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AN INDEX TO THE MINUTES OF THE INTERNATIONAL PURDUE WORKSHOP ON--ETC(U)
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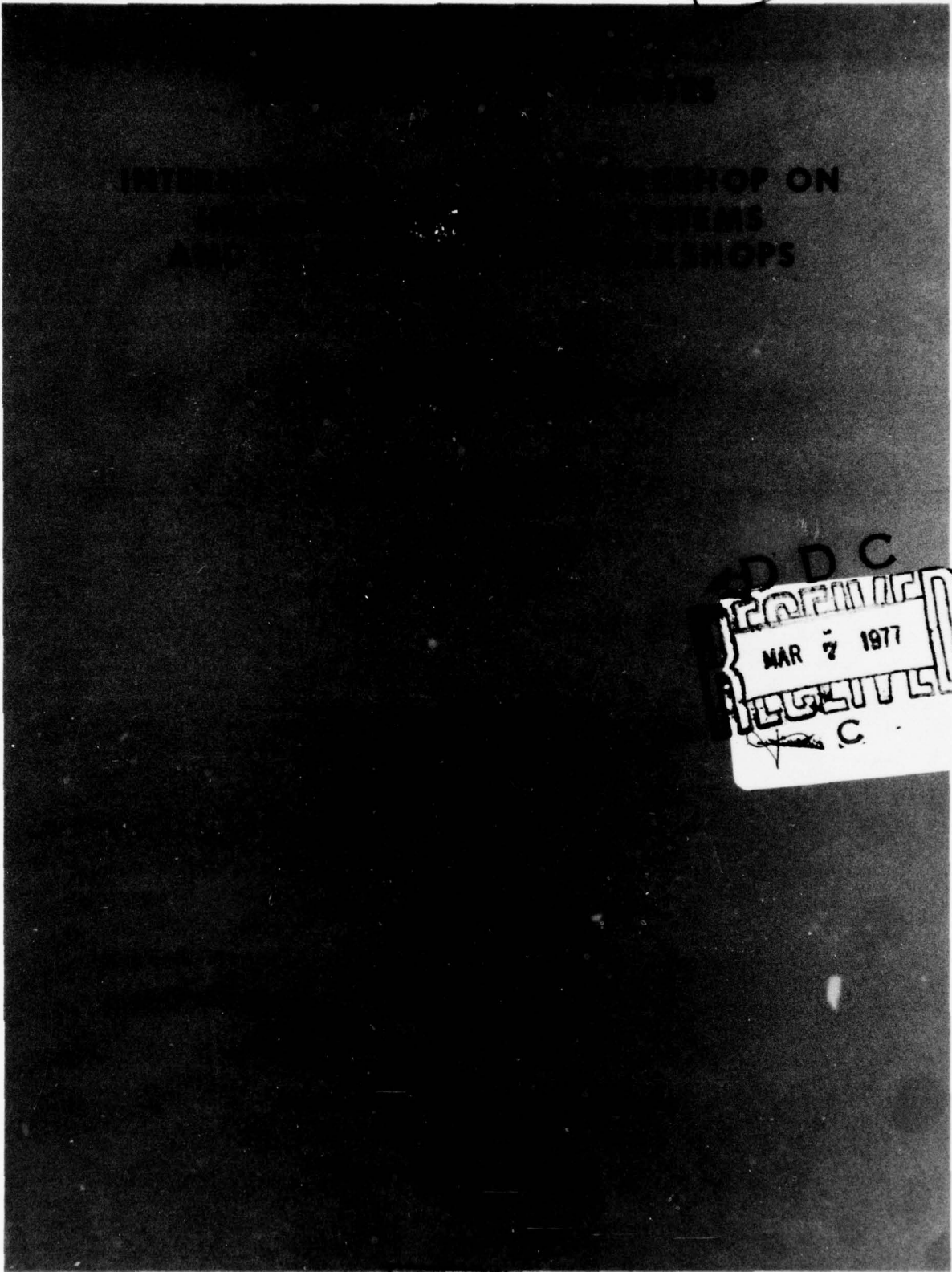
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INTERNATIONAL WORKSHOP ON
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14

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Prepared by

Theodore J. Williams

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FOREWORD

This work is being carried out to make the results of the work of the International Purdue Workshop on Industrial Computer Systems more readily available to the user community who may profit from it.

This material is being published as part of Contract N00014-76-C-0732 with the Office of Naval Research, United States Department of the Navy, entitled, The International Purdue Workshop on Industrial Computer Systems and Its Work in Promoting Computer Control Guidelines and Standards.

This contract provides for this Index of the contents of the several Workshop Minutes, an editing of the significant material developed by the Workshop participants and a summary document describing the Workshop and its operation.

We are grateful to the United States Navy for their great help in this regard.

Theodore J. Williams

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SYMBOLY AND GLOSSARY

INDEXING SYMBOLY

All references to the Workshop Minutes in this Index are coded as follows:

a b, c, d

where,

a, designates the number of the meeting in a particular series if there is more than one of these.

b, denotes the Workshop series involved.

c, denotes the volume or part number of the Minutes of a particular meeting if more than one - Roman numerals

d, the page number or numbers.

As an example, page 229 of Part I of the Minutes of the Second Annual Meeting of the International Purdue Workshop on Industrial Computer Systems would be

2A, I, 229

Likewise, a reference including pages 9 and 19 of the Minutes of the Workshop on Manufacturing Languages and Software Systems would be

M, 9, 19

Code a was not used in this particular example since there was only one volume of the Minutes of that Workshop.

Under b the following symbols will be used:

L - Purdue Workshop on Standardization of Industrial Computer Languages (9 total)

H - Purdue University Meetings of the ISA Computer Control Workshop (3 total)

- A - Annual Meetings, International Purdue Workshop on Industrial Computer Systems (3 reported, 1973-1975)
- R - Spring Regional Meetings, International Purdue Workshop on Industrial Computer Systems (3 reported, 1974-1976)
- M - Workshop on Manufacturing Languages and Software Systems (1 only held, i.e., no code used under letter a here)

NOTES

1. Listings of companies in the subject index indicates the locations of technical contributions made by employee workshop attendees and contributions in the name of the company itself instead of in their own name.
2. Educational and academic titles of authors and contributors have been included in the Index of Authors and Contributors however and whenever supplied by these individuals with their writings. We regret any omissions or incorrect listings which may have occurred here.
3. Because of the different styles of producing Lists of Registrants and Attendees between the different Regional Branches and the different Workshop Meetings (i.e., some included titles, some did not,) all educational and academic titles have been deleted from the List of Workshop Registrants.
4. Organizations whose names are commonly abbreviated in everyday practice, such as IEEE for the Institute of Electrical and Electronic Engineers, are so listed as their main listing in this Index.

GLOSSARY OF ABBREVIATIONS

A listing of common organizational abbreviations along with several acronyms from the computer field as used in this Index. In most cases acronym names of computer languages are not included.

ACAC	Associate Committee for Automatic Control of Canada
ACOS	Automatic Control Systems Division of the Instrument Society of America
ALCOA	Aluminum Company of America
ANSI	American National Standards Organization
APT	Automatic Programmed Tools, A Language for Programming Machine Tools
ARC	Automation Research Council, A Standing Committee of the American Automatic Control Council
BASF	Badische Anilen und Soda Fabrick, A German Chemical Company
CAMAC	Computer Aided Measurement and Control, A Set of Standards for Hardware for the Nuclear Instrumentation Field
CAM/I	Computer Aided Manufacturing - International, A Promotional Organization for that Field

CERCI	A French Systems Engineering Company Active in the Computer Field
CHEMPID	Chemical and Petroleum Industries Division of the Instrument Society of America
CRT	Cathode Ray Tube
DAC	Data Acquisition and Control Committee, Computer Society, Institute of Electrical and Electronic Engineers
DAHCOB	Data Handling and Computations Division of the Instrument Society of America
ECMA	European Computer Manufacturers Association
ESONE	European Standard of Nuclear Electronics
FORTREV	The Revision of the FORTRAN Standard Now (1977) Under Study
HDLC	High Level Data Link Control, A Message Transfer Protocol Now Being Standardized (1977)
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IFAC	International Federation of Automatic Control

IFIP	International Federation for Information Processing
ISA	Instrument Society of America
ISO	International Standards Organization
JEIDA	Japanese Electronic Industries Development Association
LTPL	Long Term Procedural Language
MACTAB	Measurement and Control Technical Advisory Board of ANSI (superseded by MACSMB)
MACSMB	ANSI Measurement and Control Standards Management Board
NIM	Nuclear Instrument Modules Working Group, National Bureau of Standards
POL	Problem Oriented Language
SC	Standards Committee
SDLC	Synchronous Data Link Control, A Data Transfer Protocol Developed by the IBM Company
SESA	A French Systems Engineering Company Active in the Computer Programming Field

SINTEF The Industrial Research Agency of the Technical
 University of Norway, Trondheim, Norway

TC Technical Committee

VDI/VDE The German Professional Engineering Society

WG Working Group

BACKGROUND INFORMATION ON THE WORKSHOP

The International Purdue Workshop on Industrial Computer Systems, in its present format, came about as the result of a merger in 1973 of the Instrument Society of America (ISA) Computer Control Workshop with the former Purdue Workshop on the Standardization of Industrial Computer Languages, also co-sponsored by the ISA. This merger brought together the former workshops' separate emphases on hardware and software into a stronger emphasis on engineering methods for computer projects. Applications interest remains in the use of digital computers to aid in the operation of industrial processes of all types.

The ISA Computer Control Workshop had itself been a renaming in 1967 of the former Users Workshop on Direct Digital Computer Control, established in 1963 under Instrument Society of America sponsorship. This Workshop in its annual meetings had been responsible for much of the early coordination work in the field of direct digital control and its application to industrial process control. The Purdue Workshop on Standardization of Industrial Computer Languages had been established in 1969 on a semiannual meeting basis to satisfy a widespread desire and need expressed at that time for development of standards for languages in the industrial computer control area.

The new combined international workshop provides a forum for the exchange of experiences and for the development of guidelines and proposed standards throughout the world.

Regional meetings are held each spring in Europe, North America and Japan, with a combined international meeting each fall at Purdue University. The regional groups are divided into several technical committees to assemble implementation guidelines and standards proposals on specialized hardware and software topics of common interest. Attendees represent many industries, both users and vendors of industrial computer systems and components, universities and research institutions, with a wide range of experience in the industrial application of digital systems. Each workshop meeting features tutorial presentations on systems engineering topics by recognized leaders in the field. Results of the workshop are published in the Minutes of each meeting, in technical papers and trade magazine articles by workshop participants, or as more formal books and proposed standards. Formal standardization is accomplished through recognized standards-issuing organizations such as the ISA, trade associations, and national standards bodies.

The International Purdue Workshop on Industrial Computer Systems is jointly sponsored by the Automatic Control Systems Division, the Chemical and Petroleum Industries Division, and the Data Handling and Computations Division of the Instrument Society of America, and by the International Federation for Information Processing as Working Group 5.4 of Technical Committee TC-5.

The Workshop is affiliated with the Institute of Electrical and Electronic Engineering through the Data Acquisition and Control Committee of the Computer Society and the Industrial Control Committee of the Industrial Applications Society, as well as the International Federation of Automatic Control through its Computer Committee.

Please see Report Number 77 of the Purdue Laboratory for Applied Industrial Control, entitled, The International Purdue Workshop on Industrial Computer Systems and Its Work in Promoting Computer Control Guidelines and Standards, revised September 1976, a document in this series, for a more complete discussion of Workshop organization and operation.

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IEEE Data Acquisition and Control
Committee

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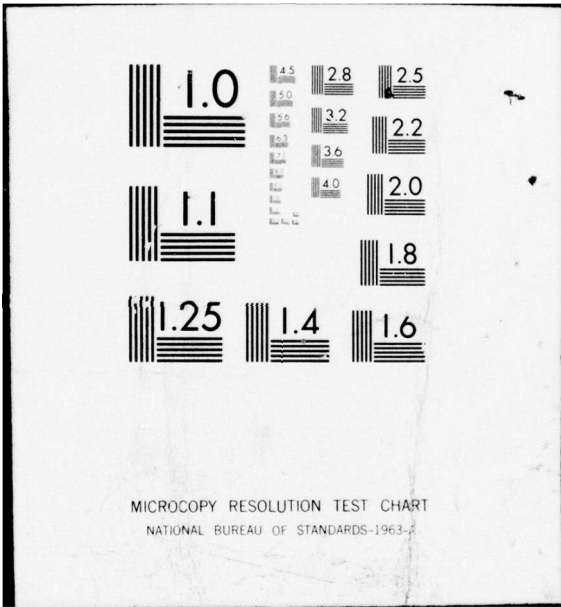
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Sage, Morley	1L, 88 Glossary; LTPL
Scanlon, J. P.	2R, I, 9; 3R, I, 9
Shorter, D. N.	LTPL
Taylor, A.	1R, 8 LTPL; POL
Thompson, K.	Safety and Sec.
Turner, Geoffrey	2L, I, 75; 7L, 149 LTPL
Wand, I. C.	2R, I, 16; 3R, I, 19 LTPL
Webb, J. T.	2R, I, 14 LTPL
Wild, A.	3R, I, 12
Wright, S. B.	3R, I, 9
Wright, Trevor J.	4L, 313

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Adams, James	1L, 85 Func. Rqmts.; Glossary
Adams, Merritt E.	1A, I, 190; 1R, 175; 3R, I, 66 Chm. LTPL-A; Steering
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Adney, Eugene M.	6L, 106
Aldredge, Edmond S.	1L, 90; 2L, I, 79; 4L, 318; 5L, 196; 6L, 106 Chm. Glossary; Chm. Man/ Machine; Steering
Alford, Joseph S.	3H, 64; 2A, I, 230 Man/Machine
Allen, Bruce S.	1A, I, 181; 3R, I, 57
Alshuk, Thomas J.	2A, I, 230 IDT

Appleby, Robert H.	1L, 86; 2L, I, 75; 3L, I, 180; 7L, 148 Bylaws; LTPL
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Bailey, Samuel J.	1L, 86; 2L, I, 74; 5L, 192; 1H, 28
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Barker, John E.	9L, 94
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Barnstone, Leonard A.	1L, 87; 2L, I, 75 Func. Rqmts.

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Bentsen, P. Craig	Safety and Sec.
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Bernhardt, Robert	3R, I, 59
Berta, Kornel	3L, I, 179; 5L, 192 LTPL
Beth, Allan, F.	3A, I, 139; 2R, I, 71 POL

Bishop, Asa O.	2A, I, 237; 2R, I, 77 POL
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Brevik, Dennis J.	3L, I, 180 LTPL; POL
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Byatt, Frank	1L, 90 Glossary
Campbell, Robert L.	8L, I, 115; 3R, I, 60 LTPL
Carl, Harry L.	9L, 94; 1R, 171
Carlo-Stella, Guedo	2L, I, 74 POL
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Cartright, Lionel M.	1L, 88; 2L, I, 77; 3L, I, 180; 4L, 316; 5L, 194; 6L, 105; 9L, 95; 3H, 64; 1A, I, 186; 2A, I, 233; 3A, I, 143; 2R, I, 74; 3R, I, 62 Chm. Nominations; Chm. Organization; Chm. Purdue America; FORTRAN: SP61; Glossary; LTPL; Man/Machine; POL; Steer- ing
Castellan, N. John, Jr.	9L, 95; 2A, I, 232 POL

Castoe, Ruth A.	4L, 317; 5L, 195; 8L, I, 113 Chm. Glossary; Steering
Chew, Robert L., III	4L, 316; 5L, 194; 6L, 105 LTPL
Chhabra, Paul S.	2R, I, 77 FORTRAN
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Clancy, Gerald F.	7L, 148 LTPL
Clark, Charles	IDT
Clark, D. R.	3H, 63
Cline, Marvin	2L, I, 77 POL
Clough, John E.	1A, I, 182; 1R, 170 POL
Coffey, Thomas	1H, 30
Cohen, Louis W.	4L, 313; 5L, 191; 6L, 103 POL
Conley, Richard M.	2H, 118 IDT
Connolly, George R.	1L, 85; 2L, I, 74 Func. Rqmts.
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Cousins, Andrew S. R.	3L, I, 181; 4L, 317 Func. Rqmts.
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Crosier, Robert G.	2A, I, 228; 1R, 169 IDT
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Crowder, Robert S.	2H, 115; 1A, I, 183; 2R, I, 72; 3R, I, 59 Wksp. Vice Chm. Planning; Chm. Man/Machine; Steering
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Darge, Don P.	7L, 149
David, Gary W.	9L, 91; 3A, I, 139; 2R, I, 71 POL
Day, Robert E.	1A, I, 182; 2A, I, 228 IDT
Deliyannides, John S.	1L, 90; 2L, I, 77 Func. Rqmts.
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Dennis, Ralph C.	5L, 193; 6L, 104; 8L, I, 114 Chm. LTPL; Steering
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Dhawan, Satish	FORTTRAN
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Dobrohotoff, V. V.	1L, 88; 2L, I, 77
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Emery, Charles C., Jr.	2L, I, 79; 3L, I, 183 LTPL
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Epperly, Albert D.	1L, 86; 8L, I, 114 FORTRAN
Farmer, Charles	1R, 171; 3R, I, 61
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Field, William B.	1H, 31; 2H, 118; 3H, 66; 1A, I, 189; 2A, I, 236; 3A, I, 147; 1R, 175; 2R, I, 77 Wksp. Vice Chm. for Planning; Chm. Safety and Sec. Steering
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Fischer, Melvin M.	1A, I, 186 IDT
Fischer, Michael	2A, I, 235; 2R, I, 75

Flath, Richard C.	3L, I, 181; 4L, 317; 5L, 194; 6L, 105; 3A, I, 144; 1R, 173; 3R, I, 62 POL
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Foreman, Roger	3L, I, 180 Func. Rqmts.
Fortier, James B.	2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 75
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Frey, Andrew	3L, I, 181; 3A, I, 142
Friedman, Stan W.	2L, I, 76; 3L, I, 181 LTPL
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Frost, David R.	2L, I, 76; 3L, I, 180; 1A, I, 184; 2A, I, 232; 1R, 172; 2R, I, 73; 3R, I, 61 FORTRAN: SP61; LTPL
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Harris, William J.	1L, 89; 2L, I, 78; 3L, I, 182 Func. Rqmts.; Glossary
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Harter, Edgar J.	1L, 86; 2L, I, 75; 4L, 314; 5L, 192 LTPL

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Loving, Donald K.	8L, I, 118 LTPL
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Osborne, William (Bill) H.	9L, 97 POL
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Pike, Herbert E., Jr.	1L, 87; 2L, I, 76; 3L, I, 180; 4L, 315; 5L, 193; 6L, 104; 7L, 152 Chm. LTPL; Glossary; Steering

Pink, John F.	1H, 30
Pistole, David C.	Func. Rqmts.; Glossary
Pitrak, James E.	1H, 27
Pittman, Vories	2A, I, 233 FORTRAN
Powell, Bruce E.	1L, 86 Func. Rqmts.
Pridmore, James A., Jr.	7L, 147 LTPL
Puckett, Sherman C.	1H, 28
Putman, R. E. J.	Func. Rqmts.
Radcliffe, Phillip S.	1L, 86; 2L, I, 75
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Read, Richard	3A, I, 140
Reid, David E.	9L, 92 LTPL
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Risku, David M.	1L, 88
Romeu, Frank J.	2L, I, 76
Rominger, Michael C.	3H, 64; 2A, I, 230 Safety and Sec.
Rosica, Gabriel A.	1H, 29; 1A, I, 184
Rowe, Donald L.	4L, 319
Ruebhausen, Fred E.	2L, I, 75; 4L, 314; 5L, 192; 9L, 94; 2A, I, 231; 1R, 171 Chm. POL; Func. Rqmts. IDT; Steering
Russell, R. Douglas	1L, 90; 2L, I, 79 Func. Rqmts.; Glossary
Rutledge, Gary J.	9L, 93; 1A, I, 184 POL
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Schultz, Jim	1R, 171
Schunk, Jerry H.	1A, I, 181; 2A, I, 227
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Short, Thomas H.	8L, I, 118 LTPL

Sigler, R. C.	Man/Machine
Signor, Richard W.	3A, I, 141; 2R, I, 73; 3R, I, 60 FORTRAN
Silver, Leonard	1L, 88
Simon, Lyle L.	2A, I, 229; 3R, I, 58; M, 183
Sims, William F.	1L, 90; 2L, I, 79; 3L, I, 183; 5L, 196; 6L, 106; 7L, 153; 2A, I, 237; 3A, I, 147; 1R, 175; 2R, I, 78; 3R, I, 66 Chm. Opr. Sys-A; Func. Rqmts.; Glossary; LTPL
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Smolen, Helen	8L, I, 114 LTPL
Solberg, Todd N.	1A, I, 189
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Spencer, Everett H.	2L, I, 76 POL
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Stadnick, David H.	2R, I, 71 POL
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Stein, Philip G.	2A, I, 234 BASIC; FORTRAN
Stella, Richard R.	8L, I, 116
Stenquist, John D.	9L, 95; 3R, I, 63
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Stockwell, Russell W.	2L, I, 76
Stokely, Robert J.	2H, 116; 3H, 64; 1A, I, 184; 2A, I, 231; 1R, 171 Chm. Safety and Sec.; Steering
Stone, Kirby L.	1H, 28
Strother, Robert W.	3R, I, 63
Summers, Bill	9L, 92 POL
Sutter, Neil G.	2R, I, 73
Swanson, Carl D.	1L, 85
Swanson, Donald M.	M, 186

Talbot, James E.	1L, 88; 2L, I, 77; 3L, I, 181 Glossary
Talda, Paul M.	7L, 147; 8L, 113; 9L, 91
Tavano, Richard E.	1R, 173 Man/Machine; POL
Taylor, S.	FORTRAN; SP61
Teeple, C. R.	1R, 170
Temple, R. H.	2L, I, 74; 3L, I, 179 LTPL
Thomas, Richard F., Jr.	9L, 95; 1A, I, 187; 1R, 173
Thomas, T. B.	3L, I, 182 FORTRAN
Thompson, Dick	3R, I, 57
Tiers, John	2R, I, 72
Tobey, Gene	2A, I, 228 IDT; Safety and Sec.
Trinkler, Charles J.	Func. Rqmts.
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Ufret, Carlos M.	2A, I, 234; 2R, I, 76
Union, Donald C.	1L, 88 Glossary; Steering
Unklesbay, Kenneth	M, 186
Uram, Robert	1L, 90
Utsumi, Takeshi	1L, 89; 2L, I, 78; 3L, I, 182 POL
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Vinz, Frank L.	Man/Machine
Vollman, Charles H.	3R, I, 66
Wade, Harold L.	1H, 29
Wagner, Steven J.	3R, I, 60
Wagner, William F.	2L, I, 75 Glossary
Waldmann, Charlie	Man/Machine

Wang, Wilson S.	M, 185
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Weber, H. L.	1L, 87 Func. Rqmts.; Glossary
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Wilburn, Norman P.	4L, 319; 5L, 196; 6L, 106; 7L, 153 Chm. POL; Steering
Willard, Frank G.	IDT
Willard, Robert E.	3H, 64 Man/Machine
Williams, Theodore J.	1L, 89; 4L, 317; 5L, 195; 6L, 106; 7L, 152; 8L, I, 116; 9L, 96; 1H, 31; 2H, 117; 3H, 65; 1A, I, 187; 2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 14, 75; 3R, I, 19, 64; M, 185 Wksp. Gen'l. Chm.; FORTRAN; Glossary; Steering
Williams, Wallace D.	1H, 27; 2H, 115; 1R, 170 Chm. Safety and Sec.; IDT; Steering

Williamson, Robert A., Jr.	3A, I, 141; 2R, I, 73; 3R, I, 60
Willmott, Thomas L.	1L, 87; 2L, I, 76; 3L, I, 180; 4L, 315; 6L, 104; 9L, 93; 3H, 64; 1A, I, 184; 2A, I, 230; 3A, I, 140; 1R, 171; 2R, I, 73 Chm. Bylaws; Chm. IDT; FORTRAN; LTPL; Steering
Witte, Bruno F.	3R, I, 65 FORTRAN
Yasnyi, Donald M.	7L, 150 LTPL
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PART IV

LIST OF COMPANIES, RESEARCH
INSTITUTES, UNIVERSITIES AND OTHER
ORGANIZATIONS REPRESENTED

Addresses presented here are those given by the registrants when attending the Workshop in question. No attempt has been made here to keep up with changing company names, missions or locations.

INDUSTRIAL COMPANIES

AUSTRIA

Oester Bundesbahnen GD/IK 2R, I, 14; 3R, I, 16
A-1010 Wien
Seilerstätte 1
AUSTRIA

SGAE 3R, I, 17
Lenaugasse 10
Vienna 1080
AUSTRIA

BELGIUM

Commission Des Commun, 3R, I, 10
Europeennes
JE 4/21A
Rue De La Loi
200 B-1049
Bruxelles
BELGIUM

EBES Grote Netten 3R, I, 11
Merksemsteenweg 233
B-2100 Devrne
BELGIUM

Euratom CBNM 3R, I, 12
BELGIUM

CANADA

Aluminum Company of Canada 1L, 85; 3A, I, 139
(ALCAN)
Arvida
Quebec
CANADA

Canadian Industries, Limited 3R, I, 58
CIL House
Box 10 Montreal
Quebec
CANADA H3C 2R3

Datagen Ltd. Richelieu Park Hull, Quebec CANADA	7L, 148
English Electric - AEI CDA Limited 766 King Street West Toronto, Ontario CANADA M5V 1N7	1A, I, 183; 2A, I, 230
Gulf Oil of Canada Box 460 Station 4 Toronto 116 CANADA	3A, I, 142
Imperial Oil Enterprises, Limited P. O. Box 3015 Sarnia, Ontario CANADA N7T 7N1	1H, 29; 3A, I, 143; 1R, 172; 3R, I, 62
Ontario Hydro 620 University Avenue H14 F9 Toronto Ontario CANADA M5G 1X6	2A, I, 234; 3A, I, 145; 2R, I, 75
Quebec Iron and Titanium Corporation P. O. Box 40 Sorel Quebec CANADA	1L, 89; 2L, I, 78; 3L, I, 182; 9L, 96; 1A, I, 187
SIDBEC-DOSCO Usine de Contrecoeur C. P. 100 Contrecoeur P. Quebec CANADA	3R, I, 64

Electricite de France, Etudes et Recherches 6, Quai Watier F-78400 Chatou FRANCE	2R, I, 10; 3R, I, 11
ERIA-ECA-Automation 182 Rue de Vaugirard F-75015 Paris FRANCE	3R, I, 11
Ferney-Voltaire FRANCE	2R, I, 11
IRIA Domaine de Voluceau F78150 Rocquencourt Le ChesNay FRANCE	3A, I, 144; 2R, I, 12; 3R, I, 14
Orme des Merisiers F-91190 Gef-sur Yvette BP 2 FRANCE	2R, I, 14
Philips Gloeilampenfabrieken 105 rue de Paris 93002 Bobigny FRANCE	7L, 151
Saint-Gobain Techniques Nouvelles Company 24 Blvd Georges Clemenceau 92400 Courbevoie FRANCE	1A, I, 188
SESA 23 Avenue de Neuilly Paris 16ème FRANCE	2L, I, 78; 3L, I, 182; 4L, 318; 5L, 195
Societe Crouzet FRANCE	2R, I, 15

Societe d'Etudes des Systemes
d'Automation (SESA)
20 rue Jean Jaures
Puteaux
FRANCE 92800

2A, I, 235; 3R, I, 17

Thomson-CSF
Laboratoire Central de
Recherches
Domaine de Corbevilles
F-91401 Orsay
FRANCE

3R, I, 18

GERMANY

AEG - Telefunken
Buecklestrasse
Konstanz D 775
GERMANY

2A, I, 227; 3A, I, 139;
2R, I, 9; 3R, I, 9

AEG Telefunken
50 Hohenzollerndamm
1000 Berlin 33
GERMANY

9L 91

Brown, Boveri and Cie
62 Neustadter Street
6800 Mannheim
GERMANY

4L, 314; 8L, I, 113;
2A, I, 228; 2R, I, 10;
3R, I, 10

Bundesbahn-Zentralen
D-800 München 2
Arnulfstr. 19
GERMANY

2R, I, 10; 3R, I, 10

DESY - F58
Notkestieg 1
D-2000 Hamburg 52
GERMANY

3R, I, 10

Dornier Systems EET
Postfach 648
D-799 Friedrichhafen
GERMANY

2R, I, 10; 3R, I, 11

ESG - Elektronik Systems GmbH Postfach 860305 Arabellastrasse 4 Muenchen D-8 GERMANY	8L, I, 114; 9L, 93; 1A, I, 183; 2A, I, 229; 3A, I, 141; 2R, I, 10, 72
ESOC - European Space Operations Center Kernforschungszenstrum D-61, Darmstadt Rob. Bosch-Str. 5 GERMANY	2R, I, 11; 3R, I, 12
Fachhochschule Fuer Technik Speyerer Strasse 4 D 68 Mannheim GERMANY	3A, I, 141; 3R, I, 12
Fakultaet Fuer Physik Herrman Herderstr. 3 D-7800 Freiburg GERMANY	3R, I, 12
Gesellschaft fur Kernforschung Projekt PDV 79 Bismarck Street F5 Karlsruhe GERMANY	2A, I, 231; 3A, I, 141; 2R, I, 11; 3R, I, 12, 61
Gesellschaft fur Mathematic und Datenverarbeitung P. O. Box 1240 Schloss Birlinghoven D5205 St. Augustin GERMANY	3R, I, 13, 61
GPP Gesellschaft fur Prozessrechner-Programmierung mbH Balanstrasse 138/I 8 Munchen 90 GERMANY	2A, I, 231; 3A, I, 142; 2R, I, 73

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HOESCH-Werk AG Zentrale Datenverarbeitung Nortkirchenstr. 101 D-46, Dortmund GERMANY	2R, I, 11; 3R, I, 13
IDAS GmbH (Informations-, Daten- und Automationssys- teme) Kornmarkt 9 Limburg (Lahn) GERMANY 6250	2R, I, 12, 74; 3R, I, 13
INTERATOM D-5060 Bensberg GERMANY	3R, I, 14
Kernforschungsanlage Zentrallab F. Elektronik Postfach 1913 D-5170 Juelich GERMANY	3R, I, 15
KFA Juelich Pier Bauweg 6 BRD Juelich D5161 GERMANY	2A, I, 233
Kloeckner-Werke AG P. O. Box 210220 D-2800 Bremen 21 GERMANY	2A, I, 233; 3R, I, 15
Krantz Computer D 51 Aachen Julicherstrasse GERMANY	3A, I, 144

Math. Beratungs-Und
Programmierungsdienst
Kleppingstr. 26
D-4600 Dortmund
GERMANY

3R, I, 15

Scientific Control Systems
(GmbH) SCS
Oehleckerring 40
D2000 Hamburg 62
GERMANY

1A, I, 188; 2A, I, 235;
3A, I, 146; 2R, I, 14;
3R, I, 17

SCS - Scientific Controls
Systems GmbH
D-4300 Essen 1
III. Hagen 43
GERMANY

2R, I, 14

Siemens AG
Abt. T 2MS
Braunschweig
Acherstr. 22
GERMANY

2R, I, 14; 3R, I, 17

Siemens A. G.
Rheinbrückenstrasse 50
Karlsruhe D-7500
GERMANY

4L, 318; 5L, 195; 6L, 106;
7L, 152; 1H, 31; 2R, I, 14;
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Siemens Aktiengesellschaft
Erlangen
Gunter Scharowsky Street
852 Erlangen
GERMANY

1A, I, 188

UNICOMP
D-7513
Stutensee-Blankenloch
Singerstr. 3
GERMANY

2R, I, 16

Werkzeugmaschinenlabor
RWTH Aachen
D-5100 Aachen
GERMANY

2R, I, 16

Zenstrallabor f. Elektronik 2R, I, 16
Kernforschungsanlage Jülich
Postfach 365
D-517 Jülich 1
GERMANY

ITALY

Societa Italiana Avionica 2R, I, 15
Torino
ITALY

JAPAN

Ando Denki Co. 3R, I, 29
4-19-7 Kamata
Ota-ku
Tokyo
JAPAN

Anritsu Denki Co. 2R, I, 39
1800 Onna
Atsugi-shi
Kanagawa Prefecture
JAPAN

Asahi Glass Co., Ltd. 3R, I, 29
2-1-2 Marunouchi
Chiyoda-ku
Tokyo
JAPAN

Chino Seisakusho Co. 3R, I, 29
1145 Kamei
Ohimachi
Iruma city
Saitama
JAPAN

Chiyoda Chemical Engineering 4L, 314; 5L, 191; 6L, 103;
and Construction Company, 7L, 148; 8L, I, 113;
Limited 2A, I, 228; 3A, I, 140;
1580 Tsurumi-cho 2R, I, 39; 3R, I, 29
Tsurumi-ku
Yokohama City
JAPAN

- Chiyoda Joho Kiki Co., Ltd. 2R, I, 39
5-3 Kojimachi
Chiyoda-ku
Tokyo
JAPAN
- Daicel Co. 2R, I, 39; 3R, I, 29
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Higashi-ku
Osaka
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- Daido Steel Co., Ltd. 3R, I, 29
1-11-18 Nishiki
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Nagoya
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- Electrotechnical Laboratory 2A, I, 229; 2R, I, 39;
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6-1 Nagata Machi
Chiyodaku
Tokyo
JAPAN 100
- Electrotechnical Laboratory 5L, 192; 6L, 104; 8L, I, 114;
Japanese Government 2R, I, 39
5-4-1 Mukodaimachi
Tanashi-shi
Tokyo
JAPAN
- Fuji Electric Co., Ltd. 2R, I, 40; 3R, I, 30
1 Fujimachi
Hino-shi
Tokyo
JAPAN
- Fuji Electric Co., Ltd. 2R, I, 40
1-1, Tanabeshinden
Kawasaki-ku
Kawasaki-shi
Kanagawa Prefecture
JAPAN

Fuji Electric Co., Ltd. Technical Section of Water Treatment 11, Yurakucho 1-chome Chiyoda-ku JAPAN	2R, I, 40
Fuji Photo Film Co., Ltd. Minamiashigara Kanagawa JAPAN	3R, I, 30
Fujitsu Limited Furukawa Sogo Bldg. 6-1, Marunouchi 2-chome Chiyoda-ku Tokyo 100 JAPAN	2R, I, 40
Fujitsu Limited 1015 Kamikodanaka Nakaharaku Kawasaki JAPAN	3A, I, 141; 2R, I, 40; 3R, I, 30
Fujitsu Limited 3-21-8, Nishi-shinbashi Minato-ku JAPAN	2R, I, 40
Fujitsu, Ltd. 5-35-10 Shinbashi Minato-ku Tokyo JAPAN	3R, I, 30
Fujitsu Limited 6-1-1, Shinbashi Minato-ku JAPAN	2R, I, 40
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Harami Electric Works, Co. 3996 Izumi-cho Totsuka-ku Yokohama JAPAN	3R, I, 31
Hitachi, Ltd. 1-1 Higashi Koigakubo Kokubungi-shi Tokyo JAPAN	2R, I, 41
Hitachi, Limited 4026 Kuji-machi Hitachi-shi Ibaraki-ken JAPAN	1R, 171
Hitachi Ltd. Naka Works 882 Ichige Katsuta, Ibaraki JAPAN	4L, 316
Hitachi, Limited, Omika Works 5-2-1 Omika Cho Hitachi-Shi Ibaraki-Ken 319-12 JAPAN	5L, 193; 7L, 150; 9L, 94; 1A, I, 185; 2A, I, 231; 3A, I, 142
Hitachi, Ltd. Shiba-Nishikubo-Sakuragawa Minato-ku Tokyo JAPAN	3R, I, 30
Hokushin Electric Works, Limited 30-1 3 Chome Shimomaruko Ohta-Ku Tokyo JAPAN 144	8L, I, 115; 1A, I, 185; 3A, I, 142; 2R, I, 12,41; 3R, I, 31

IBM Japan
3-2-12 Roppongi
Minato-ku
Tokyo
JAPAN

2R, I, 41; 3R, I, 31

Idemitsu Oil Co.
1-1 Miyamae-cho
Tokuyama
Yamaguchi
JAPAN

3R, I, 31

Intel Japan Corp.
1-6-10, Uchikanda
Chiyoda-ku
Tokyo
JAPAN

2R, I, 41

Ishikawajima Harima Heavy
Industry Ltd.
2-2-1 Ohtemachi
Chiyoda-ku
Tokyo
JAPAN

3R, I, 31

Iwatsu Electric Co., Ltd.
2969-1, Ishikawacho
Hachiojishi
Tokyo
JAPAN

2R, I, 41; 3R, I, 31

Iwatsu Electric Co., Ltd.
1-7-4, Kugayama
Suginami-ku
JAPAN

2R, I, 41

Japan Electronic Industry
Development Association
3-5-8 Shiba-koen
Minato-ku
Tokyo
JAPAN

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Japan National Railway (Laboratory) Kunitachi Tokyo JAPAN	3R, I, 38
Japan Radio Co., Ltd. 5-1-1, Shimorenjaku Mitaka-shi JAPAN	2R, I, 41; 3R, I, 32
Japan System Engineering Co., Ltd. 2-9-20, Shirako Wako Saitama Prefecture JAPAN	2R, I, 41; 3R, I, 32
Kawasaki Heavy Industries, Ltd. 1-1 Kawasaki-cho Akashi-shi Hyogo Prefecture JAPAN	2R, I, 41; 3R, I, 31
Kyowa Electronics Instruments Co. 3 Choufugaoka Chofu-shi Tokyo JAPAN	2R, I, 42
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Meidensha Electric Mfg. Co. Ltd. 1-5-2 Kitashinjuku Sinjuku-ku Tokyo JAPAN	2R, I, 42

Meidensha Electric Mfg.
Co., Ltd.
5-5-5 Osaki
Shinagawa
Tokyo
JAPAN

3R, I, 32

Mitsubishi Electric
Corporation
Kamakura Works
325 Kamimachiya
Kamakura City
Kanagawa 247
JAPAN

4L, 317; 6L, 105; 8L, I, 116;
9L, 95; 2A, I, 233; 3A, I, 144;
2R, I, 42, 75; 3R, I, 32

Mitsubishi Heavy Industries,
Ltd.
1-1 Akunoura-machi
Nagasaki
JAPAN

2H, 116

Mitsubishi Heavy Industries,
Ltd.
2-5-1, Marunouchi
Chiyoda-ku
Tokyo
JAPAN

5L, 194; 2R, I, 42;
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Mitsui Ship-Building and
Engineering Co., Ltd.
3-1-1 Tama
Tamano-shi
Okayama Prefecture
JAPAN

2R, I, 42

Mitsui Ship-Building and
Engineering Co., Ltd.
5-6-4 Chikuzi
Chuo
Tokyo
JAPAN

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Nippon Denso Co., Ltd. 1-1 Shows Kariya Aichi JAPAN	3R, I, 34
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Nippon Electronics Co., Ltd. 2R, I, 43
1753 Shimonumabe
Nakahara-ku
Kawasaki-shi
Kanagawa Prefecture
JAPAN

Nippon Keisan Center Co. 3R, I, 34
2-1-10 Nihonbashi
Chuo
Tokyo
JAPAN

Nippon Kokan Co. 3R, I, 34
Ogishima
Kawasaki
JAPAN

Nippon Mini-Computer Co., 2R, I, 43; 3R, I, 33
 Ltd.
6-12-20, Jingumae
Shibuya-ku
Tokyo
JAPAN

Nippon Oil Co. 2R, I, 43
1-chome
Nishi-shimbashi
Minato-ku
Tokyo
JAPAN

Nippon Steel Corp. 3R, I, 34
2-6-3 Ohtemachi
Chiyoda-ku
Tokyo
JAPAN

Nissin Electric Co. 2R, I, 43
47 Umezu
Takasecho
Kyoto
JAPAN

Nozomi Denki Co. Yokohama Kanagawa JAPAN	3R, I, 38
Ohkura Electric Co. 3-20-8, Naritanisi Suginami-ku Tokyo JAPAN	2R, I, 43
Oki Electric Industry Co., Ltd. 4-10-12, Shibaura Minato-ku Tokyo JAPAN	2R, I, 44; 3R, I, 34
Oki Electric Industry Co., Ltd. 1-25-36, Nakahara Mitaka-shi JAPAN	2R, I, 44
Oki Electric Industry Co., Ltd. 4-10-3, Shibaura Minato-ku JAPAN	2R, I, 44
Omika Works of Hitachi Ltd. Kujimachi Hitachi-shi Ibaragi Pref. JAPAN	2R, I, 44
Omron Tateishi Electronics Co. 20 Igadera Shimokainji Namaokakyo Kyoto JAPAN	2R, I, 44
Osaka Gas Co. 5-1 Hirano Higashi Osaka JAPAN	3R, I, 34

Osaki Electric Industry Co., Ltd. 2-2-7 Higashigotanda Shinagawa Tokyo JAPAN	3R, I, 34
Panafacom Limited 2-10-16, Jiyugaoka Meguro-ku Tokyo 152 JAPAN	2R, I, 44; 3R, I, 34
Richo Co., Ltd. 12-3 Takashimadai Kanagawa-ku Yokohama JAPAN	2R, I, 44; 3R, I, 35
Ricoh Co., Ltd. 6-14-6, Chuo-ku Tokyo JAPAN	2R, I, 44
Shinko Electric Co., Ltd. Nihonbashi Chuo-ku Tokyo JAPAN	2R, I, 44
Shinko Electric Co., Ltd. 100 Takehana Ise Mie JAPAN	3R, I, 35
Sumitomo Chemical Co., Ltd. Sumitoma Computer Bldg. 7 fl. 1-2-2, Shinsenri-nishimachi Toyonaka-shi Osaka JAPAN	2R, I, 45; 3R, I, 35

Sumitoma Metal Co. Kashima 750 Hikari Kashima-cho Kashima-gun Ibaragi Prefecture JAPAN	2R, I, 45; 3R, I, 35
Takeda Riken Industry Co., Ltd. 1-16-1, Fujimicho Gyodashi Saitama Prefecture JAPAN	2R, I, 45; 3R, I, 36
Tateishi Electric Co. 2-Igadera Nagaoka-kyo Kyoto JAPAN	3R, I, 36
Tawara Electric Mfg. Co. Ltd. 2-30 Honmachi Fuchu Tokyo JAPAN	3R, I, 36
TELMEC Co. 1 Tohocho Midori Yokohama JAPAN	3R, I, 36
Toa Nenryo Kogyo, Co. 7-1 Ukishima Kawasaki-ku Kawasaki JAPAN	3R, I, 36
Tokyo Denki Tokki KK. 1-31-3, Honcho Nakano-ku Tokyo JAPAN	2R, I, 45

Tokyo Electron Labs Inc. Meiho Bldg. 1-21 Nishishinjuku Shinjuku-ku Tokyo JAPAN	2R, I, 45
Tokyo Gas Co., Ltd. Tokyo JAPAN	2R, I, 45
Tokyo Metropolitan Industrial Technology Center 3-13-10, Nishigaoka Kita-ku Tokyo JAPAN	2R, I, 45
Tokyo Shibaura Electric Co., Ltd. Fuchu Works 1, Toshiba-cho Fuchu-shi Tokyo JAPAN	2R, I, 15, 45, 46; 3R, I, 35
Tokyo Shibaura Electric Company, Ltd. (Toshiba) 2 Shiba-Nishikubo Sakuragawa- cho Minato-ku Tokyo JAPAN 105	5L, 195; 8L, I, 117; 1A, I, 189; 3A, I, 146; 2R, I, 45
Tokyo Shibaura Electric Co., Ltd. 2-9 Suehiro-Cho Ome-City Tokyo 198 JAPAN	4L, 318
Topacs, Inc. 3-2-5, Kasumigaseki Chiyoda-ku Tokyo 100 JAPAN	2R, I, 46; 3R, I, 38

Topacs, Inc. 1-14-14, Nakatehara Kohoku-ku Yokohama JAPAN	2R, I, 46
Toyota Motor Co. Toyota-shi Aichi Prefecture JAPAN	2R, I, 46
Yamatake Honeywell 1-12-2, Kawana Fujisawa-shi JAPAN	2R, I, 46; 3R, I, 36
Yamatake Honeywell Application Engineering Sec. Computer Control Division Kanagawa Prefecture JAPAN	2R, I, 46
Yamatake Honeywell 4-28-1, Nishirokugo Ota-ku Tokyo JAPAN	2R, I, 46
Yamatake Maintenance Co., Ltd. 5-14-1, Kamata Ota-ku Tokyo JAPAN	2R, I, 47
Yaskawa Electric Mfg. Co., Ltd. 314 Yukuhashi-shi Fukuoka Pref. JAPAN	2R, I, 47

Yaskawa Electric Mfg. Co. Ltd. 2346 Fujita Yahata-Nishi-ku Kitakyushu-shi JAPAN	2R, I, 47
Yaskawa Electric Mfg. Co., Ltd. Saitama prefecture 480 Kami-Fujisawa Iruma JAPAN	2R, I, 47
Yokogawa Electric Works, Ltd. c/o Mitsui Bldg. 5-7, Yaesu Chuo-ku Tokyo JAPAN	2R, I, 47
Yokogawa Electric Works, Limited 2-9-32 Nakacho Musashino-shi Tokyo 180 JAPAN	7L, 153; 1A, I, 190; 2R, I, 47; 3R, I, 37
Yokogawa-Hewlett-Packard Co. 9-1, Takakura-cho Hachioji-shi Tokyo JAPAN	2R, I, 47

MEXICO

HYLSA Stell Group P. O. Box 996 Monterrey, N. L. MEXICO 51-20-20	3A, I, 142
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THE NETHERLANDS

Philips Gloeilampenfabrieken 8L, I, 116
N. V.
Eindhoven
THE NETHERLANDS

Koninklijke/Shell-Laboratorium 2L, I, 78
Badhuisweg 3
Amsterdam
NETHERLANDS

Shell Oil Company 4L, 318; 1A, I, 188
Bataafse Internationale
 Petroleum/Chemie My. NV
30 Carel V Bylandtlaan
The Hague
THE NETHERLANDS

NORWAY

A/S Computas 3H, 63
Okernveien 145
Oslo 5
NORWAY

SWEDEN

ASEA LME AUTOMATION 2R, I, 9
S-72183 Västerås
SWEDEN

SJ Centralfoervaltning BAS 3R, I, 17
Stockholm 10550
SWEDEN

SWITZERLAND

Brown Boveri and Cie
CH-5401 Baden
SWITZERLAND

2A, I, 228; 2R, I, 10;
3R, I, 10

Interautomation AG
CH-5702 Niederlenz
SWITZERLAND

2R, I, 13; 3R, I, 14

Landis Und Gyr Zentrallabor
CH-6300 Zug
SWITZERLAND

3R, I, 15

Sandoz AG
CH-4002 Basel
Lichestr. 35
SWITZERLAND

2R, I, 14; 3R, I, 16

Schweiz, Bundesbahnen
BAU GD
Mittelstrasse 43
CH-3000 Bern
SWITZERLAND

2R, I, 9; 3R, I, 17

Weber AG
Prozessrechentechnik
Sedelstrasse 2
CH-6020
Emmenbruecke
SWITZERLAND

3R, I, 19

UNITED KINGDOM

The British Steel Corporation
140 Battersea Park Road
London S. W. 11
ENGLAND

4L, 313; 2R, I, 9

Ferranti Ltd.
Bridge House
Gatley, Cheadle, Cheshire
UNITED KINGDOM

2L, I, 75

Ferranti Ltd. Simonsway, Wythenshawe Manchester ENGLAND M22 5LA	4L, 315; 3H, 64; 3R, I, 12
Ferranti, Ltd. Western Road Brackwell Berks. GREAT BRITAIN	3R, I, 12
GEC Computers Ltd. Elstree Way Borehamwood Hertfordshire WD6 1RX ENGLAND	2R, I, 11; 3R, I, 12
GEC Electrical Projects Ltd. Boughton Road Rugby Warwickshire ENGLAND	2R, I, 11
GEC-Elliott West Avenue Kidsgrove Stoke on Trent ENGLAND	2L, I, 75; 7L, 149
GEC-Elliott Process Automation Limited New Parks, Leicester ENGLAND LE9 8JP	5L, 193; 8L, I, 114; 9L, 93; 1A, I, 184; 2A, I, 231; 2R, I, 11; 3R, I, 12
G.E.C. - Elliott Traffic Automation Ltd. East Lane Wembley, Middlesex ENGLAND HA9 7PL	6L, 104
Imperial Chemical Industries Limited Central Instrument Research Lab. Bozedown House Whitchurch Hill Pangbourne, Reading Berkshire RG8 7PF ENGLAND	1L, 88; 2L, I, 76; 3L, I, 181; 4L, 316; 5L, 193; 8L, I, 115; 1A, I, 185; 2A, I, 232

Imperial Chemical Industries P. O. Box 11 The Heath, Runcorn Cheshire ENGLAND WA7 4QE	3A, I, 143
Imperial Chemical Industries, Limited (ICI) Mond Division North ICI Paints Slough ENGLAND	3R, I, 61
Kent Automation Systems 6 Hunting Gate Hirchin Hertfordshire GB-SG4 OT6 GREAT BRITAIN	2R, I, 13; 3R, I, 15
National Computer Centre Quai House Quai Street Manchester M3 3HV GREAT BRITAIN	2R, I, 13
National Computing Centre Oxford Road GM-M1 7ED Manchester GREAT BRITAIN	3R, I, 16
Royal Radar Establishment St. Andrew's Road Malvern Worcestershire GREAT BRITAIN	2R, I, 14; 3R, I, 16
Software Sciences, Ltd. London and Manchester House Park Street Macclesfield Cheshire GB-SK11 6SR GREAT BRITAIN	3R, I, 17

Systems Designers Ltd.
59-61 High Street
Frimley/Surrey
GREAT BRITAIN

2R, I, 15; 3R, I, 18

UNITED STATES

Allen Bradley Company
747 Alpha Drive
Highland Heights, Ohio 44143

7L, 147; 3H, 63

Allied Chemical Corporation
40 Rector Street
New York, New York 10006

1L, 85

Aluminum Company of America
1501 Alcoa Building
Pittsburgh, Pennsylvania 15219

1L, 85; 2L, I, 74; 3L, I, 179;
4L, 313; 5L, 191; 6L, 103;
7L, 147; 8L, I, 113; 9L, 91;
1H, 27; 2H, 115; 3H, 63;
1A, I, 181; 2A, I, 227;
3A, I, 139; 1R, 169;
2R, I, 71; 3R, I, 57

American Chain and Cable
Corporation (ACCO)
Bristol Division
40 Bristol Street
Waterbury, Connecticut 06720

1A, I, 181; 3A, I, 139;
1R, 169; 2R, I, 71;
3R, I, 57

American Oil Company
2400 New York Avenue
P. O. Box 431
Whiting, Indiana 46394

1L, 85; 1H, 27

Anchor Hocking Corporation
109 North Broad St.
Lancaster, Ohio 43130

8L, I, 113

Anchor Hocking Corporation Plant 55 West Fair Avenue Lancaster, Ohio 43130	3H, 63
Applied Automation Inc. MS 215, R. B. No. 2 Electromechanical Lab/Phillips Research Center Bartlesville, Oklahoma 74003	1L, 89; 2L, I, 77 3L, I, 179; 4L, 313; 5L, 191; 3R, I, 57
Armco Steel Corporation Research Center West Middletown, Ohio 45043	1A, I, 181; 2A, I, 227
Automated Data and Telecommunications Service General Services Administration 18th and F. Street, N.W. Washington, D. C. 20405	3A, I, 139
Babcock and Wilcox Company P. O. Box 1260 Lynchburg, Virginia 24505	7L, 147; 1H, 27
Babcock and Wilcox Company 29801 Euclid Avenue Wickliffe, Ohio 44092	2R, I, 71; 3R, I, 57
Bailey Meter Company 29801 Euclid Avenue Wickliffe, Ohio 44092	1L, 85; 2L, I, 74; 3L, I, 179; 4L, 313; 5L, 191; 6L, 103; 7L, 147; 9L, 91; 1H, 27; 3H, 63; 1A, I, 181; 3A, I, 139; 1R, 169; 2R, I, 71
Baltimore Gas and Electric Company 500 Gas and Electric Building Lexington and Liberty Streets Baltimore, Maryland 21203	1A, I, 182
Battelle Northwest P. O. Box 999 Richland, Washington	1L, 85; 2L, I, 74; 3L, I, 179
Beloit Corporation Control Systems Division 1 St. Lawrence Beloit, Wisconsin 53511	2L, I, 74; 3L, I, 179

Bethlehem Steel Corporation Room 1585 Martin Towers 8th and Eaton Avenue Bethlehem, Pennsylvania 18018	2A, I, 228; 1R, 169; 2R, I, 72; 3R, I, 57
Bethlehem Steel Corporation Homer Research Labs Bethlehem, Pennsylvania 18016	7L, 148; 1R, 169; 2A, I, 228
B. F. Goodrich Chemical Company 6100 Oak Tree Boulevard Cleveland, Ohio 44131	2A, I, 227; 3A, I, 140; 1R, 169; 2R, I, 72; 3R, I, 58
Black, Crow and Eidsness P. O. Box 542 Chester Springs, Pennsylvania 19425	1A, I, 182
Black Crow and Eidsness, Inc. Subsidiary of Hercules, Inc. 1819 John F. Kennedy Boulevard Suite 434 Philadelphia, Pennsylvania 19103	2A, I, 228
Boeing Company 1401 West Smith Street Apartment 1017 Kent, Washington 98031	2A, I, 228
Bonner & Moore Associates, Inc. 500 Jefferson, Cullen Center Houston, Texas 77002	1L, 85; 2L, I, 74
Bonneville Power Administration P. O. Box 3521 (EKMA) Portland, Oregon 97208	1L, 85; 1A, I, 182
Caterpillar Tractor Company 600 West Washington Street Building W East Peoria, Illinois 61630	3R, I, 58; M, 183
Celanese Corporation P. O. Box 1414 Charlotte, North Carolina 28232	1H, 27; 2H, 115; 1R, 170; 3R, I, 58

Cincinnati Milacron Inc. 4701 Marburg Street Cincinnati, Ohio 45213	1H, 28; M, 183
Cincinnati Milacron Mason-Morrow Road Lebanon, Ohio 45036	3A, I, 140
Collins Radio Company 5200 C Avenue N. E. Mail Station 107-141 Cedar Rapids, Iowa 52401	4L, 314; 1R, 170
Collins Radio Group of Rockwell International 5225 C Avenue N. E. Cedar Rapids, Iowa 52406	2A, I, 228
Compaq, Inc. 1 Militia Drive Lexington, Massachusetts 02173	3L, I, 179
Computer Sciences Corporation 6565 Arlington Boulevard Falls Church, Virginia 22042 Computer S	9L, 92
Computer Sciences Corporation 8300 South Whitesburg Drive Huntsville, Alabama 35802	1A, I, 182; 2A, I, 229; 1R, 170
Computer Sciences Corporation 2251 San Diego Avenue San Diego, California 92122	3R, I, 58
Continental Oil Company Drawer 1267 Ponca City, Oklahoma 74601	1L, 86
Control Data Corporation 4455 East Gate Mall La Jolla, California 92037	1L, 86; 2L, I, 74; 3L, I, 179; 4L, 314; 5L, 192; 6L, 103; 2H, 115; 1A, I, 182; 1R, 170

Corning Glass Works 918 W. 2nd Street W. Elmira, New York 14905	3L, I, 179
Corning Glass Works Control Engineering Department Building 37-4 Corning, New York 14830	1L, 86; 2L, I, 75; 4L, 314; 5L, 192
Cummins Engine Company, Incorporated 1000 5th Street Columbus, Indiana 47201	1H, 28; 2A, I, 229; 3R, I, 58; M, 183
Cutler-Hammer, Incorporated 4701 North 27th Street Milwaukee, Wisconsin 53216	7L, 148; 3R, I, 59
Data General Corporation Route 9 Southboro, Massachusetts 01772	7L, 148; 1A, I, 182; 3A, I, 140
Datum Incorporated 1363 South State College Boulevard Anaheim, California 92672	3A, I, 140; 3R, I, 59
Davis Computer Systems, Inc. 280 Park Avenue New York, New York 10017	1L, 86; 2L, I, 75; 3L, I, 180
Digital Applications, Inc. 866 Third Avenue New York, NY 10022	1L, 86
Digital Equipment Corporation 146 Main Street Maynard, Massachusetts 01754	1L, 86; 2L, I, 75; 3L, I, 180; 4L, 314; 5L, 192; 6L, 103; 7L, 148; 8L, I, 113; 9L, 92; 1A, I, 183; 2A, I, 229; 3A, I, 140; 1R, 170; 2R, I, 72; 3R, I, 59; M, 183

Digital Equipment Corporation One Iron Way Marlboro, Massachusetts 01752	2A, I, 229
Eastman Kodak Company Kodak Park Division 1460 Lake Avenue Bldg. 23 Area 6 Rochester, New York 14650	1L, 86; 2L, I, 75; 7L, 149; 8L, I, 114; 9L, 92; 1H, 28; 1A, I, 183
Ebasco Services, Incorporated 2 Rector Street New York, New York 10006	2L, I, 75 4L, 314; 9L, 92; 3A, I, 140; 2R, I, 72
E. I. du Pont de Nemours Company Louviers Building Wilmington, Delaware 19898	1L, 86; 2L, I, 75; 3L, I, 180; 5L, 192; 7L, 148; 1H, 28; 2H, 115; 1A, I, 183; 3A, I, 141; 2R, I, 72; 3R, I, 59
Eli Lilly and Company 1200 Kentucky Avenue Indianapolis, Indiana 46204	3H, 64
Eli Lilly and Company 307 East McCarty Street Indianapolis, Indiana 46206	2A, I, 230
EMR-COMPUTER Division of Weston Instruments 8001 Bloomington Freeway Minneapolis, Minnesota 55420	1H, 28
Entrekin Computers 9475 Center Road Fenton, Michigan 48430	M, 183
The Fenn Manufacturing Company Fenn Road Newington, Connecticut 06111	2A, I, 230
Fisher and Porter Company County Line Road Warminster, Pennsylvania 18974	1L, 87; 3R, I, 60

Fisher Controls Company
R. A. Engel Technical Center
Marshalltown, Iowa 50158

5L, 192; 7L, 149; 9L, 93;
1H, 28; 2A, I, 230;
3R, I, 59

Fluor Corporation
2500 South Atlantic
Los Angeles, California
90040

1H, 29, IA, I, 183

Fluor Engineers and
Constructors, Inc.
3320 East La Plama
Anaheim, California 92806

2A, I, 230

Ford Motor Company
20000 Rotunda Drive
Dearborn, Michigan 48124

2L, I, 76; 3L, I, 180;
4L, 315

Ford Motor Company
WHQ
American Road
Room 527
Dearborn, Michigan 48121

7L, 149; 8L, I, 114; M, 183

Ford Motor Company
McKean and Textile Roads
P. O. Box 412
Ypsilanti, Michigan 48197

1L, 87

Ford Motor Company
21500 Oakwood
Dearborn, Michigan 48124

5L, 193; 6L, 104

The Foxboro Company
25 Neponset Avenue
Foxboro, Massachusetts 02035

1L, 87; 3L, I, 180;
4L, 315; 5L, 193; 6L, 104;
7L, 149; 8L, I, 114;
9L, 93; 1H, 29; 3H, 64;
1A, I, 184; 2A, I, 230;
3A, I, 141; 1R, 171;
3R, I, 60; M, 184

The Foxboro Company
38 Neponset Avenue
Foxboro, Massachusetts 02035

2L, I, 76; 2R, I, 73

Frankford Arsenal
Bridge and Tacony Streets
Philadelphia, Pennsylvania
19137

8L, I, 114

General Atomic Company
P. O. Box 81608
San Diego, California 92138

2A, I, 231; 1R, 171

General Electric Company
2255 West Desert Cove Road
Phoenix, Arizona 85029

1L, 87; 2L, I, 76; 3L, I, 180;
4L, 315; 7L, 149; 9L, 93;
1A, I, 184

General Electric Company
Special Purpose Computer
Center
Mail Drop 21DW
1285 Boston Avenue
Bridgeport, Connecticut 06602

3A, I, 141; 2R, I, 73;
3R, I, 60

General Electric Company
Information Services
823 Commerce Drive
Suite 302
Oak Brook, Illinois 60521

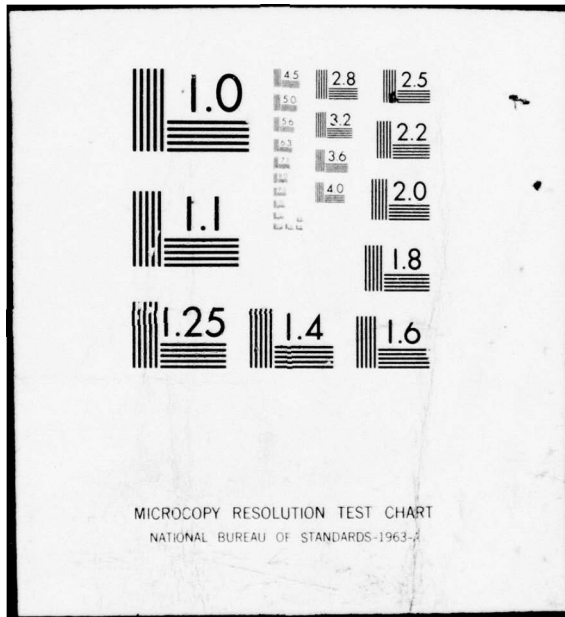
M, 184

General Electric
40 Federal Street
Lynn, Massachusetts 01910

5L, 193; 6L, 104

General Electric Company
Advanced Controls and N/C
Systems
Large Steam Turbine -
General Dept.
273 North Avenue
Room 2300
Schenectady, New York 12345

M, 184



The Foxboro Company
38 Neponset Avenue
Foxboro, Massachusetts 02035

2L, I, 76; 2R, I, 73

Frankford Arsenal
Bridge and Tacony Streets
Philadelphia, Pennsylvania
19137

8L, I, 114

General Atomic Company
P. O. Box 81608
San Diego, California 92138

2A, I, 231; 1R, 171

General Electric Company
2255 West Desert Cove Road
Phoenix, Arizona 85029

1L, 87; 2L, I, 76; 3L, I, 180;
4L, 315; 7L, 149; 9L, 93;
1A, I, 184

General Electric Company
Special Purpose Computer
Center
Mail Drop 21DW
1285 Boston Avenue
Bridgeport, Connecticut 06602

3A, I, 141; 2R, I, 73;
3R, I, 60

General Electric Company
Information Services
823 Commerce Drive
Suite 302
Oak Brook, Illinois 60521

M, 184

General Electric
40 Federal Street
Lynn, Massachusetts 01910

5L, 193; 6L, 104

General Electric Company
Advanced Controls and N/C
Systems
Large Steam Turbine -
General Dept.
273 North Avenue
Room 2300
Schenectady, New York 12345

M, 184

General Electric Company Building 300-3C 1 Nott Street Schenectady, New York 12345	M, 184
General Electric Company Aircraft Engine Group Interstate 75 Mail Drop A-107 Evendale, Ohio 45215	M, 184
General Motors Corporation 2401 Columbus Avenue Anderson, Indiana 46011	6L, 104
General Motors Corporation Delco Electronics Division Monitoring and Control Systems Group MS R221 1800 East Lincoln Road Kokomo, Indiana 46901	3R, I, 60
General Motors Corporation GM Technical Center 12 Mile and Mound Road Warren, Michigan 48090	7L, 149; 8L, I, 115; 9L, 93; 1H, 29; 2H, 116; 1A, I, 184; 2A, I, 231; 3R, I, 60
General Motors Institute 1700 West Third Avenue Flint, Michigan 48502	M, 184
Goodyear Tire and Rubber Company 1144 East Market Street Akron, Ohio 44316	7L, 150
Gulf Energy and Environmental Systems 10955 John Jay Hopkins Drive P. O. Box 81608 San Diego, California 92138	9L, 94; 3H, 64

Gulf Oil Corporation P. O. Box 608 San Diego, California 92112	2H, 116; 1A, I, 184
Hewlett-Packard Company 395 Page Mill Road Palo Alto, California 94306	1L, 87; 2L, I, 76; 4L, 315; 5L, 193; 6L, 105; 7L, 150
Hewlett-Packard 974 East Arques Avenue Sunnyvale, California 94086	8L, I, 115; 9L, 94; 1A, I, 184; 2A, I, 231; 1R, 171
Hewlett-Packard 11000 Wolfe Road Cupertino, California 95014	3L, I, 181; 3A, I, 142; 2R, I, 73; M, 184
Honeywell, Incorporated 2222 West Peoria Avenue Phoenix, Arizona 85018	3A, I, 142
Honeywell Incorporated 2600 Ridgway Parkway Minneapolis, Minnesota 55413	9L, 94
Honeywell, Incorporated Process Control Division/ Phoenix 2255 West Desert Cove Road Phoenix, Arizona 85029	2A, I, 232; 2R, I, 73; 3R, I, 61; 1R, 172
Honeywell, Inc. Old Connecticut Path Framingham, Massachusetts 01701	1L, 87; 3L, I, 181; 4L, 316; 6L, 105; 7L, 150
Honeywell Incorporated Honeywell Information Systems 200 Smith Street Waltham, Massachusetts 02154	7L, 150

Honeywell, Incorporated
Process Control Division
MS 105
1100 Virginia Drive
Fort Washington, Pennsylvania
19034

7L, 150; 1R, 171

Honeywell Incorporated
Industrial Division
1100 Virginia Drive
Fort Washington, Pennsylvania
19034

8L, I, 115; 9L, 94; 1H, 29;
2H, 116; 1A, I, 185

Honeywell, Incorporated
1500 West Dundee Road
Arlington Heights, Illinois
60004

9L, 94; 1R, 171

Hughes Aircraft Company
Centinela and Teale Streets
MS V106
Culver City, California 90230

1R, 172

Humble Oil and Refining Company
P. O. Box 551
Baton Rouge, Louisiana 70821

2L, I, 76; 1H, 29

Humble Oil & Refining Company
P. O. Box 2180
Houston, Texas 77001

1L, 87

IBM Corporation
Data Processing Division
1133 Westchester
White Plains, New York 10604

1L, 88; M, 185

IBM Corporation
System Communications Division
P. O. Box 6
Endicott, New York 13760

M, 185

IBM Corporation
700 Banyon Trail
Boca Raton, Florida 33432

3L, I, 181

IBM Corporation
P. O. Box 1328
26V/031-2
Boca Raton, Florida 33432

2L, I, 76; 4L, 316; 5L, 194;
6L, 105; 7L, 150; 9L, 94;
1H, 30; 2H, 116; 3H, 64;
1A, I, 185; 2A, I, 231;
3A, I, 143; 1R, 172;
2R, I, 12, 73; 3R, I, 38 61;
M, 184

IBM Corporation
General Systems Division
2000 51st Street
Boca Raton, Florida 33432

8L, I, 115; 3A, I, 143

IBM Corporation
Monterey and Cottle Roads
San Jose, California

1L, 88

IBM Corporation
6900 Fannin Street
Houston, Texas 77025

1L, 88

IBM Corporation
P. O. Box 390
Poughkeepsie, New York

2A, I, 232

Industrial Nucleonics,
Incorporated
P. O. Box 4887
650 Ackerman Road
Columbus, Ohio 43202

8L, I, 115; 9L, 95;
1A, I, 185; 2A, I, 232;
3A, I, 143; 1R, 172;
2R, I, 74; 3R, I, 62

Information General Corporation
6355 Topanga Canyon Boulevard
Woodland Hills, California
91364

1L, 88

Inland Steel Company
Indiana Harbor Works
3210 Watling Street
East Chicago, Indiana 46312

1L, 88; 2L, I, 77;
3L, I, 180; 4L, 316;
5L, 194; 6L, 104; 9L, 95;
3H, 64; 1A, I, 186;
2A, I, 233; 3A, I, 143;
1R, 172; 2R, I, 74; 3R, I, 62

Innovators Incorporated
348 Maple Avenue
Edgewood, Pennsylvania 15218

1H, 29

Interdata Incorporated 2 Crescent Place Oceanport, New Jersey 07757	1A, I, 186; 2A, I, 233; 3A, I, 144; 1R, 172
Intermetrics Incorporated 701 Concord Avenue Cambridge, Massachusetts 02138	3R, I, 14, 62
International Harvester Company 401 North Michigan Avenue Chicago, Illinois 60611	M, 185
International Paper Company Jay, Maine 04239	7L, 151
J. F. Pink Associated P. O. Box 25 Huntingdon Valley Pennsylvania 19006	1H, 30
John Deere Waterloo Tractor Works Box 270 P. E. Waterloo, Iowa 50704	9L, 95
Johnson Controls, Incorporated 507 East Michigan Avenue Milwaukee, Wisconsin 63201	1A, I, 186; 2A, I, 233; 3A, I, 144; 1R, 173; 3R, I, 62
Jones and Laughlin Steel Corporation 900 Agnew Road Pittsburgh, Pennsylvania 15230	1A, I, 186
Joseph E. Seagram Inc. P. O. Box 204 Louisville, Kentucky 40201	1H, 30
Kaiser Aluminum & Chemical Corp. Kaiser Center 300 Lakeside Drive Oakland, California 94604	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 316; 5L, 194; 6L, 105; 9L, 95

Kinetic Systems Corporation Maryknoll Drive Lockport, Illinois 60441	2H, 116; 3H, 65; 1A, I, 186; 3A, I, 144; 1R, 173; 2R, I, 74; 3R, I, 62
Leeds and Northrup Company Dickerson Road M/D 130 North Wales, Pennsylvania 19454	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 317; 5L, 194; 6L, 105; 7L, 151; 1H, 30; 2H, 116; 3H, 65; 1A, I, 186; 3A, I, 144; 1R, 173; 2R, I, 74; 3R, I, 62
3M Company 900 Bush Avenue St. Paul, Minnesota	7L, 151
3M Company P. O. Box 33331 St. Paul, Minnesota 55133	1A, I, 187
Massachusetts Computer Associates Lakeside Office Park Wakefield, Massachusetts 01880	8L, I, 116
Mead Corporation Chillicothe, Ohio 45601	1L, 88
Measurex Corporation 10475 Imperial Avenue Cupertino, California 95014	7L, 151
Merck and Company, Incorporated 126 East Lincoln Avenue Rahway, New Jersey 07065	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 317; 5L, 194; 1R, 173
Middle South Services, Incorporated P. O. Box 61000 New Orleans, Louisiana 70161	9L, 96; 1A, I, 187; 2A, I, 234; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63
Modular Computer Systems 1650 West McNab Road Fort Lauderdale, Florida 33309	3L, I, 182; 9L, 96; 1A, I, 187; 2A, I, 234; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63

Monsanto Company 800 N. Lindbergh Blvd. St. Louis, MO 63166	1L, 89; 4L, 317
National Steel Corporation 2800 Grant Building Pittsburgh, Pennsylvania 15219	1L, 89
North Electric Company Galion, Ohio	2L, I, 77
Owens-Corning Fiberglas Corporation Case Avenue Newark, Ohio 4355	1L, 89; 2L, I, 77; 3L, I, 182; 5L, 195; 6L, 105; 7L, 151; 2A, I, 234
Owens-Illinois, Incorporated 1700 N. Westwood Avenue P. O. Box 1035 Toledo, Ohio 43666	1A, I, 187; 3R, I, 63
Pennsylvania Power and Light Company 901 Hamilton Street Allentown, Pennsylvania 18101	2H, 117
Pennsylvania Power and Light Company Two North Ninth Street Allentown, Pennsylvania 18101	3R, I, 63
PPG Industries, Incorporated P. O. Box 11472 Pittsburgh, Pennsylvania 15238	8L, 116; 1H, 30
PPG Industries, Incorporated One Gateway Center Pittsburgh, Pennsylvania 15222	2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 75; 3R, I, 64
Procter and Gamble Company Winton Hill Technical Center 6300 Center Hill Road Cincinnati, Ohio 45224	2L, I, 78; 2R, I, 75; 3R, I, 64
Procter and Gamble Company P. O. Box 559 Cincinnati, Ohio 45201	9L, 96; 3H, 65; 2A, I, 234; 1R, 174

Profimatics, Inc. 3110 Southwest Highway Houston, Texas 77006	1L, 89; 2L, I, 78; 3L, I, 182
Radio Corporation of America (RCA) Moorestown, New Jersey 08057	2H, 117
Reliance Electric Company 750 North Maple Road Saline, Michigan 48176	2H, 117
Scientific Systems Services, Incorporated 476 North Highway 1A P. O. Box 2519 Satellite Beach, Florida 32937	9L, 96
Scott Paper Company Scott Plaza III Philadelphia, Pennsylvania 19113	1L, 89; 3L, I, 182; 4L, 318; 5L, 195; 9L, 96; 2A, I, 235; 1R, 174; 2R, I, 76; 3R, I, 64; M, 185
Shell Development Company P. O. Box 481 Houston, Texas 77001	2A, I, 235; 2R, I, 76
Shell Oil Company P. O. Box 100 Deerpark, Texas 77536	3L, I, 182
Shell Oil Company P. O. Box 2463 Houston, Texas 77001	2A, I, 235; 2R, I, 76
Shell Pipeline Corporation P. O. Box 2648 Houston, Texas 77001	9L, 97
Shimadu Seisakusho Ltd. 633 Third Avenue New York, New York 10017	2L, I, 78

Softech 391 Totten Pond Road Waltham, Massachusetts 02154	7L, 152
Solidstate Controls, Incorporated 600 Oakland Park Avenue Columbus, Ohio 43214	3H, 65
Standard Engineering Corporation 44800 Industrial Drive Fremont, California 94538	3R, I, 64
Standard Oil Company P. O. Box 400 Naperville, Illinois 60540	9L, 97
The Standard Oil Company of Ohio Midland Building Cleveland, Ohio 44115	3A, I, 146; 2R, I, 76; 3R, I, 64
Stone & Webster Engineering Corp. 225 Franklin Street Boston, Massachusetts 02107	1L, 89; 2L, I, 78; 3L, I, 182
Sun Oil Company P. O. Box 426 Marcus Hook, Pennsylvania 19061	1L, 89; 2L, I, 78; 3L, I, 182; 8L, I, 116; 1A, I, 138
Sun Oil Company 1608 Walnut Street Philadelphia, Pennsylvania 19103	5L, 195
Sunstrand Machine Tool Company 3615 Newburg Road Belvidere, Illinois 61008	M, 186
Systems Engineering Laboratories 6901 West Sunrise Boulevard P. O. Box 9148 Fort Lauderdale, Florida 33310	1L, 90; 9L, 9

Taylor Instrument
Process Control Division of
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1L, 90; 7L, 152; 1H, 31;
2H, 117; 3H, 66; 1A, I, 188;
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1R, 174; 2R, I, 77;
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3A, I, 146

Taylor Instrument
Process Control Division of
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46 Prince Street
Rochester, New York, 14607

3H, 66; 1A, I, 188

Tenneco Incorporated
P. O. Box 2511
Houston, Texas 77001

1H, 31; 2H, 118;
1A, I, 189

Tennessee Eastman Company
Building 54B
P. O. Box 511
Kingsport, Tennessee 37662

7L, 152; 8L, I, 117;
9L, 97; 2A, I, 236;
3A, I, 146; 1R, 175;
3R, I, 65

Texas Instruments,
Incorporated
P. O. Box 1444
Houston, Texas 77001

6L, 106; 9L, 97

Texas Instruments,
Incorporated
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P. O. Box 2909
Austin, Texas 78767

2A, I, 236; 3A, I, 146;
2R, I, 77; 3R, I, 65

Texas Instruments
12203 Southwest Freeway
Houston, Texas 77006

6L, 106

Union Carbide Corporation Technical Center, Building 2000/320 P. O. Box 8361 South Charleston, West Virginia 25303	1L, 90; 2L, I, 79; 3L, I, 182; 4L, 318; 5L, 196; 6L, 106; 8L, I, 117; 9L, 98; 1H, 31; 2H, 118; 3H, 66; 1A, I, 189; 2A, I, 236; 3A, I, 147; 1R, 175; 2R, I, 77; 3R, I, 65
Union Oil Company of California 200 East Golf Road Palatine, Illinois 60067	8L, I, 117; 9L, 97
Uniroyal Chemical Elm Street Naugatuck, Connecticut 06770	1L, 90
United States Steel Corporation One North Broadway Gary, Indiana 46402	3R, I, 65
United States Steel Corporation 600 Grant Street Pittsburgh, Pennsylvania 15230	1H, 31; 3R, I, 66
United States Steel Corporation 525 William Penn Place-1614F Pittsburgh, Pennsylvania 15230	1L, 90; 2L, I, 79
Universal Oil Products Company 20 U.O.P. Plaza Mount Prospect and Algonquin Roads Des Plaines, Illinois 60016	8L, I, 117; 2R, I, 77
University Computing Company 120 South Riverside Plaza Chicago, Illinois 60606	M, 186
The Upjohn Company 7171 Portage Street Kalamazoo, Michigan 49001	3H, 66

Varian Data Machines 611 Hansen Way Palo Alto, California 94303	2H, 118
Varian Data Machines 2722 Michelson Drive Irvine, California 92664	7L, 152
WADCO Corporation P. O. Box 1970 Richland, Washington 99352	4L, 319; 5L, 196; 6L, 106
Warner and Swasey Company 5701 Carnegie Avenue Cleveland, Ohio 44103	M, 186
West Virginia Pulp and Paper Westvaco Building 299 Park Avenue New York, New York 10017	1L, 90
Western Electric Company Naperville, Illinois 60540	1A, I, 190; 1R, 175
Western Electric Company P. O. Box 900 Princeton, New Jersey 08540	1L, 90
Western Electric Company 3300 Lexington Road Winston Salem, North Carolina 27103	2A, I, 237; 3A, I, 147; 1R, 175; 2R, I, 78; 3R, I, 66
Western Electric Company, Inc. 204 Graham-Hopedale Road Burlington, North Carolina 27215	1L, 90; 2L, I, 79; 3L, I, 183; 5L, 196; 6L, 106; 7L, 153
Western Electric Company 4513 Western Avenue Lisle, Illinois 60532	3R, I, 66

Westinghouse Electric Corporation
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1L, 90; 2L, I, 79; 3L, I, 183;
4L, 319; 7L, 153; 8L, I, 118;
9L, 98; 1H, 32; 2A, I, 237;
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Westinghouse Electric Corporation
2040 Ardmore Boulevard
Pittsburgh, Pennsylvania 15521

M, 186

Westinghouse Electric Corporation
P. O. Box 22005
Tempe, Arizona 85281

3R, I, 66

Westinghouse Electric Corporation
1200 West Colonial Drive
Orlando, Florida 32804

2A, I, 237; 3A, I, 147;
2R, I, 78; 3R, I, 66

Westinghouse Hanford Company
P. O. Box 1970
Richland, Washington 99352

7L, 153; 1H, 32; 2A, I, 237

Westvaco Corporation
P. O. Box 5207
North Charleston, South Carolina
29406

3L, I, 183; 5L, 196

Weyerhaeuser Company
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Birmingham, Alabama 35243

7L, 153; 1H, 32

Whirlpool Corporation
Monte Road
Benton Harbor, Michigan 49022

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2A, I, 234; 3A, I, 145;
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2R, I, 9; 3R, I, 9

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Establishment
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WY4
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The Norwegian Institute of 1A, I, 188; 2A, I, 235;
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N-7034 Trondheim-NTH 2R, I, 9, 76; 3R, I, 17
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USSR - MOSKOV

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 ICC
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 Brest-Litovsky pros. #39
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Battelle Columbus Laboratories 505 King Avenue Columbus, Ohio 43201	1A, I, 182
Burr-Brown Research Corporation P. O. Box 11400 Tucson, Arizona 85734	2A, I, 228
Burr-Brown Research Corporation 5730 South Tucson Boulevard Tucson, Arizona 85706	3A, I, 140; 1R, 170
Chevron Research Company 576 Standard Avenue Richmond, California 94802	1L, 86
Electro-Mechanical Research, Inc. EMR Computer Division 8001 Minnesota 55420	1L, 87
Exxon Research and Engineering Company Mathematical Computers and Systems Department P. O. Box 153 Florham Park, New Jersey 07932	1L, 87; 2L, I, 75; 3L, I, 180; 1H, 28; 2H, 115; 1A, I, 183; 2R, I, 72; 3R, I, 59
IIT Research Institute 10 West 35 Street Chicago, Illinois 60616	1L, 87
Lawrence Livermore Laboratory 320 North Main Street Ann Arbor, Michigan 48104	M, 185

Lawrence Livermore Laboratory P. O. Box 808 L-152 Livermore, California 94550	M, 185
Los Alamos Scientific Laboratory P. O. Box 1663 Los Alamos, New Mexico 87545	9L, 95; 1A, I, 187; 2A, I, 233; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63
Mobil Research & Development Corp. 150 East 42nd Street New York, NY 10017	2L, I, 77
NASA, Lewis Research Center 21000 Brookpark Road Cleveland, Ohio 44135	1A, I, 187; 2R, I, 75
Naval Electronics Laboratory Code 5200, 271 Catalina Boulevard Department of the Navy San Deigo, California 92152	3A, I, 145; 3R, I, 18
Oak Ridge National Laboratory Bldg. 3500 P. O. Box X Oak Ridge, Tennessee 37830	1H, 30
Stanford Research Institute 333 Ravenswood Avenue Menlo Park, California 94025	1L, 89; M, 186
United States Naval Electronics Laboratory Center Code 5200 271 Catalina Boulevard San Diego, California 92152	3R, I, 65

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AUSTRALIA

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Physics Institute III 7L, 152; 8L, I, 117; 9L, 92;
Tandemlabor, Erwin-Rommel- 1A, I, 189; 2A, I, 236;
Strasse 1/ D-852, Erlangen 3A, I, 147; 2R, I, 16;
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1A, I, 189

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2A, I, 236; 3A, I, 147;
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1A, I, 186

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1A, I, 190; 3A, I, 147;
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Minami-ku
Yokohama
JAPAN

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2R, I, 15

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Enschede
NETHERLANDS
2R, I, 15

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3A, I, 142

UNITED KINGDOM

Imperial College
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ENGLAND
2L, I, 76

University of Nottingham
University Park
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University of York
Heslington
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GREAT BRITAIN
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UNITED STATES

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Tempe, Arizona 85281
2R, I, 71

Carnegie-Mellon University
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3A, I, 140; 1A, 183

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1L, 85; 9L, 91

Indiana University
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Department of Psychology
Psychology Building
Bloomington, Indiana 47401

2A, I, 232

Purdue University
Purdue Laboratory for Applied
Industrial Control
102 Michael Golden
West Lafayette, Indiana 47907

1L, 89; 4L, 317; 5L, 195;
6L, 106; 7L, 152; 8L, I, 116;
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3H, 65; 1A, I 187;
2A, I, 234; 3A, I, 145;
1R, 174; 2R, I, 14, 76;
3R, I, 19, 64; M, 185

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5734 S. Ellis
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1A, I, 189

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212 Electrical Engineering
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Columbia, Missouri 65201

M, 186

University of Tennessee
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Knoxville, Tennessee 37916

2A, I, 237; 2R, I, 77

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724 South Euclid Avenue
St. Louis, Missouri 63110

2R, I, 77

OTHER ORGANIZATIONS

UNITED STATES

Control Engineering Magazine 466 Lexington Avenue New York, New York 10017	1L, 86; 2L, I, 74; 5L, 192
Dun-Donnelley Publishing Company 466 Lexington Avenue New York, New York 10017	7L, 148; 1H, 28
Instrument Society of America 400 Stanwix Street Philadelphia, Pennsylvania 15222	3L, I, 181
Instrumentation Technology Magazine Instrument Society of America 400 Stanwix Street Pittsburgh, Pennsylvania 15222	1L, 86; 2L, I, 77; 2R, I, 74
Oil Insurance Association 612 Polo Drive Wheaton, Illinois 60187	2H, 117
Oil Insurance Association 175 West Jackson Street Chicago, Illinois 60604	1H, 30; 3A, I, 145
PHD Associates Box 5797 Upper Arlington Station Columbus, Ohio 43221	4L, 317; 5L, 195
NASA Marshall Space Flight Center Huntsville, Alabama 35812	3H, 65
National Bureau of Standards U. S. Department of Commerce Washington, D. C. 20234	3H, 65; 2A, I, 234

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USATACOM - U. S. Army Tank and 8L, I, 118
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