

## DOCUMENT RESUME

ED 090 965

IR 000 576

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TITLE A Comparison of Three Online Information Retrieval Services.  
INSTITUTION California Univ., Berkeley. Lawrence Berkeley Lab.  
SPONS AGENCY Atomic Energy Commission, Washington, D.C.  
REPORT NO UCID-3656  
PUB DATE Apr 74  
NOTE 32p.

EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE  
DESCRIPTORS \*Comparative Analysis; Costs; \*Data Bases; Guides; \*Information Retrieval; Information Systems; \*On Line Systems; Services  
IDENTIFIERS ERIC; Lockheed Information Service; System Development Corporation; Western Research Application Center

## ABSTRACT

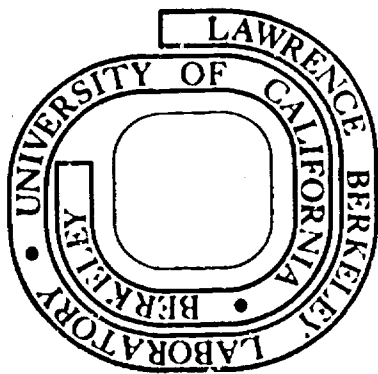
Three firms which offer online information retrieval are compared. The firms are Lockheed Information Service, System Development Corporation and the Western Research Application Center. Comparison tables provide information such as hours accessible, coverage, file update, search elements and cost figures for 15 data bases. In addition, general information is given on the firm and the search service including who to contact for information, membership requirements, equipment requirements, costs, special features and additional services. The data bases are Chemical Abstracts Condensates, Predicasts' Chemical Market Abstracts, Engineering Index, Inc., American Geological Institute, Institution of Electrical Engineers (London), National Aeronautics and Space Administration (NASA), National Technical Information Service: Government Reports Announcement (GRA), Macmillan's Current Index to Scientific and Technical Literature, American Petroleum Institute, National Agricultural Library, ISI Source and Citation Index, National Library of Medicine, Educational Resource Information Center, Abstracted Business Information and American Psychological Association. (JG)

**A COMPARISON OF THREE ONLINE  
INFORMATION RETRIEVAL SERVICES**

**Harriet W. Zais**

**April 1974**

**AEC Contract No. W-7405-end-48**



# A COMPARISON OF THREE ONLINE INFORMATION RETRIEVAL SERVICES

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J	PSYCH ABST	Lockheed
K	MEDLINE	SDC
L	APILIT, APIPAT	SDC
M	CMA	Lockheed

## A COMPARISON OF THREE ONLINE INFORMATION RETRIEVAL SYSTEMS

### INTRODUCTION

This report was created to provide a concise guide to the data bases offered by three firms for online information searching. These are Lockheed Information Service (using Lockheed's DIALOG system), System Development Corporation (using SDC's ORBIT II retrieval program), and Western Research Application Center (using WESRAC's DATACON system). The comparison tables were designed originally to highlight data bases that we at Lawrence Berkeley Laboratory were interested in accessing. Enough interest has been shown in these, however, to convince us that there is a wider audience for this type of comparison.

The report is designed for those librarians, administrators, and managers who are considering becoming subscribers to such online search services to better serve their user community. It presupposes some familiarity with the terminology of computerized information services. The selection of these three firms is not intended to be an endorsement to the exclusion of others that may be suitable. Because the focus of this report is on the online search services offered, we have not included other services such as custom created batch process searches, and selective dissemination of information (SDI) services that the firms may offer.

Information on 15 data bases is presented in the tables. Table 1 presents general information on the nature of the firm and the search service itself, e.g., whom to contact for information, membership requirements if any, equipment requirements, costs, special features and additional services.

In Table 2 the data bases are grouped by broad subject areas as follows:

- The Physical Sciences
- The Biological Sciences
- The Social Sciences

Within each data base, the following information features are given:

Hours Accessible: The hours that the data base is available for online searching.

Coverage: The years of material that the file contains.

File Update: How often the new material is added to the searchable file. Where available, some indication is given of the amount of material included in these updates. These elements give an indication of how large the data base is and how rapidly it is growing.

Search Elements: The fields or categories that can be used to search the data base. Typical search elements include author (personal and/or corporate), subject terms, document title, and source reference. The number and kind of element vary with the data base and firm.

Cost: The charges for the use of the data base. COMPUTER CONNECT is the dollar amount that the user will be charged for each hour (rounded up to the 1/100 of an hour) his terminal is connected online to the computer at the firm's facility. OFFLINE PRINTING is the amount charged per citation to have material printed at the computer facility and mailed to the user (usually within 24 hours).

### A Brief Overview of Online Searching

In online or "interactive" searching, the user's terminal is connected by phone to the computer at the search service's facility. Each user has a unique user identification code that allows access to the system and is used in billing the subscriber for the amount of time he was connected to the system. Each firm has its own search language--usually simple English language statements and commands which the user keys into his terminal. He formulates his request by using Boolean logic (AND, OR, AND NOT) to connect terms of interest to him. He can then view some of the material thus retrieved and can have items that he wants printed, specifying the desired format.

The data bases these firms offer access to are files of bibliographic information in machine readable form. These bibliographic citations include such elements as personal author, corporate author, document title, journal citation, keyword phrases, language, patent number, and abstracts. Although all these elements may be present in the data base, the firms do not necessarily offer access to them all. Each firm, for each data base, has some subset of elements in each citation that users may search, display, and have printed offline.

### ACKNOWLEDGEMENTS

My deep appreciation is extended to the firms referred to in this report for their wholehearted cooperation. My special thanks go to Ms. Judy Wanger of SDC, to Mr. Mark Radwin of Lockheed, and to Dr. Robert Mixer of WESRAC who patiently answered my innumerable questions. They reviewed the draft of this report. The author, however, acknowledging the difficulty in capturing data as liquid as the current status of information retrieval system, is responsible for all errors of commission and omission.

I would also like to thank the Publications Section of the LBL Technical Information Department for their advice and assistance in the publication of this report.

Table 1. General service information.

	SYSTEM DEVELOPMENT CORPORATION	WESTERN RESEARCH APPLICATION CENTER	LOCKHEED
For Information:	SDC Search Service 2500 Colorado Avenue Santa Monica, CA 90406 (213) 393-9411, Ext. 7277/7313  SDC Search Service 5827 Columbia Pike Falls Church, VA 22041 (703) 820-2220, Ext. 442	WESRAC University of Southern California 809 West 34th Street Los Angeles, CA 90007 (213) 746-6132  Attn: Mr. Herb Asbury	Lockheed Information Systems 3251 Hanover Street Palo Alto, CA 94304 (415) 493-4411, Ext. 45034  or 405 Lexington Avenue New York, NY 10017 (212) 697-7171
Membership Requirement	There are no minimums or subscription charges of any kind	\$100 minimum charge for the first month.	There are no minimums or membership charges of any kind.
Terminals Acceptable	Dial up: ASCII-, Correspondence-, EBCDIC-code terminals at 10, 15, or 30 cps. Popular terminals: Anderson-Jacobson, Computer Devices, Datapoint, Execuport, Hazeltine, IBM2741, NCR, Novar, Teletype, TerminiNet, Texas Instruments.  Equipment rental: Will assist users, on request, to contact terminal suppliers.	Dial up: ASCII-2 coded, teletype compatible at 10 or 30 cps	Dial up: ASCII-, Correspondence-, EBCDIC-code terminals at 10, 15, or 30 cps. Popular terminals: Anderson-Jacobson, Computer Devices, Datapoint, Execuport, Hazeltine, IBM2741, NCR, Novar, Teletype, TerminiNet, Texas Instruments.  Leased line: 480 cps (for high speed display terminals)  Equipment rental: Dial-up terminal costs \$85 to \$150/mo rental. High-speed display terminal with printer costs about \$400/mo. Can be customer furnished.
Costs	Online Access Rates: (See specific data bases)  Offline Printing: (See specific data bases. The cost and content of a citation vary from base to base.)  TYMSHARE (Optional) \$10/hr plus telephone charges to the nearest TYMSHARE city (if required) Overseas users pay actual postage costs and an additional \$16/hr for the transatlantic TYMSHARE communications.	Online Access Rates: \$25 connect hr/data base  Offline Printing: 6¢/citation (A citation consists of accession number, title, keywords only and is the same for all data bases.)  TYMSHARE There are no TYMSHARE arrangements	Online Access Rates: (See specific data bases)  Offline Printing: (See specific data bases. The cost and content of a citation vary from base to base.) Partial printing: 4¢/title 5¢/citation  TYMSHARE (Optional) \$10/hr plus telephone charges to the nearest TYMSHARE city (if required) In Europe: \$15/hr plus telephone charges to nearest TYMSHARE city (if required)
Special Features	Special Offer: up to 2 free hr of computer time during first 30 days of service for new users. Regular charge for communications and off-line printing.  \$10 for each data-base manual; additional copies are \$5 each.	Training credit is not given but instruction is available.  A copy of the manual is provided free; additional copies at extra cost.	Training credit of 2 hr search service time will be allowed all customers. There are quarterly or consortia discounts.  Buy one copy of user manual: \$10/copy--covers all data bases.
Additional Services SDI	Additional bases will be added throughout 1974. SDI planned for mid-1974 Beginning June 1974, SDC users will be able to place document orders online to ISI's OATS® (Original Article Tearsheets Service).	Complete customized retrospective and current awareness search service provided.	Additional data bases are being added SDI planned for early 1974
Source of Material	Ms. Judy Wanger, Ms. Martha Bonner	Dr. Robert Mixer	Mr. Mark Radwin, Ms. Frances Grant

Information current as of April 17, 1974.

Table 2. Data Bases offered by each firm.

CHEMICAL ABSTRACTS CONDENSATES Provider information from the corresponding issues of Chemical Abstracts			
	SDC CHEMCON and CHEM7071	WESRAC	LOCKHEED CAC [Scheduled for May 15, 1974]
Hours Accessible	Effective April 29, 1974: CHEM7071: M-F 8 am-11 am CHEMCON: M-F 5 am-8 am; 8:10 am-11 am; 2:10 pm-5 pm		M, W, Th, F: 5 am-4:30 pm T: 4:30 am-3:30 pm
Coverage	CHEM7071: 1970-71 CHEMCON: 1972.		1972 -
File Update	Biweekly (15,000 added monthly)		N/A
Search Elements	36 categories; 13 directly searchable <sup>a</sup>		Estimated 13 categories directly searchable
Cost	COMPUTER CONNECT TIME: \$45/connect hr OFFLINE PRINTING: 8¢/citation		COMPUTER CONNECT TIME: \$45/connect hr OFFLINE PRINTING: 10¢/citation
Special Features	Index with word frequencies available on either fiche or film (16 mm or 35 mm) to users for \$25.		

<sup>a</sup> See Appendix A for list of searchable fields.

## PREDICASTS' CHEMICAL MARKET ABSTRACTS

The CMA tape provides digests of all literature significant to chemical products marketing. Coverage includes both domestic and foreign information on all chemical process industries.

	SDC	WESRAC	LOCKHEED CMA
Hours Accessible			M, W, Th, F: 5 am-4:30 pm T: 4:30 am-3:30 pm
Coverage			January 1972 -
Search Elements			12 retrieval codes. Abstracts can be searched, displayed, and printed.*
Cost			COMPUTER CONNECT TIME: \$60/hr OFFLINE PRINTING: 10¢/citation (includes abstract)
Special Features			Sorting of output by a variety of fields including nested sorts is offered. After 6 mos trial, user must subscribe to the CMA hard copy publication at \$350 annual cost. Scheduled for May 17, 1974: Predicasts' Electronics Market Abstracts (EMA) data base will be merged with CMA. EMA coverage includes both domestic and foreign information on computers, consumer electronics, aerospace, electronic components, instruments, CATV, and other electronics markets.  Scheduled for Fall 1974: Predicasts F & S Index

\* See Appendix M for list of searchable fields.



**ENGINEERING INDEX, INC.**  
Data base corresponds to the issues of The Engineering Index Monthly.

	SDC COMPENDEX	WESRAC	LOCKHEED COMPENDEX
Hours Accessible	M-F: 5 am-8 am; 2:10 pm-5 pm (Plus 11:10 am-2 pm Effective 4/29/74)		M, W, Th, F: 5 am-4:30 pm T: 4:30 am-3:30 pm
Coverage	January 1970 -		January 1972 - (Intend to add '70-'71)
File Size	300,000 records (6000 added monthly)		6000 records added monthly
File Update	Monthly		Monthly
Search Elements	14 categories, 12 directly searchable <sup>b</sup>		8 fields searchable: 4 of them full-text indexed <sup>c</sup>
Cost	COMPUTER CONNECT: \$90/hr OFFLINE PRINTING: 20¢/citation (including abstract)		COMPUTER CONNECT: \$55/hr OFFLINE PRINTING: 10¢/citation (including abstract)
Special Features	Abstracts displayable		Abstracts displayable

<sup>b</sup>See Appendix B for list of searchable fields

<sup>c</sup>See Appendix B for list of searchable fields

**AMERICAN GEOLOGICAL INSTITUTE**  
Worldwide coverage of geosciences literature:  
3000 journals plus conferences, symposia, and major monographs.

	SDC GEO-REF	WESRAC	LOCKHEED
Hours Accessible	M-F: 8:10 am-11 am Effective 4/29/74		
Coverage	1967 -		
File Update	3000 records added monthly		
Search Elements	13 categories, 8 directly searchable <sup>d</sup>		
Cost	COMPUTER CONNECT: \$60/hr OFFLINE PRINTING: 15¢/citation		
Special Features	Use of GEO-REF is limited to the user organization with whom SDC has a contract. Authorization for use of the file by service bureaus serving outsiders must be granted by AGI.		

<sup>d</sup>See Appendix C for list of searchable fields

**INSTITUTION OF ELECTRICAL ENGINEERS (LONDON)**  
Provides information from the corresponding issues of  
Physics Abstracts; Electrical and Electronics Abstracts; Computer and Control Abstracts.

	SDC	WESRAC	LOCKHEED INSPEC Files
Hours Accessible			M, W, Th, F: 5 am-4:30 pm T: 4:30 am-3:30 pm
Coverage			1970 -
File Update			Monthly (150,000 records added yearly)
Search Elements			15 searchable fields; 3 are full-text indexed <sup>e</sup>
Cost			COMPUTER CONNECT TIME: \$45/connect: hr OFFLINE PRINTING: 10¢/citation (includes abstract)
Special Features			Data base has three sections: Physics; Electrical and Electronics Engineering; Computers and Control Engineering Abstracts are displayable.

<sup>e</sup>See Appendix D for list of searchable fields.

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)**  
Provides information from the corresponding issues of  
International Aerospace Abstracts (IAA) and Scientific and Technical Aerospace Reports (STAR).

	SDC	WESRAC NASA	LOCKHEED
Hours Accessible		W, F: 9am-12:45pm	
Coverage		January 1971 -	
File Update		Quarterly (approx. 60,000 new citations added yearly)	
Search Elements		1 search element: keywords	
Cost		COMPUTER CONNECT TIME: \$25/connect hr OFFLINE PRINTING: 6¢/citation	

**NASA-MINI**

NASA-MINI is a compilation of  
NASA S and T files covering  
structural analysis.

Hours Accessible		M: 9am-12:45pm	
Coverage		1962	
File Update		Semi-annually	
Search Elements		1 searchable element: keywords	
Cost		COMPUTER CONNECT TIME: \$25/connect hr OFFLINE PRINTING: 6¢/citation	
Special Features		Keyword postings of the NASA file available in printout form for \$12.	

**NATIONAL TECHNICAL INFORMATION SERVICE: GOVERNMENT REPORTS ANNOUNCEMENT (GRA)**  
Abstracts of government research from over 240 agencies:  
AEC, HEW, HUD, DOT, Commerce, DOD, etc.

	SDC NTIS [Scheduled for May 1, 1974]	WESRAC GRA	LOCKHEED NTIS
Hours Accessible	M-F: 8:10am-11am 11:10am-2pm	T, Th: 9am-12:45pm	M, W, Th, F: 5am-4:30pm T: 4:30am-3:30pm
Coverage	1970 -	January 1971 -	1964 -*
File Update	5000 new citations added monthly	Quarterly	Semi-monthly (56,000 citations included each year)
Search Elements	12 searchable elements <sup>1</sup>	1 searchable field: keywords	10 searchable fields: 4 are full-text indexed <sup>2</sup>
Cost	COMPUTER CONNECT TIME: \$45/connect hr OFFLINE PRINTING: 10¢/citations (includes abstract)	COMPUTER CONNECT TIME: \$25/connect hr OFFLINE PRINTING: 6¢/citation	COMPUTER CONNECT TIME: \$35/connect hr OFFLINE PRINTING: 10¢/citation (includes abstract)
Special Features	Keyword index on fiche and film is planned Abstracts displayable	Keyword postings available in printout form for \$50. Abstracts not displayable	Abstracts are displayable

<sup>1</sup>See Appendix E for list of searchable fields

<sup>2</sup>See Appendix E for list of searchable fields

\* This firm offers the complete file; this file began in 1964.

MACMILLAN'S CURRENT INDEX TO SCIENTIFIC AND TECHNICAL LITERATURE

PANDEX

Bibliographic citations from 2400 of the world's leading scientific, technical, and medical journals

	SDC	WESRAC	LOCKHEED PANDEX/TRANSDEX
Hours Accessible			M,W,Th,F: 5am-4:30 pm T: 4:30am-3:30 pm
Coverage			January 1970 to December 1972
File Update			Irregular intervals (240,000 citations added each year). Next update will be May 1974: all 1973 and 5 months of 1974 will be added. The file will be 900,000 citations at completion of this update.
Search Elements			8 searchable fields: 3 are full-text indexed <sup>h</sup>

TRANSDEX

Document translations from the US Joint Publications Research Service covering articles from communist and developing countries. JPRS translations are available on film or microfiche.

	SDC	WESRAC	LOCKHEED
Hours Accessible			(Same as PANDEX)
Coverage			January 1972 to current (effective June 1974)
File Update			Irregular intervals (60,000 added yearly)
Search Elements			8 searchable fields: 3 full-text indexed (Title, Serial title, Descriptors are full-text indexed) <sup>i</sup>
Cost			COMPUTER CONNECT: \$35/hr OFFLINE PRINTING: 5¢/citation

<sup>h</sup>See Appendix F.

<sup>i</sup>See Appendix F.

AMERICAN PETROLEUM INSTITUTE  
Index to API Abstracts of Refining Literature

	SDC APIPAT	WESRAC	LOCKHEED
Hours Accessible	M-F: 5am-8am; 2:10 pm-5 pm (Effective 4/29/74)		
Coverage	1964 -		
File Update	1500 records added monthly		
Search Elements	11 categories, 6 directly searchable <sup>q</sup>		
Cost	Currently available only by special arrangement with the American Petroleum Institute.		

<sup>q</sup>See Appendix L for list of searchable files.

Index to API Abstracts of Refining Patents

	APIPAT	WESRAC	LOCKHEED
Hours Accessible	M-F: 2:10 pm-5 pm (Effective 4/29/74)		
Coverage	1964 -		
File Update	670 records added monthly		
Search Elements	11 categories, 6 directly searchable <sup>r</sup>		
Cost	Currently available only by special arrangement with the American Petroleum Institute.		

<sup>r</sup>See Appendix L for list of searchable fields.

**NATIONAL AGRICULTURAL LIBRARY**  
CAIN is a Cataloging and Indexing data base that provides  
worldwide coverage of journal and monographic literature in agriculture

	SDC CAIN	WESRAC	LOCKHEED CAIN
Hours Accessible	M-F: 11:10 am-2 pm (Effective 4/29/74)		M,W,Th,F: 5 am-4:30 pm T: 4:30 am-3:30 pm
Coverage	1970 -		1970 -
File Update	12,000 records added monthly		Monthly (120,000 records added yearly)
Search Elements	16 categories, 13 directly searchable <sup>j</sup>		15 retrieval codes: 3 full-text indexed fields <sup>k</sup>
Cost	COMPUTER CONNECT: \$30/hr OFFLINE PRINTING: 8¢/citation		COMPUTER CONNECT: \$25/hr OFFLINE PRINTING: 5¢/citation
Scope			The NAL's Food and Nutrition file has been merged with the CAIN file.
Special Features			Sorting of output by a variety of fields, including nested sorts, are available both online and offline.

<sup>j</sup>See Appendix G for list of searchable fields.

<sup>k</sup>See Appendix G for list of searchable fields.

**ISI SOURCE AND CITATION INDEX**  
(The Life Sciences and Clinical Practices File)  
Includes articles published in over 1000 life science journals. Provides information from the corresponding issues of ISI's Current Contents--Life Sciences and Current Contents--Clinical Practices.

	SDC SCISEARCH [To be operational June 1974]	WESRAC	LOCKHEED  [Scheduled for June 1974]
Hours Accessible	M-F: 11:10 am-2 pm		
Coverage	April 1972		
File Update	400,000 citations when the file comes up; 16,000 new citations added monthly.		
Search Elements	5 elements directly searchable: Source Author, Cited Author, Cited Reference, Corporate Author, Title Terms.		
Cost	COMPUTER CONNECT TIME: \$90/connect hr OFFLINE PRINTING: 25¢/citation		

**NATIONAL LIBRARY OF MEDICINE**  
The MEDLINE (MEDLARS ONLINE) data base is a special subset of the  
MEDLARS file and covers over 1,100 biomedical journals.

	SDC MEDLINE	WESRAC	LOCKHEED
Hours Accessible	M-F: 11:10 am-2 pm		
Coverage	1970 -		
File Update	12,000 records added monthly		
Search Elements	11 categories, 7 directly searchable <sup>j</sup>		
Cost	Service is currently available only by special arrangement with the Pharmaceutical Manufacturers Assoc.		

<sup>j</sup>See Appendix K for list of searchable fields.

**EDUCATIONAL RESOURCE INFORMATION CENTER: National Institute of Education**  
The ERIC file contains information from the corresponding issues of  
**Research in Education (RIE) and Current Index to Journals (CIJE).**

	SDC ERIC	WESRAC ERIC	LOCKHEED ERIC
Hours Accessible	M-F: 5am-8am; 11:10am- 2pm; 2:10pm-5pm	M-F: 1pm-5pm	M,W,Th,F: 5am-4:30pm T: 4:30am-3:30pm
Coverage	1966 -*	1966 -*	1966 -*
File Update	2500 records added monthly	Quarterly	Monthly
Search Elements	19 categories, 10 directly searchable <sup>l</sup>		See attachment for list of search- able files and their codes. <sup>m</sup>
Cost	COMPUTER CONNECT: \$25/hr OFFLINE PRINTING: 8¢/citation (includes abstract)		COMPUTER CONNECT: \$25/hr OFFLINE PRINTING: 10¢/citation (includes abstract)
Scope	SDC's ERIC file includes RIE and CIJE.	WESRAC's ERIC file includes RIE and CIJE.	In addition to RIE and CIJE, Lock- heed offers the following education- related data bases: Exceptional children abstracts Abstracts of Instructional Materials (AIM/ARM) Current Projects in Education Field Reader Catalog All are searchable in a similar manner to ERIC
Special Features	Abstracts displayable	If WESRAC's search service is used for an ERIC search, WESRAC will obtain fiche copies of the RIE documents for the user. Keyword postings available in printout form for \$12.	Abstracts displayable.

<sup>l</sup>See Appendix H for list of searchable fields.

<sup>m</sup>See Appendix H for list of searchable fields.

\*These firms offer the complete file; these files began in 1966.

**ABSTRACTED BUSINESS INFORMATION**

Major feature articles abstracted from approximately 300 journals.

	SDC INFORM	WESRAC	LOCKHEED ABI/INFORM
Hours Accessible	M-F: 5am-5pm		M,W,Th,F: 5am-4:30pm T: 4:30am-3:30pm
Coverage	August 1971 -		August 1971 -
File Update	Monthly (900 citations added/mo)		Monthly (10,000 citations added yearly)
Search Elements	8 categories, 5 directly searchable <sup>n</sup>		2 prefix codes, 2 suffix codes (title and abstract full-text indexed for searching) <sup>o</sup>
Cost	COMPUTER CONNECT: \$45/hr OFFLINE PRINTING 10¢/citation (including abstract)		COMPUTER CONNECT: \$45/hr OFFLINE PRINTING 10¢/citation (includes abstract)
Special Features	Abstracts displayable		Abstracts displayable

<sup>n</sup>See Appendix I for list of searchable fields.

<sup>o</sup>See Appendix I for list of searchable fields.

**AMERICAN PSYCHOLOGICAL ASSOCIATION**

Non-evaluative summaries of the world's journal literature in psychology and related disciplines

	SDC	WESRAC	LOCKHEED Psychological Abstracts
Hours Accessible	SDC does not plan to add this data base		M,W,Th,F: 5am-4:30pm T: 4:30am-3:30pm
Coverage			January 1967 -
File Update			Monthly (24,000 records added yearly)
Search Elements			13 searchable fields, 5 are full- text indexed. <sup>p</sup> Abstracts search- able
Cost			COMPUTER CONNECT: \$50/hr OFFLINE PRINTING: 10¢/citation (includes abstract)
Special Features			Customers may not duplicate or sell copies of printouts without prior agreement of the Am. Psych. Assoc. Abstracts displayable

<sup>p</sup>See Appendix J for list of searchable fields.

## APPENDIX A

## SDC CHEMCON

Records in the SDC/CHEMCON file contain up to 30 different categories of bibliographic information. Thirteen of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories can be searched on subsets of the file through special ORBIT text-searching features. All information in a citation can be requested by the user through various "print" commands.

Title	Parent Journal Citation
*Keyword Phrase	Book Review Citation
*CA Publication Section	Meeting Date
*Codon	Availability
Foreign Title (Book)	Work Address
*Author (Personal)	*Work Location
*Author (Corporate)	*Language
Source Reference	*Patent Number
*Publication Date	Patent Assignees
Publication Class	*Patent Classification
Publisher Identity	Patent Date
CA Publication Citation	Patent Priority Number
CA Cross References	*Patent Location
CA Service Coverage	*Patent (Publication Class)
Copy Abstract Citation	*Update Code

At the user's option, searches may be restricted to the most recently entered segment of the file to provide for easy-to-use online current awareness searching.

January 1, 1974

## APPENDIX B

## SDC COMPENDEX

Records in the SDC/COMPENDEX file contain up to 14 different categories of bibliographic information. Twelve of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories can be searched on subsets of the file through special ORBIT text-searching features. All information in a citation can be requested by the user through various "print" commands.

*Title	*Free-Language Terms
*Author	*Accession Number
*Author Affiliation	Abstract
Source	*Entry Date
*Index Terms	*Card Alert Codes
*Subject Headings	*Journal Coden
*Cross References	*Update Code

The searchable Index Term category includes Subject Headings (and subheadings), Cross References, Free-Language Terms, and Title Terms. At the user's option, searches may be restricted to the most recently entered segment of the file, to provide for easy-to-use online current awareness searching.

January 1, 1974

# COMPENDEX RETRIEVAL CODES

Table 1 Prefix Codes

<u>Prefix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Used With Following Commands</u>
AU=	Author	AU=Pauling L	EXPAND, SELECT
CA=	Card Alert	CA=402	EXPAND, SELECT
CO=	Coden	CO=AACOB L	EXPAND, SELECT
JA=	Journal Announcement (source)	JA=AM CHEM SOC	EXPAND, SELECT

Table 2 Suffix Codes

<u>Suffix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Used With Following Commands</u>
/DE	Descriptor (1) (full text indexed)	Absorption/DE	EXPAND, SELECT
/ID	Identifier (2) (full text indexed)	Energy/ID	EXPAND, SELECT
/TI	Title (full text indexed)	Gasification/TI	EXPAND, SELECT
/CS	Author Affiliation (full text indexed)	Univ(F)Calif(F)Berkeley/CS	EXPAND, SELECT

- (1) Subject Headings (and Subheadings) and Cross References are included in both original bound multiple word phrase form and also reindexed to permit retrieval by constituent words or subphrases.
- (2) Free-Language Terms are included in both original bound multiple word phrase form and also reindexed to permit retrieval by constituent words or subphrases.



## APPENDIX C

## SDC GEO-REF

Records in the SDC/GEO-REF file contain up to 13 different categories of bibliographic information. Eight of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories can be searched on subsets of the file through special ORBIT text-searching features. All information in a citation can be requested by the user through various "print" commands.

Title	*Identification Number	*Journal Coden
Original Title	Title Annotation	*Category Code
*Author	*Descriptors	*Publication Year
Symposium Information	*Language	*Update Code

INSPEC  
RETRIEVAL CODES  
Table 1 Prefix Codes

<u>Prefix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Used with Following Commands:</u>
AU	Author (includes author, editor, translator)	AU-Jones, M. I.	EXPAND, SELECT
CN	Contract	CN-AF-AFOSR-1367-68	EXPAND, SELECT
CO	Coden	CO=AACOB1	EXPAND, SELECT
JN	Title of Cover-to-Cover Journal Original Journal	JN=Materials Res. Stand. (USA)	EXPAND, SELECT
LA	Language	LA=Bulgarian	EXPAND, SELECT
PA	Patent Assignees	PA=A. B. DICK, CO.	EXPAND, SELECT
PN	Patent Number	PN=3489850	EXPAND, SELECT
PO	Country of original patent application	PO=Australia	EXPAND, SELECT
PI	Country of patent	PI=USA	EXPAND, SELECT
RN	Report Number Standard Book No. U.S. Government No.	RN-A??15630	EXPAND, SELECT
SC	Section Classification Codes	SC=C9980	EXPAND, SELECT
TI	First 40 characters of title	TI=Matching The Work of the Control Comput	EXPAND, SELECT

Table 2 Suffix Codes

<u>Suffix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Used with Following Commands:</u>
/DE	Descriptor (full text indexed)	Computer Aided/DE	EXPAND, SELECT
/ID	Identifier (full text indexed)	Computer Aided/ID	EXPAND, SELECT
/CS	Corporate Source includes author affiliation, editor affiliation, original issuing or sponsoring organization (conference)	Lockheed/CS	EXPAND, SELECT

\*The identifier field consists not only of identifiers but salient words extracted from the title and abstract fields.

CATEGORY NAMES	ABBREVIATIONS	DIRECTLY SEARCHABLE CATEGORIES	PRINTABLE CATEGORIES
Accession Number	AN	X	X
Title	TI	X*	X
Title Annotation	TA	-	X
Title Note	TN	-	X
Authors (Personal)	AU	X	X
Corporate Source	CS	X*	X
Pagination/Date	PD	-	X
Publication Year	PY	Date Ranging	-
NTIS Prices	PR	-	X
Availability	AV	-	X
Category Codes	CC	X	X
Index Terms	IT	X	-
Descriptors	DE	X*	X
Identifiers	ID	X*	X
Notes	NO	-	X
Announcement Publication	AP	X	X
Sponsoring Agency Acronym/Number	SA	X**	X
Numbers	NU	X	-
Report Numbers	RN	X***	X
Contract/Grant Numbers	CG	X***	X
Project Numbers	PN	X***	X
Task Numbers	TS	X***	X
Abstract	AB	-	X
Update Code	UP	X	-
<p>*Single terms are searchable in the Index Term category.</p> <p>**Only the Acronym part is searchable.</p> <p>***All are searchable in the Numbers category.</p>			

Table 1 PREFIX CODES

Prefix Code	Field Name	Example	Commands Used With:
AU	Author	AU-ABAGYAN, L. P.	EXPAND, SELECT
CC	Corporate Source Code	CC 002450	EXPAND, SELECT
CF	COSATI Field <sup>(2)</sup> (or WGTA and GRTA Nos.)	CF 05010	EXPAND, SELECT
CN	Contract Number	CN-AF-AFOSR-0100-67	EXPAND, SELECT
RN	Report Number	RN-AD-197703	EXPAND, SELECT
JA	Journal Announcement	JA 07218 (for NTIS) JA-S0924 (for NASA) JA-N2409 (for AEC)	EXPAND, SELECT

Table 2 SUFFIX CODES (FULL-TEXT INDEXED)

Suffix Code	Field Name	Example	Commands Used With:
TI	Title (Full Text)	ALUMINUM/TI	EXPAND, SELECT
DE	Descriptor	ALUMINUM ALLOYS/DE <sup>(3)</sup>	EXPAND, SELECT
DE*	Descriptor (primary term)	ALUMINUM ALLOYS/DE*	SELECT ONLY
ID	Identifier	ALUMINUM BRONZES/ID	EXPAND, SELECT
ID*	Identifier (primary term)	ALUMINUM BRONZES/ID*	SELECT ONLY
CS	Corporate Source (Full Text)	LOCKHEED/CS	EXPAND, SELECT

- In these fields a generic entry has been created, e.g., CF=05....includes categories.
- It is customary for library indexers to use single-term descriptors/identifiers and descriptor/identifier phrases. Consequently in DIALOG, when searching the descriptor and identifier fields, retrieval is possible by keying in acceptable bound phrases (i.e., ALUMINUM ALLOYS/DE or ALUMINUM ALLOYS/ID). But it also should be noted that bound phrases cannot be used when searching the title field in the same manner exemplified above. If a searcher wishes to use a phrase for title retrieval, he must qualify it with a full-text specification (ALUMINUM (W) ALLOYS/TI).

SELECT ALUMINUM ALLOYS without specification will default to the descriptor and identifier fields only, not to all occurrences of the two terms. SELECT ALUMINUM, however, will default to all occurrences of the single-term, irrespective of field.

Note that both description and identifier fields have also been reindexed by full-text method so that individual words and subject phrases are searchable.

## RETRIEVAL CODES FOR PANDEX

Prefix Code	Name	Example	Commands Used With
(none)	Key word in title of article	See note below	
AU=	Author(s)	AU=SMITH RA (for R. A. Smith)*	EXPAND, SELECT
CO=	Coden - abbreviation for journal titles and publishers. See separate list.	CO=ELEE	EXPAND, SELECT
GC=	Group Code - principal subject divisions of the Pandex published index. See separate list.	GC=45000 (for experimental medicine)	EXPAND, SELECT
JO=	Journal Name	JO=ELECTRICAL ENGINEER	EXPAND, SELECT
YR=	Year of journal publication	YR=71	EXPAND, SELECT

\*Entry format for authors differs according to data base. PANDEX format is: JONES ML

## RETRIEVAL CODES FOR TRANSDEX

Prefix Code	Name	Command Used With
AU=	Authors (AU=JONES ML)	EXPAND, SELECT
JO=	Journal Name (also other media names, e.g. newspapers, radio stations, etc.)	EXPAND, SELECT
TP=	Document Type (TP=2 is Social Science, TP=1 is scientific technical)	EXPAND, SELECT
CD=	Country Described	EXPAND, SELECT
CS=	Country Source of the information (only used if not the same as the Country Described)	EXPAND, SELECT
Suffix Code		
/TI	Title ( <u>full-text</u> )	SELECT
/ID	Ad-Hoc or Serial Title ( <u>full text</u> )	SELECT
/DE	Descriptors (Both bound and <u>full-text</u> indexed)	SELECT



## APPENDIX G

SDC CAIN

Records in the SDC/CAIN file contain up to 16 different categories of bibliographic information. Thirteen of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories can be searched on subsets of the file using special ORBIT text-searching features. All information in a given citation can be requested by the user through various "print" commands.

*NAL Call Number	*Publication Date
*Document Title	*Document Type
*Author (Personal)	*Source Code
*Author (Corporate)	*ID Number
*Primary Category Code	*Translation
*Secondary Category Code	*Language
*Subject Terms	Notes
Source Reference	Series Statement

At the user's option, searches may be restricted to the most recently entered segment of the file, to provide for easy-to-use online current awareness searching.

January 1, 1974

## RETRIEVAL CODES

A. FULL TEXT LIMITORS

<u>ID</u>	<u>DESCRIPTION</u>	<u>SOURCE</u>
/DE	Subject Terms	Col. 10
/CS	Corporate Source (S)	Col. Y
/TI	Title (S)	Entry 2

B. FORMATTED FIELD CODES

<u>ID</u>	<u>DESCRIPTION</u>	<u>SOURCE</u>
AU=	Author (S)	Entry 3
CC=	Category Codes (S)(Primary & Secondary)	Col. 12-17, 62-67
NO=	NAL Call Number (C) (S)	Entry 9
DT=	Document Type	Col. 157, 171, 172, 21
JN=	Journal Name	Entry 6
LA=	Languages	Col. 22-24
SC=	Source Code	Col. 173
SD=	Search Date (Yr, Mo, Day)	Col. 30-37
SM=	Search Month (Yr, Mo)	Col. 30-35
SY=	Search Year (Yr)	Col. 30-33
RN=	YY-9NNNNNN	Col. 1

C. SOURCE CODES (SC)

SC=USDA	SC=EXT	SC=TRANSL
SC=EXP STN	SC=FAO	

D. DOCUMENT TYPES (DT=)

DT=ARTICLE	DT=SERIAL	DT=REVIEW
DT=MONOGRAPH	DT=BIBLIOGRAPHY	

(S) Field may be sorted

(C) Cascaded Indexing

(To be used with PRINT Command only)



## APPENDIX H

SDC ERIC

Records in the SDC/ERIC file contain up to 19 different categories of bibliographic information. Ten of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories are searchable on subsets of the file through special ORBIT text-searching features. All information in the other categories can be requested by the user through various "print" commands.

*ERIC Accession Number	*Institute Name	Source Reference
*Clearinghouse Code	*Sponsoring Agency Name	Descriptive Note
Clearinghouse Accession Number	EDRS Price	*Descriptors
*Author	Contract/Grant Number	*Identifiers
Title	Bureau Number	Abstracts
*Publication	Availability	*Update Code

Users may restrict searches to either the report (RIE) or the journal (CIJE) parts of the file, or may retrieve on the full file. At the user's option, searches may be restricted to the most recently entered segment of the file, to provide for easy-to-use online current awareness searching.

January 1, 1974

## FILES SEARCHABLE WITH THE ERIC/DIALOG TERMINAL

(Retrieval Codes are listed alphabetically with an example, a description, and the applications to each file.)

Code and Example	Description	Research in Education	Current Index to Journals in Education	Current Project Information	Pace-setters in Innovation	Field Reader Catalog	Exceptional Child Education Abstracts
AC=64	Legislative Authority Code	AC		AC			
AU=SMITH, J. L.	Personal Author	AU	AU=				AU
BN=Er-9-0694	Bureau Number			BN			
CD=ARIZONA 1-2	Congressional District			CD			
CH=CC	Clearinghouse Prefix Code	CH	CH=				CH
CN=OEC-4-16-923	Contract/Grant Number	CN		CN		CN=	CN
DN=NDEA-VIB-149	Report Number	DN				FR-	DN
FR=LEWIS, DIR. HILDA	Field Reader						
GL=AAAU00045	Title III Location & Agency Code						
ID=HEAD START	Identifiers	ID	ID	ID	GL	ID	
IS=RIEDEC70	Issue of RIE	IS			ID		
(IT=) COMPUTERS*	Descriptor	(IT=)	(IT=)	(IT=)	(IT=)	(IT=)	(IT=)
JO=AAUP BULLETIN	Journal Citations	JO	JO				JO
PA=00040000	Project Dollar Amounts			PA	PA		
PB=62-05	Project Starting Date			PB			
PE=73-06	Project Ending Date			PE			
PI=ABBOTT, MAX G.	Project Investigator			PI			
PX=DPS 68-5659	Title III Project Number						
PO=ANDREWS	Project Officer - USOE				PX		
PS=RE LOIT COLL. . . WIS.	Organizational Source	PS		PO	PS	PS	PS
PY=68	Proposal Submission Date			PS			
RB=BBB6362	OE Responsible Branch Code			PY			
RE=04	OE Regions Code Number			RB			
SC=AHF22630	Organizational Source Code						
SP=RMQ6600	Sponsoring Agency Code	SC				RE	
TI=PROBLEM SOLVING	Title	SP		TI	TI		SP

\*IT = is not required, since system automatically address this field.  
 \*\*not encoded.

The AIM and ARM data base of Vocation and Technical Information is also available for online searching.

## APPENDIX I

## SDC INFORM

The records in the SDC/INFORM file contain eight different categories of bibliographic information. Five of these categories (shown with asterisks) are indexed for rapid and direct searching, but all categories can be searched on subsets of the file through special ORBIT text-searching features. All information in a citation can be requested by the user through various "print" commands.

Title	*Publication Year	*Journal Code
*Author	*Index Terms	*Update Code
Source	Abstract	*Company Code (in 1974)

Directly searchable Index Terms are derived from the Abstract and Title categories. At the user's option, searches may be restricted to the most recently entered segment of the file, to provide for easy-to-use online current awareness searching.

## ABI RETRIEVAL CODES

<u>PREFIX CODES</u>	<u>Field</u>	<u>Example</u>	<u>Used with Following Commands:</u>
AU=	Author	AU=Harris, David	EXPAND, SELECT
CO=	Coden	CO=ABI	EXPAND, SELECT

<u>SUFFIX CODES</u>	<u>Field</u>	<u>Example</u>	<u>Used with Commands:</u>
/TI	Title (Full Text Indexed) (a)	Business (F) Cycle/TI	SELECT
/AB	Abstract (Full Text Indexed)	Economy (F)War/AB	SELECT

(a) See DIALOG Terminal Users Reference Manual, pp. 2-51 to 2-59.

## RETRIEVAL CODES (PREFIX-SUFFIX)

Table 1 PREFIX CODES

<u>Prefix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Commands Used With:</u>
AU=	Author	AU=SMITH, John L.	Expand, Select
LA=	Language	LA=AFRI	Expand, Select
JN=	Journal Name	JN=ACADEMIC THERAPY	Expand, Select
YR=	Year	YR=71	Expand, Select
JA=	Journal Announcement	JA=4302	Expand, Select
SC=	Subject Code	SC=00190	Expand, Select
CL=	Classification	CL=01	Expand, Select
CO=	Coden	CO=AAPY-A	Expand, Select

Table 2 SUFFIX CODES

<u>Suffix Code</u>			
/DE	Subject Term	(Full Text)	Select
/ID	Subject Index Phrase	(Full Text)	Select
/TI	Title	(Full Text)	Select
/CS	Corporate Source	(Full Text)	Select
/AB	Abstract	(Full Text)	Select

## APPENDIX K

## SDC MEDLINE

Each record contains 11 different categories of bibliographic information. Seven of these categories (shown with asterisks) are directly searchable, but all categories can be searched on subsets of the file through a special text-searching feature. All information in a given citation can be requested by the user through various "print" commands.

*Author	*Publication Year
Title	*Entry Date
Source Journal	*Main Heading or MH/subheading
*Language	*MeSH Class Number
Accession Number	*Journal Code
Citation Identifier	



## APPENDIX L

## SDC APILIT and APIPAT

## APILIT

CATEGORY NAMES	ABBREVI- ATIONS	SEARCHABLE CATEGORIES	PRINTABLE CATEGORIES
ID Number	ID	X	X
Title	TI		X
Authors	AU	X	X
Author Affiliation	AA	X	X
Entry Date	ED	Date Ranging	
Source Reference	SO		X
Section Headings	SH	X	X
Index Terms	IT	X	X
Free Language Terms	FT		X
Linked Terms	LT		X
Update Code	UP	X	

## APIPAT

CATEGORY NAMES	ABBREVI- ATIONS	SEARCHABLE CATEGORIES	PRINTABLE CATEGORIES
ID Number	ID	X	X
Title	TI		X
Authors	AU	X	X
Entry Date	ED	Date Ranging	
Source Reference	SO		X
Patent Number	PN	X	
Section Headings	SH	X	X
Index Terms	IT	X	X
Free Language Terms	FT		X
Linked Terms	LT		X
Update Code	UP	X	

# CHEMICAL MARKET ABSTRACTS RETRIEVAL CODES

Table 1 Prefix Codes

<u>Prefix Code</u>	<u>Descriptor</u>	<u>Example</u>	<u>Used With Following Commands:</u>
CC=	Country Code	CC=3ARG	EXPAND, SELECT
CN=	Country Name	CN=ARGENTINA	EXPAND, SELECT
CO=	Company Name	CO=Abbott Laboratories	EXPAND, SELECT
DT=	Date	DT=73/06	EXPAND, SELECT
EC=	Event Code	EC=150	EXPAND, SELECT
EN=	Event Name	EN=Contracts	EXPAND, SELECT
JO=	Journal Name	JO=Chem Age	EXPAND, SELECT
PC=	Product Code	PC=2841002	EXPAND, SELECT
PN=	Product Name	PN=Acrylic Fibers	EXPAND, SELECT
TN=	Trade Name	TN=Dow Corning	EXPAND, SELECT

Table 2 Suffix Codes

<u>Suffix Code</u>	<u>Field Name</u>	<u>Example</u>	<u>Used With Following Commands:</u>
/AB	Abstract (full-text indexed)	Japan(F)Oil/AB	SELECT
/DE	Descriptor (full-text indexed)	Japan(F)Oil Products/DE	SELECT



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