, SIC codes, business description, fiscal year-end, the number of employees, the auditor, the type of auditor's report and the types of filings over the past 18 months together with their dates; also included are the names of parents and subsidiaries; the number of shareholders; and the names and titles of directors and officers. In addition, financial information from the company's 10-K usually is available. When data on a company are retrieved from the DISCLO library, the researcher may select those segments of interest and print them.

A useful capability of DISCLO is that certain segments may be searched arithmetically, as with NAARS, for items equal to, greater than, less than or between certain values. Arithmetic searches may be performed on total assets, net income, net revenue, current assets, debt, equity, SIC codes, zip codes and the fiscal year-end. Another helpful feature is that the retrieved companies may be sorted so that a list of companies may be printed in ascending, descending or alphabetical order according to the item selected. Sortable segments of DISCLO include the company name, city, state, zip code, total assets, net income, net revenue, auditor, debt, equity, number of shareholders and fiscal year-end. For example, a list of companies with net revenues over \$100 million could be printed alphabetically by company name, in descending order of net revenues (highest first) or alphabetically by auditor name.

*Equipment.* The hardware offered by MDC that is installed in the subscriber's office consists of a standard-sized terminal with keyboard, a 12-inch video screen and printer or a small terminal called a UBIQ (ubiquitous) with a 9-inch video screen and keyboard. A high-speed printer is usually supplied with UBIQ terminals which can print the output from a large number of terminals off-line. Access to the MDC data bases in Dayton, Ohio, is made via telephone lines.

An in-firm terminal is not necessary to use NAARS. CPA firms that need access to this data base on an infrequent basis can direct their inquiries to the AICPA, and the Institute staff will do the research and supply the firm with a printout for a fee.



### **Examples of a CPA Firm's Research Requests**

The following examples are derived from actual requests for research at one accounting firm. They show the variety of research that can be performed using computerized techniques and indicate which research systems the researcher considered the most likely to contain the desired information.

Annual report footnotes disclosing product liability lawsuits—the NAARS AR file contains relevant footnote disclosures.

Examples of a change in accounting for the investment tax credit from deferral to flow through—the NAARS AR file contains footnote disclosures on accounting principles changes.

U.S. companies with subsidiaries in Panama or Switzerland—the "subsidiaries" segment of DISCLO can provide names of companies with subsidiaries in specified countries.

Authoritative accounting literature and articles mentioning unusual uncertainties—the NAARS LIT file, containing all authoritative and semiauthoritative literature of the AICPA, the SEC and the FASB, should be searched.



### **The Future of Computerized Research**

As the amount of business information grows, on-line data bases will enlarge and multiply, and they probably will become the primary source of business information. The high speed and extreme accuracy of electronic searching, the huge volume of materials that can be stored and readily accessed for searching and printing and the phenomenal expansion in the number and size of on-line data bases over the past decade will make computerized information retrieval systems the primary research tools of the future. No existing system of manual indexing or numbering can be as effective for information storage and retrieval as computerized systems, especially those with free-text search capability. As smaller, more efficient, higher capacity hardware such as the random access memory chip is used, future search costs will be reduced and the use of on-line data bases will become increasingly common in small and large CPA firms, businesses, schools and homes. ■

# A BREAKTHROUGH IN DISCLOSURE RETRIEVAL

## How the National Automated Accounting Research System aids CPAs in research.

by *Andrew P. Gale*

Organizations such as the American Institute of CPAs, the Financial Accounting Standards Board, the Securities and Exchange Commission and the courts continually issue statements, standards, guidelines, bulletins, releases and decisions on various aspects of business activities. These pronouncements result in changes in the extent of corporate disclosure and in the format and content of financial statements, whose principal aim is to inform people making investment decisions. Because accounting is more of an art than a science, there are diverse views on how and what information describing business activities can best inform the investing public. All accountants, from the large international firms to individual practitioners, must be certain that their clients' filings are in accordance with the latest authoritative pronouncements and within the guidelines of precedent when particular treatments are not specified. Even local practitioners with nonpublicly held clients need to be aware of the latest disclosure trends because, at present, generally accepted accounting principles apply to all enterprises regardless of size or nature of ownership.<sup>1</sup>

Therefore, accounting research is important to large and small accounting firms to enable them to cope with the evolving rules, the vast amount of disclosure precedents and their clients' and the public's interests.

One of the least publicized activities of an accounting firm is its research function, which plays a supportive role in the account-

ing, auditing, disclosure and opinion-issuing process. Research frequently is necessary to determine how certain transactions and events are being accounted for, classified and disclosed in financial reporting; how compliance with authoritative pronouncements is being disclosed in annual reports; or what authoritative literature could apply to specific transactions or accounting concepts. Also, information is often sought on the policies followed within certain industries and the preferability or general acceptance of accounting methods used for particular transactions.

It is little wonder, then, that accounting firms have recently invested heavily in upgrading and automating their research capabilities. Many firms now use a recently developed digital computer system known as NAARS, an acronym for National Automated Accounting Research System.

NAARS, developed by the AICPA in conjunction with Mead Data Central, Inc., consists of several IBM 370/155 computers located in Dayton, Ohio, with remote console terminals that communicate with the computer via telephone lines from subscribers' offices throughout the U.S. NAARS can be used to select and display on a television screen at a subscriber's console disclosures from its data bank of accounting materials, which are stored electronically in the computer memory, and can also print them out as desired. By formulating a search strategy according to prescribed rules, a researcher can

---

**ANDREW P. GALE, M.B.A.**, is research associate/NAARS coordinator with Touche Ross & Co.'s New York executive office. A former project engineer with Grumman Corp., he was a researcher with Arthur Young & Company. Mr. Gale is a member of the National Association of Accountants.

<sup>1</sup> Charles Chazen and Benjamin Benson, "Fitting GAAP to Smaller Businesses," *JofA*, Feb.78, p.46. See also "Auditing Interpretation—Applicability of [Statement on Auditing Standards] no. 21 to Nonpublic Companies," *JofA*, May78, p.101.

Reprinted with permission from the September 1978 issue of the *Journal of Accountancy* (c) 1978 by the American Institute of Certified Public Accountants, Inc.

search the data bank rapidly and accurately for disclosures that are relative to his area of interest.

### **The Need for an Accounting Research System**

NAARS was created when it was determined that new advances in computer technology could be applied by accounting firms to their conventional methods of storing and retrieving accounting information.

Traditionally, an accountant trying to find out how a financial transaction is being reported in corporate annual reports searches his library for reference materials or talks with other accountants to see if they have been confronted with similar problems. To determine if precedents exist, the accountant may refer to a variety of indexes and have staff accountants search through stacks of corporate annual reports for relevant information. Most nonautomated retrieval systems are based on the familiar subject-heading classification method in which information is categorized by the subjects deemed appropriate by the indexer. Depending on the degree of refinement of these headings, the alertness of the indexer in recognizing and properly classifying the information and the ingenuity of the researcher in determining the heading pertinent to the information he is seeking, the results obtained could be incomplete or even incorrect. Much time can be wasted in checking information that turns out to be irrelevant because of misleading, ambiguous or incomplete subject headings. The recent "information explosion" has resulted in a huge body of data, in accounting as well as in other fields such as law, which has made it necessary for researchers to find a more efficient means of retrieval.

It became apparent that the digital computer, with its vast memory for the storage of data and its accurate and rapid data processing capabilities, could be programmed to conduct accounting research more quickly, comprehensively and with less cost than the traditional manual methods.

NAARS overcomes problems inherent in the subject-heading method of storage and retrieval because retrieval is based on the actual words in the documents, which the researcher selects, based on his knowledge of the subject. NAARS is called a "full text"

system because all meaningful words and their locations in its data base are recorded in a concordance maintained by the computer. When a search is performed, the computer examines this concordance to find the location of words to satisfy the search logic.

### **How NAARS Works**

A NAARS console is installed in the office of each NAARS subscriber; it consists of a keyboard resembling a typewriter but with several special keys; a television screen or video tube; a high-speed printer; and a special data telephone to link the console to the computer.

To perform a search, the researcher dials the NAARS number on the data telephone and, once in contact with the computer, uses the console keys to type the search in the prescribed format. The screen displays the search terms, as they are being typed, which the researcher then transmits to the computer.

The data bank is searched automatically, and usually within a few seconds a message

**"The function of NAARS is to process a request by searching its data files as instructed."**

on the screen displays the number of documents satisfying the search. These documents can be displayed in any of several modes by using special keys. The display could include (1) the full text of the document, (2) a particular segment of the document or (3) merely the search words surrounded by a small amount of text to put the key word(s) in context. If, on viewing the results, the researcher is dissatisfied, he may modify the request (called the search strategy) or start anew. Alternatively, a list of companies whose disclosures are in accord with the search logic can be retrieved, and their disclosures examined in the firm's library on microfiche or in hard copy. Obviously, the use of the computer to locate and display documents speeds up the research process tremendously.

The function of NAARS is to process a request by searching its data files as instructed. The researcher formulates the search strategy according to certain rules, which are flexible. If the search strategy is inadequately developed but technically correct, NAARS will process the request routinely but the search results may be incom-

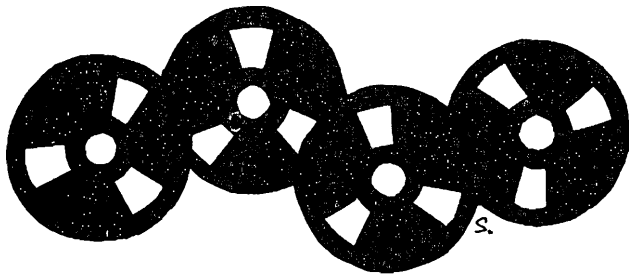


plete, contain irrelevant materials or be misleading. Formulating a search strategy efficiently to obtain all, and only, the relevant disclosures is the NAARS researcher's chief challenge and requires some basic accounting knowledge, a familiarity with the rules for structuring the search, hands-on experience with the system and careful analysis before operating the console.

#### The Data Bank

The NAARS data bank currently contains financial statements, including footnotes and auditors' reports, from approximately 7,000 annual reports with fiscal years ending in 1976, 1977 and 1978. Included are approximately 4,000 companies, mostly those traded on the New York and American stock exchanges, of the nearly 10,000 that file reports with the SEC. All years may be searched together or the search may be limited to a particular year or portion thereof. The data base also contains a file of 500 examples of the "management's discussion and analysis of the summary of operations" sections from annual reports with balance sheet dates between November 30, 1974, and January 31, 1975.

An extensive accounting literature file of the full texts of updated authoritative and semiauthoritative pronouncements is included. This file contains AICPA materials, including accounting research bulletins, Accounting Principles Board opinions, statements and interpretations, statements on auditing standards, auditing interpretations,



industry accounting and audit guides, accounting standards executive committee statements of position and technical practice aids; SEC materials, including regulation S-X, accounting series releases and staff accounting bulletins; FASB statements and interpretations; Cost Accounting Standards Board statements; and International Accounting Standards Committee pronounce-

ments. A file of superseded documents is also available, which may be searched separately or together with the current literature.

All annual reports in the file have been divided into sections, or segments, to narrow a search to a specific area of the document. Examples of segments include B/S for the entire balance sheet, I/S for the entire income statement, REPT for the auditors' report, CURA for current assets and EQUIT for stockholders' equity.

The AICPA has also incorporated broad subject headings into footnotes and auditors' reports to categorize the nature of the disclosures. These headings (called descriptors) are used if the researcher wishes to restrict a search to a preindexed topic. Examples of descriptors include DISCOP for discontinued operations, SUBEV for subsequent events and FORX for foreign exchange disclosures.

#### Searches and Applications

In formulating a search strategy, the researcher must be familiar with the multiple capabilities of the system, which can retrieve the following:

- Financial statements or footnotes containing a particular word or phrase, or a word within a specified number of words of another word, or those containing one word or phrase but not another.
- Specified segments of annual reports, such as current assets, extraordinary items, accounting policies notes or auditors' reports.
- Footnotes on a preindexed topic, such as discontinued operations or pension plans.
- Companies in a certain industry, as classified by the Standard Industrial Classification code, which is a separately stored segment of each annual report.
- Companies with a specific *Fortune* standing, which is another stored segment.
- Companies with total assets, net worth, total sales or net income of a certain amount or within a designated range.
- Companies audited by a particular firm.

Combinations of the above are practicable, which gives NAARS versatility in addition to speed.

The accounting researcher, using NAARS and other research tools, can obtain information like the following:

- Illustrative examples of financial statements and footnotes that reflect compliance with a pronouncement of an authoritative or semiauthoritative accounting body, such as the AICPA, the FASB, the SEC, the CASB or the APB. This enables the accountant to see how companies other than his client are

complying with the pronouncement. Such information is a guide to the preferred manner of presentation.

Current practices in disclosing items not specifically prescribed by existing authoritative pronouncements. Because not all items affecting a company's financial statements are prescribed by authoritative pronouncements, there may be a choice among alternatives in accounting for certain events. It is to the accountant's advantage to survey such disclosures to help him decide on the method of accounting he can recommend to his client.

The extent of support for one accounting method over others. This can arise when accounting for an event is not covered by an authoritative or semiauthoritative pronouncement and the client strongly favors a certain presentation. The accountant might be reluctant to agree to this approach without checking other companies' disclosures. The accountant's credibility could be held in question if he insisted that a client follow one accounting method only to discover that a number of companies in similar circumstances use the approach favored by the client.

A survey of accounting methods peculiar to an industry. Certain industries have transactions or are governed by considerations or statutes that make their disclosures different from those of other industries. The accountant is better qualified to serve his client after he surveys principles and methods peculiar to the industry in which the reporting entity operates.

Auditors' opinions that are qualified, adverse or disclaimers of opinions or that express reliance on another auditor for a portion of the financial statements. NAARS can be used to retrieve such opinions to serve as guidelines to help the accountant determine the borderline cases, which may include considerations of materiality, to enable him to decide when a qualified opinion or disclaimer may be necessary. Knowing the extent of an accountant's reliance on another auditor for portions of assets, net income or subsidiaries can help establish the scope of an engagement.

Accounting literature on a particular subject to ascertain that all pertinent pronouncements are being considered for decision-making purposes. An accountant must be informed of all authoritative and semiauthoritative pronouncements on a subject in order to advise his client properly. However, because the number of standards and regulations is constantly increasing and because of

the difficulties inherent in manual indexing systems, an important pronouncement, or perhaps an exception to the rule, can easily be overlooked. This oversight may result in misleading or incorrect disclosures.

Disclosures of transactions, presentations and events for use as illustrations in a CPA firm's staff audit and SEC manuals.

Mention of a certain event or firm policy regarding a certain issue in an accounting firm's private internal releases or in the firm's manuals to develop applicable background information to relate to a current situation.

NAARS has been applied to the following topics, based on requests from various offices of a major international CPA firm:

Accounting policy followed by manufacturers for design costs (deferral or expensing).

Disclosures of pending government investigations.

Examples of double-dated auditors' opinions.

Literature on independence and ethics standards of accountants.

Literature with the term "legal obligation."

Examples of a change in the estimated salvage value of a fixed asset.

Examples of consolidation policies for subsidiaries that are less than 100 percent owned.

Annual report footnotes disclosing compliance with FASB Statement no. 13, *Accounting for Leases*, or Statement no. 14, *Financial Reporting for Segments of a Business Enterprise*.

Companies with foreign currency exchange gains or losses, with net worth over \$100 million and net income over \$10 million.

Annual report footnotes presenting quarterly data (unaudited) for unequal quarters, such as 12 weeks and 16 weeks.

Companies that have repurchased their stock from employees.

Corporations that are limited partners in partnerships.

Companies with unfunded pension liabilities shown on the balance sheet.

Companies with subsidiaries in the Netherlands Antilles or in Puerto Rico.

Examples where the audited financial statements of an insurance company conform to statutory requirements.

Authoritative literature using the term "senior management" or the term "top management."

- Disclosures by construction and manufacturing companies of the capitalization of interest.
- Disclosures by publishing companies of deferred, prepaid or unearned subscription income.
- Examples of companies adopting the Lifo method for valuing inventories.

The preceding examples illustrate the kinds of information that NAARS can retrieve, but there is virtually an unlimited spectrum of applications of computer-assisted research. Although there are alternative research tools, NAARS has many advantages in terms of speed, versatility, cost and convenience.

#### **Costs**

The cost of using NAARS consists of two basic elements, research time and search time. From the time the user identification is transmitted until the power is turned off, there is a connect time hourly charge of \$117. In addition, the time the computer is processing the request is search time, charged at \$195 per hour. The average search uses only about a minute of search time. Accounting firms typically bill their clients for the NAARS time and for the time of the researcher in preparing, executing and reporting results of NAARS research.

#### **Users**

At present, NAARS subscribers include the eight largest accounting firms plus six smaller firms, the AICPA, the FASB, the SEC,

schools of business at four universities and several financial and industrial organizations. AICPA members, corporate executives, researchers and others need not have their own terminals to take advantage of NAARS; inquiries can be directed to the AICPA staff for research, with a printout supplied on a fee basis. This service, designed primarily for the firm or executive with only an occasional need for this type of search, supplements the existing subscriber programs. Any organization or individual making use of disclosures in corporate annual reports for statistical studies of accounting methods, treatments or trends of financial disclosures, the extent or preferred wordings of disclosures on a certain subject, or application or wordings of authoritative or semiauthoritative accounting pronouncements is a potential user. These could include securities and economic analysts, stock exchanges, broker-dealers, federal agencies and individual practicing accountants, and possibly individual investors and prospective employees of publicly held firms.

#### **Summary**

While accounting research will never become totally automated, because of the need for accounting researchers to interpret research requests, formulate searches and evaluate results, the investment in computer research facilities will pay handsomely in more complete and accurate results, more timely solutions to problems and reduced research costs. ■

## ACCOUNTING LIBRARY

as of April 1, 1982

### ACTIVE FILES

#### Annual Report Files

The file consists of annual reports to shareholders of corporations whose stock is traded on the New York or American Stock Exchanges, selected companies traded Over-The-Counter, or Fortune ranked companies whose balance sheet date falls between July 31, and the following June 30. Only the financial statements, footnotes, auditor's opinion, management responsibility letter, and anything incorporated by reference are in the file.

1979/80 File 4,170 annual reports

1980/81 File 4,207 annual reports

1981/82 File will consist of approximately 4,200 reports upon completion.

Proxy File consists of selected elements of proxy statements of Fortune companies.

#### Accounting Literature File

The Accounting Literature File consists of the following documents updated for changes in superseded pronouncements:

APB Accounting Principles including: Terminology Bulletins; Accounting Research Bulletins; APB Opinions; Statements and Interpretations.

Statement on Auditing Standards and Interpretations

Statement on Standards for Accounting and Review Services and Interpretations

Statement on Quality Control and Interpretations

Industry Audit and Accounting Guides

Ethics consisting of Concepts, Rules of Conduct, Interpretation of Rules of Conduct and Ethics Rulings.

SEC Material consists of: Regulation S-X, all Accounting Series Releases (ASR), Staff Accounting Bulletins, and Regulation S-K.

FASB Material consists of: FASB Statements, Interpretations, Concepts, and Technical Bulletins.

ASEC Material (Accounting Standards Executive Committee Pronouncements).

CASB Material (Cost Accounting Standards Board Pronouncements).

International Accounting Standards Committee Pronouncements

International Federation of Accountants Committee Pronouncements (Auditing)

Technical Information Service consists of the Institute's technical practice aids,

## ARCHIVE FILES

1972/3 Annual Report File	3,353 annual reports
1973/4 Annual Report File	3,617 annual reports
1974/5 Annual Report File	3,150 annual reports
1975/6 Annual Report File	3,717 annual reports
1976/7 Annual Report File	4,145 annual reports
1977/8 Annual Report File	4,347 annual reports
1978/9 Annual Report File	4,076 annual reports
1971 Prospectus File	50 (test file)
Management Discussion and Analysis File	extracted from 500 annual reports with fiscal year endings on or after December 20, 1974. The selection covers a wide variety of industries.

## OTHER AVAILABLE SERVICES

as of April 1, 1982

### I LEXIS

Subscribers to the LEXIS/National Automated Accounting Research System can also subscribe to the LEXIS service which utilizes the same terminal. This service contains State and Federal law as well as specialized libraries in Federal Tax, Federal Securities, Federal Trade Regulation, Federal Patent, Trademark and Copyright law, Federal Communications, Federal Labor, Federal Bankruptcy Law, the Federal Register, Federal Energy Law and, in addition, United Kingdom Law, which may be of interest to other departments including your General Counsel. Mead Data Central (MDC) is continually adding new libraries, as well as expanding existing ones.

### II NEXIS

NEXIS consists of the full text of stories and articles carried in major newspapers, magazines, newsletters and wire services for at least five years back.

Among many other publications, NEXIS includes Newsweek, The Washington Post, Business Week, the Congressional Quarterly, U.S. News and World Report, and the following wire services:

AP, UPI, and Reuters

New publications are being added rapidly.

### III DISCLO LIBRARY

The Disclosure library, made available in the Service by agreement with Disclosure, Inc., includes extracts and abstracts of company profiles for 8,500 companies on file with the SEC and extracts and abstracts of 10-Ks or 20-Ks for companies whose stock is traded over the New York and American Stock Exchanges. It also includes extracts and abstracts of 10-Ks on file with the SEC for many of the companies whose stock is traded over the counter.

### IV THE NEW YORK TIMES INFORMATION BANK

Using the same terminal, subscribers can also subscribe to the New York Times Information Bank. This service offers a data base consisting of abstracts of news and editorial matter (and occasional advertising matter, if deemed of research value) published in the New York Times and selected material from approximately 70 other publications. Each abstract is accompanied by one or more index terms characterizing its content and serving as access points, and by all necessary bibliographic elements.

The Information Bank also contains a daily News Summary based on the final edition of The New York Times.

## V SUPPLEMENTARY LIBRARIES

Auto-Cite is made available in the Service by agreement with Lawyers Co-operative Publishing Company ("LCP") and its affiliate, Bancroft-Whitney ("BW"). Auto-Cite, containing millions of federal and state case law citations, offers an almost instantaneous check of the accuracy of citations and the validity of cited cases as precedent. Auto-Cite is available via a special Auto-Cite key on the LEXIS terminal.

The Encyclopaedia Britannica library, made available in the Service by agreement with Encyclopaedia Britannica, Inc., includes the Britannica 3, comprising the ten-volume Micropaedia and the 19-volume Macropaedia.

Shepard's Citations, made available in the Service by agreement with McGraw-Hill, Inc., comprises case law citations from Shepard's federal, state, and National Reporter system citators.

The Matthew Bender library, made available in the Service by agreement with Matthew Bender & Company, Inc., includes various treatises, forms, and other legal publications.

## VI PRIVATE LIBRARY

MDC will personally design for you a private library which can be used for lengthy litigation, for corporate minutes, for internal memoranda, etc. A computer-searched private library can bring tremendous improvements to the process of finding and organizing in-house documents.

For further information regarding LEXIS, NEXIS, the New York Times Information Bank, the Disclo Library, Auto-Cite, the Encyclopaedia Britannica library, Shepard's Citations, the Matthew Bender library, or a private library, contact:

Henry E. Heilesen, Vice President  
Mead Data Central, Inc.  
200 Park Avenue  
New York, New York 10166  
(212) 883-8560

NATIONAL AUTOMATED ACCOUNTING RESEARCH SYSTEM  
USER COSTS

as of April 1, 1982

The AICPA and Mead Data Central ("MDC") make available a unique accounting research service. There are three ways in which this service is being offered.

1. FULL SUBSCRIBER

A full subscriber would have a terminal in its own office.<sup>1</sup>

Monthly Library Access Charges<sup>2</sup>

For NAARS only

	<u>Charge Per Office</u>	<u>Charge Per Professional</u>	
Largest Office with a Terminal	\$100	First 20: \$10 each	
		Next 35: \$ 4 each	
		56th and all additional:	No Charge
Second Largest Office with a Terminal	\$100	First 5: \$10 each	
		Sixth and all additional:	No Charge
Third Largest Office with a Terminal	\$100		-0-
Fourth Office with a Terminal	\$ 50		-0-
Each Additional Office with a Terminal	-0-		-0-

For Lexis and NAARS

	<u>Charge Per Office</u>	<u>Charge Per Professional</u>	
Largest Office with a Terminal	\$100	First 20: \$ 10 each	
		Next 60: \$ 4 each	
		81st and all additional:	No Charge
Second Largest Office with a Terminal	\$100	First 15: \$10 each	
		16th and all additional:	No Charge
Third Largest Office with a Terminal	\$100	First 5: \$10 each	
		Sixth and all additional:	No Charge
Fourth Office with a Terminal	\$ 50		-0-
Each Additional Office with a Terminal	-0-		-0-



Monthly Equipment Charges

Each Deluxe Terminal	\$150
UBIQs <sup>3</sup>	
First 5	\$ 55 each
6th through 10th	45 each
11th through 25th	35 each
26th through 50th	30 each
51st through 100th	25 each
101st and all additional	20 each

Stand-Alone Printers

<u>Total Number of UBIQs Installed in Subscriber's Offices in a Single Building</u>	<u>For First Printer</u>	<u>For Second Printer</u>
1-24	\$ 150	\$ 150
25-49	100	150
50-74	-0-	150
75-99	-0-	100
100 or more	-0-	-0-

Use Charges

Hourly Connect Time<sup>4</sup>—Peak Hours<sup>5</sup>

<u>Number of Hours of Peak-Time Use by All of Subscriber's Users During a Single Month</u>	<u>Charge Per Hour For NAARS</u>	<u>Charge Per Hour For LEXIS and Supplementary Libraries</u>
First 5 Hours (0-5)	\$ 81	\$ 90
Next 5 Hours (5-10)	66	75
Next 30 Hours (10-40)	51	60
Next 60 Hours (40-100)	36	45
More than 100 Hours	21	30
Hourly Connect Time <sup>4</sup> —Off-Peak Hours <sup>6</sup>	36 <sup>7</sup>	45 <sup>7</sup>
AICPA Surcharge for Access to NAARS	40	
Search Surcharge <sup>8</sup>	45¢	for each search unit

Installation Charges (non-recurring)<sup>9</sup>

Deluxe Terminals

Initial Terminal \$ 400  
 Each Additional Terminal 300

UBIQs

<u>Number of UBIQs</u>	<u>UBIQ</u>	Maximum <sup>10</sup> For Each Group of Five or
		<u>Fewer UBIQs</u>
First 5	\$ 200	\$ 600
6th through 10th	200	400
11th through 25th	200	350
26th through 50th	200	300
51st through 100th	200	250
101st and all additional	200	200

Each Stand-Alone Printer<sup>11</sup> \$ 200

Instruction Charges (non-recurring) \$75 per professional<sup>12</sup>

MAIL-IT and PRINT CASE Charges

Print Charge<sup>13</sup>

First 5,000 Lines: 1¢ a printed line  
 Next 5,000 Lines: ¾¢ a printed line  
 Over 10,000 Lines: ½¢ a printed line

Handling Charge<sup>14</sup> \$15

Stand-Alone Printer Print Charges<sup>15</sup>

½¢ a printed line  
 Maximum: 10¢ a screenful of text

Charges for Moving Equipment from One Location to Another

Deluxe Terminals \$ 250  
 UBIQs 100  
 Stand-Alone Printers 150

## NOTES

1. All prices are for research terminals installed anywhere in the 48 contiguous states of the United States or in the District of Columbia.
2. This charge is computed on the basis of the number of offices, in different buildings, in which Subscriber has terminals installed, without regard to the number of terminals in each such office. The largest of such offices is that office with the greatest number of Subscriber's professionals. "Professionals," with respect to NAARS-only subscribers are full-time, permanently employed accountants and librarians. With respect to subscribers to the Legal Research Service and NAARS, "professionals" are full-time, permanently employed lawyers, accountants, and librarians.
3. All UBIQs, no matter where located, are counted when computing equipment charges.
4. "Connect time" is the total time a researcher is in contact with MDC's central computer, from the time he or she transmits his or her identification number until communication with the computer is terminated. All time is measured to the nearest second. All peak-time use of the Legal Research Service, NEXIS, NAARS, the DISCLO Library, Shepard's Citations, the Encyclopaedia Britannica library, and the Matthew Bender library (the "Supplementary Libraries") will be counted in determining the applicable "steps" at which a subscriber is charged for connect time.
5. "Peak hours" are from 7:30 a.m. to 7:30 p.m. (local time), every day.
6. "Off-peak hours" are all hours during which the Service is available that are not peak hours.
7. All off-peak connect-time use will be charged at the lower of (a) \$36 an hour for NAARS use or \$45 an hour for all other use or (b) the charge that would be applicable if all such use were treated as peak connect-time use and aggregated with all other peak connect-time use.
8. Search surcharges are based on the total number of occurrences of each word in each search (i.e., the initial request or any subsequent search level) in the file in which research is being performed. Each 25,000 occurrences (or fraction thereof) of each word is a "search unit." There is a search surcharge maximum of 75 search units for each search request at each level. If a user voluntarily interrupts a search, Subscriber will be charged the greater of (a) three search units or (b) the number of search units accumulated up to the time of the interruption. A faulty search request that leads to interruption of processing of the request will cost one search unit.
9. Subscriber will provide basic telephone and electricity services adjacent to the terminal installation site.

10. The installation charge maxima apply to groups of terminals ordered for installation in one building at one time.
11. There will be no installation charge for a printer if it is installed at a time when there is a sufficient number of UBIQs installed so that no monthly equipment charge would be imposed for it.
12. MDC will charge \$75 for each professional (as defined in Note 2) in the firm as of the effective date of this Agreement (up to a maximum of \$2,250), without regard to the number of such professionals who actually receive such instruction. This charge covers (a) the basic instruction of all individuals in Subscriber's offices selected by Subscriber to receive instruction in the use of the Service and (b) instructional and reference materials on the use of the Service. Professionals who complete the basic MDC instruction program within the time limits set forth below are each entitled to one free hour of use to perfect their skills.
 

(1) Individuals in firm on date of installation	Within 60 calendar days of installation
(2) Individuals joining firm after date of installation	Within 60 calendar days of joining firm

This free hour is non-transferable and must be used within 14 calendar days of the date on which basic instruction is completed, at a single session or on an aggregated basis. Credit for such use will automatically be reflected on Subscriber's monthly invoice and will be applied against Subscriber's total use charges in a given month.

13. This charge will be computed for the aggregate of MAIL-IT and PRINT CASE prints ordered on any one day by any one individual, without regard to where the printing takes place.
14. A single handling charge applies to all MAIL-IT and PRINT CASE prints ordered on any one day by any one individual for delivery from MDC's computer center to any one building.
15. This charge is for individual screenfuls of text printed with this printer; the charge for MAIL-IT and PRINT CASE printing performed through this printer will be the same as set forth under "MAIL-IT and PRINT CASE Charges," except that there will be no handling charge.

## II. ASSOCIATE SUBSCRIBER

An associate subscriber will be trained in the mechanics of operating the terminal and in the various methods available to research the data bank. The associate subscriber will research its own problems using the AICPA terminal.

### A. Cost

#### 1. One-time Cost

Instruction (for 2 persons) .....\$250.00  
Additional persons trained at \$125 each

#### 2. Recurring Cost

Hourly charge (measured to nearest second) .....\$150.00  
This includes all computer and communication cost

#### 3. Printing Charge

- a. On-line at the terminal no additional charge.
- b. Off-line (remote printing) charges will be 1¢ a line plus a \$15.00 handling charge. (48-72 hour turnaround estimated).

#### 4. Minimum Charge

There will be a minimum charge of 2 hours per month measured over a 12-month period for each associate subscriber. (24 hours per year minimum use).

### B. Procedure

To become an associate subscriber, notify the Information Retrieval Department of the AICPA. An instruction session will be arranged. To guarantee availability of the terminal, at least one day advance notice must be given to the Information Retrieval Department. Every effort will be made to accommodate associate subscribers but the AICPA will have first priority in using the terminal. The AICPA terminal will be available from 9:00 a.m. to 5:00 p.m. (Eastern Time) Monday through Friday.

### III. INDIVIDUAL INQUIRY

For those who do not desire to have a terminal in their office or who do not desire to share the AICPA terminal, the Institute will allow access to the NAARS system on an individual inquiry basis.

#### A. Cost

##### 1. Recurring Cost

Hourly charge (measured to the nearest second) . . . . . \$200.00

##### 2. Printing Charge

- a. On-line at the terminal no additional charge.
- b. Off-line (remote printing) charges will be 1¢ a line plus a \$15.00 handling charge. (48-72 hour turnaround estimated).

##### 3. Minimum Charge

A minimum charge of 15 minutes will be required for each inquiry. Since an individual question can be searched quite rapidly, it is recommended that several questions be submitted with your inquiry so that full use can be made of the fifteen-minute minimum charge.

#### B. Procedure

All individual inquiries will be channeled through the NAARS service department. Two methods of handling individual inquiries are available.

- 1. An inquiry can be brought to the AICPA and discussed with a researcher by calling in advance for an appointment. The researcher will discuss the problem and determine the best search strategy to use. If there is an answer in the data bank the inquirer will receive a hard copy containing his answer.
- 2. An inquiry can be mailed to the AICPA and a researcher will be assigned to each inquiry and will be responsible for searching the system for relevant answers. The turnaround time is usually less than 48 hours.

For further information, please call or write:

**NATIONAL AUTOMATED ACCOUNTING RESEARCH SYSTEM (NAARS)  
AMERICAN INSTITUTE OF CPAs  
1211 AVENUE OF THE AMERICAS  
NEW YORK, NEW YORK 10036**

**PHONE (212) 575-6393**

# UNIVERSITY SUBSCRIBERS<sup>1</sup>

## USER COSTS<sup>2</sup>

as of January 1, 1982

### Monthly Library Access Charge

Each Terminal (NAARS - only)       \$300  
Each Terminal (LEXIS and NAARS) \$400

### Monthly Equipment Charges

Each Deluxe Terminal               \$ 175  
Each UBIQ                               75  
Each Stand-Alone Printer           250

<u>Monthly Use Charges</u>	<u>Schedule A<sup>3</sup></u>	<u>Schedule B<sup>3</sup></u>	<u>Schedule C<sup>4</sup></u>
First Terminal	\$ 1,300	\$ 800	\$ 500
Second Terminal	950	775	475
Third and Each Additional Terminal	900	750	450

Special Terminal Option: Schedule C subscribers (but not Schedule A or B subscribers) may order up to two terminals (in addition to the initial terminal) without incurring any additional monthly library access or use charges. MDC will charge Subscriber for installation, equipment, and communications (if any) to the nearest MDC multiplexer. However, these two additional terminals may not be used from 6:00 a.m. to 7:30 p.m. (local time), Monday through Friday.

### Installation Charges (non-recurring)<sup>5</sup>

Deluxe Terminals  
Initial Terminal                   \$ 400  
Each Additional Terminal       300  
Each UBIQ                           200  
Each Stand-Alone Printer       200

### Instruction Charge (non-recurring)

All Faculty Members               \$ 1,000  
Six Faculty Members               450

Special Option: Under Schedules A and B, Subscriber may elect to designate any three consecutive months as non-school-session months, during which Subscriber will not use the Service. In the event of such election, Subscriber will pay only its monthly equipment charges during each non-school-session month. Should the Service be used during these three months, Subscriber will pay, in addition, a library access charge of \$300 a terminal a month for NAARS-only use (\$400 a terminal a month for LEXIS and NAARS use) and the standard private-sector

use charges then in effect. Currently, these charges are \$81 an hour for the first five hours of connect time for NAARS use (\$90 an hour for all other use) and a surcharge of 45c for each search unit (i.e., each 25,000 occurrences in the file being searched of each of the words in the user's request). Further details will be sent upon request to subscribers who designate non-school-session months.

Training Aid Simulator Charges (non-recurring)<sup>6</sup>

Initial	\$ 500
Replacement	400

Simulator Switchbox Charge (non-recurring) 225

MAIL-IT and PRINT CASE Charges:

Print Charge<sup>7</sup>

First 5,000 Lines:	1¢ a printed line
Next 5,000 Lines:	¾¢ a printed line
Over 10,000 Lines:	½¢ a printed line

Handling Charge<sup>8</sup> \$15

Stand-Alone Printer Print Charges<sup>9</sup>

	½¢ a printed line
Maximum:	10¢ a screenful of text

Hours Available:

Schedules A and C

Schedule B

All regular LEXIS operating hours, except 2:00 p.m.--5:00 p.m. (Eastern Time), Monday through Friday

All regular LEXIS operating hours, except 7:00 a.m.--5:00 p.m. (Eastern Time), Monday through Friday

Instructional Materials:

For Students

For Faculty

LEXIS Libraries Guide<sup>10</sup>

LEXIS Libraries Guide <sup>10</sup>	\$8.50 each	\$8.50 each
Primers	No Charge	No Charge
Handbooks	No Charge	No Charge
Quick Reference Cards	No Charge	No Charge
LEXIS Libraries Pamphlets	No Charge	No Charge
Workbooks	\$1.25 each	No Charge
Videotapes <sup>11</sup>	No Charge	No Charge



## NOTES

1. The use of the system will be for sole benefit of the students and academic staff of the university. The university will warrant that the system will only be used for educational purposes, i.e., for active research by the faculty or as an integral part of a course that will require the use of the system by the students officially registered in the course.
2. All prices are for research terminals installed anywhere in the 48 contiguous states of the United States or in the District of Columbia. All departments of a university may be considered as one subscriber provided they are located in the same metropolitan area.
3. A school may install its first terminal under Schedule A and additional terminals under Schedule B. A school subscribing under this combination of Schedules A and B may not have more than one terminal active between the hours of 7:00 a.m. and 2:00 p.m. (Eastern Time), Monday through Friday. A school may not install the first terminal under Schedule B and additional terminals as second or subsequent terminals under Schedule A.
4. Schedule C subscribers who are not located in cities with MDC multiplexers (Multiplexers permit access to MDC's computer with a local phone call) will, in addition, pay MDC's actual communications costs from the terminal site to the nearest MDC multiplexer. The telephone company bills MDC for communications costs, which MDC passes along to Subscriber. These charges are subject to change in accordance with the approximate actual cost of communications, as a result of increases in charges by the telephone company.
5. Subscriber will provide basic telephone and electricity services adjacent to the terminal at the terminal installation site.
6. MDC will provide, at no charge, all required tapes and charts.
7. This charge will be computed for the aggregate of all MAIL-ITs and PRINT CASE prints ordered on any one day by any one individual.
8. A single handling charge applies to all MAIL-ITs and PRINT CASE prints ordered on any one day by any one individual for delivery from MDC's computer center to any one building.
9. This charge is for individual screenfuls of text printed with this printer; the charge for MAIL-IT and PRINT CASE printing performed through this printer is the same as set forth under "MAIL-IT and PRINT CASE Charges," except that there will be no handling charge.
10. MDC will provide, at no charge, five copies of the LEXIS Libraries Guide for library use.
11. There is one module consisting of approximately 15 minutes of demonstration, explanation, and discussion.

DISTRIBUTORSHIPS

as of April 1, 1982

Profit-seeking entities as well as not-for-profit organizations may become distributorship sponsors. The sponsor may install any number of terminals in the sponsor's offices or in the offices of sponsors user entities. Each sponsor must designate a terminal operator to assist non-MDC-instructed users.

I. MONTHLY FIXED CHARGES

<u>Monthly Subscription Charge for each user-entity</u>	\$50
<u>Monthly Equipment and Library Access Charge</u>	Same as under NAARS user costs

II. USE CHARGES

<u>Hourly Connect Time - Peak Hours</u>	<u>Charge Per Hour<sup>1</sup></u>
Numbers of hours of peak-time use of the subscriber's users during a single month	<u>The Service and "HELP" Tutorials</u>
First 5 hours ( 0 - 5 )	\$75
Next 5 hours ( 5 - 10 )	\$60
Next 30 hours ( 10 - 40 )	\$45
Next 60 hours ( 40 - 100 )	\$30
More than 100 hours	\$15

Hourly Connect Time - Off-Peak Hours

All off-peak connect time for each separate user-entity will be charged at the lower of (a) \$36 an hour or (b) the charge that would be applicable if all such use were treated as peak-time use and aggregated with all other peak-time use for that user-entity.

- 
1. All peak-time use of the Legal Research Service, the Accounting Information Library, the DISCLO Service and "HELP" tutorials will be counted in determining the applicable "step" at which a subscriber is charged for connect time.

This table of connect-time charges will be applied separately for each user-entity entitled to use the subscriber's terminal (i.e., each user-entity will be treated as if it were a separate subscriber for purposes of determining the appropriate connect-time charges).

### III. INSTRUCTION CHARGES

The sponsor will pay MDC \$2,250 for instruction of the sponsor's supervising accountant, terminal operators and instructors. All supervisors, terminal operators, and instructors must be instructed and certified by MDC. If users are instructed by MDC, the sponsor will pay MDC its standard instruction charges for such instruction of each user-entity (\$75 per individual in the entity, up to the maximum of \$2,250) or, if such instruction is limited to seminar sessions, the sponsor will pay MDC's then-current charge for such seminars. Standard instruction will be performed by MDC only at MDC instruction centers. If seminars are conducted by MDC at locations selected by the sponsor, then the sponsor will pay all additional costs incurred by MDC in presenting such seminars.

### IV. FREE TIME

Users who have attended MDC's standard instruction program will each receive one hour of (unsupervised) free post-instruction time to be used within 30 days after completion of the user's instruction; no other free use will be granted to the user by MDC.

### V. PROMOTIONAL MATERIAL

The sponsor will provide all promotional and advertising materials at its own expense, to be approved by MDC. At the sponsor's request (and cost), MDC will provide such materials.

### VI. DEPOSIT

The sponsor must provide MDC with a \$10,000 deposit. MDC will maintain all deposits in an interest-bearing account.

### VII. CANCELLATION

The sponsor may cancel a distributorship agreement upon three months' written notice.

### VIII. DEFINITIONS

For definitions of "connect time," "search surcharge," "peak hours," "off-peak hours," "off-line print charges," and the like, see the NAARS user costs section.

## SHARED SUBSCRIPTION

as of April 1, 1982

MDC will permit any number of organizations (i.e., accounting firms) to share a subscription if the aggregate number of accountants is thirty or less. For purposes of determining the number of accountants, each sharing firm consists of all offices of the firm, without regard to location. MDC will install a single research terminal at a location to be designated by Subscriber.

Sharing subscribers pay all user costs set forth under "NAARS User Costs." The Subscriber with the terminal in its office pays \$100 as a library access charge plus the charges set forth under "Charges Per Professional" under the heading "Monthly Library Access Charges." All other sharing Subscribers pay only its "per professional" charge as a library access charge.

The training charges for each sharing firm will be \$75 for each accountant.

In the event that a new subscriber joins in sharing a subscription to the service:

- (a) thirty days' written notice of "intent to join" must be given;
- (b) the agreement will be regarded as beginning anew in all respects for a minimum three-month term.

For definition of "connect time," "search surcharge," "peak hours," "off-peak hours," "off-line print charges," and the like, see the NAARS user costs section.