Compcon Spring 75 Panel to Explore Retail Automation and Point-of-Sale

A panel of experts scheduled for Compcon Spring 75 will present the technology behind the point-of-sale and credit authorization industries—two new fields that have arisen as a result of the computerized cash register. The panel, according to Compcon Spring 75 General Chairman Lowell Amdahl, will discuss the growth and effect of computer technology in these areas from the standpoint of the manufacturer, the retailer, and the consumer.

Chairing the session and speaking for the manufacturer will be F. Willard Griffith II, President of Syscom, Inc. Located in Atherton, California, Syscom is a consulting and research firm specializing in point-of-sale evaluation and implementation. Griffith was a founder and for six years Executive Vice President of American Regitel, now a subsidiary of General Instruments. Regitel is one of the leaders in the development of on-line software control, point-of-sale, and credit authorization systems.

Speaking for the retailer will be Paul Close, President of Retail Communication Management, Los Altos, California. Close has been in the retail automation industry for over 15 years with various retailers and manufacturers, including Regitel and NCR. A former management information system director for the May Co. in Portland, he currently plans and evaluates point-of-sale systems and data communications networks for several large retail firms.

Compcon Spring 75, scheduled for February 25-27, 1975, at the Jack Tar Hotel in San Francisco, will focus on the theme of “Computer Technology to Reach the People.”

Dejka Appointed Chairman of Mini/Micro Technical Committee

W. J. Dejka, head of Advanced Digital Systems at the Naval Electronics Laboratory Center in San Diego, California, was recently named chairman of the Computer Society’s Mini/Micro Computers Technical Committee. In his new position, Dejka will be responsible for organizing meetings and workshops on mini/microcomputers, as well as specialized sessions at general conferences.

Dejka’s prime responsibility at NELC is the projection of computer technology in the 1980’s based on availability of large fast megabyte memories and single-chip processors. His work also includes product engineering experience at Sperry-Phoenix Co.

Dejka received his BS degree in electrical engineering from the University of Illinois and his MS degree in engineering from UCLA. He has two years of advanced graduate training under the sponsorship of NELC, having completed most of the requirements for a PhD at Case-Western Reserve University.
The First National Conference on Software Engineering, cosponsored by the IEEE Computer Society Technical Committee on Software Engineering and the National Bureau of Standards, will follow Compcon Fall 75 on September 11 and 12 at the Mayflower Hotel in Washington, D.C., with a half-day overlap on the 11th. Compcon Fall 75 is scheduled for September 9-11.

In making joint announcement, Dr. Harlan Mills, Chairman of the Conference on Software Engineering, and Compcon Fall 75 General Chairman Dr. Richard E. Merwin stressed the advantages to attendees, who will be able to participate in both conferences during the same week as well as register for both conferences with a joint registration fee. Registration fees, which will be announced in the near future will provide a price break for those who wish to attend both conferences.

Mills, in describing the objective of the First National Conference on Software Engineering, stated, "Software engineering is a new discipline which applies engineering principles to the development of computer software. Problems of primary concern in this area are those involved in specification, design, development, management, testing, validation, and maintenance of software systems. The goals of the conference will be to describe software engineering, practical tools and techniques for the software development process, and actual large-scale software project experiences."

Merwin, speaking for Compcon Fall 75, expressed enthusiasm for this arrangement, which provides almost four days of technical sessions. "By attending Compcon Fall 75, software developers can learn how software can be used to make computers easier to use—and follow this up with a day and a half of sessions devoted to applying engineering techniques to the development of this software."

The First National Conference on Software Engineering will feature separate proceedings. A call for papers is to be issued shortly. For further information about this conference, write to Software Engineering, P.O. Box 639, Silver Spring, MD 20901.

Lynn Hopewell, Vice President and Director, Washington Operations, of Network Analysis Corp., has accepted the position of program chairman for Compcon 75, to be held in Washington, D.C. September 9-11.

In announcing the appointment, Compcon Fall 75 General Chairman Richard E. Merwin said, "We are fortunate in having someone of Lynn's caliber to help organize the conference. His background in computer networks will prove invaluable in planning a technical program promoting the theme, 'How to Make Computers Easier to Use.'"

In his capacity with NAC, Hopewell is responsible for technical, managerial, financial, and policy studies in the telecommunications field. In assisting its clients, NAC's activities in computers and communication cover the spectrum from planning and feasibility studies to maintenance of software management and systems design, testing, and evaluation.

Prior to joining NAC in 1972, Hopewell was director of Data Communications Systems Engineering for Telcom, Inc. His professional experience also includes eight years in the Central Intelligence Agency's Office of Communications.

Moderator of the panel on "Valued Added Networks: What Lies Ahead" at the May 1974 NBS/Computer Society Networks Symposium, Hope-
destinations outside North America. We expect the new system to reduce this to about two weeks.

Region 8 countries included in this system are as follows:

- Albania
- Austria
- Belgium
- Bulgaria
- Cyprus
- Czechoslovakia
- Denmark
- Finland
- France
- East Germany
- West Germany
- Gibraltar
- Greece
- Greenland
- Holland
- Hungary
- Iceland
- Ireland
- Italy
- Lichtenstein
- Luxemburg
- Malta
- Monaco
- Norway
- Poland
- Portugal (Azores)
- Romania
- Spain (Canary Islands)
- Sweden
- Switzerland
- United Kingdom
- USSR
- Yugoslavia

Computer Updates for 1975

Computer begins the new year with several changes in content and format. The January issue introduces a new section of technical book reviews (see p. 75), a revised title and contents page, and the addition of reader service numbers for IC Announcements, a continuing new products feature (see p. 61).

Michalopoulos Named Editor of New Products Section

Beginning with this issue of Computer, the New Products/New Applications Section is being edited by Dr. Demetrios A. Michalopoulos, associate professor with the Department of Quantitative Methods and the Computer Sciences Program, California State University at Fullerton. He succeeds Milton G. Bienhoff, staff consultant with Compata, Inc., who edited the section for two years.

Dr. Michalopoulos is the author of several technical publications and has presented papers at various national and international conferences. His current interests include pattern recognition, computer architecture, and mathematical programming. He received the BS and MS degrees in electrical engineering from North Carolina State University, Raleigh, North Carolina, and the PhD degree in electrical engineering-computer sciences from the University of Southern California, Los Angeles. Dr. Michalopoulos is a member of Eta Kappa Nu, the Pattern Recognition Society, ACM, IEEE, and the Computer Society.

Dr. Simon Ramo, Keynote Speaker at NTC 74, Sees Electronics Developments as Antirecession Weapons

"By a fortunate coincidence of timing, electronics breakthroughs are now emerging which, when fully applied to business, industry, and transportation, will cut costs, helping to curb inflation and provide new and effective products to enhance employment and resist recession," according to Dr. Simon Ramo, Vice Chairman of TRW Inc.

Speaking before a capacity crowd of 500, the electronics executive delivered the keynote banquet address Tuesday, Dec. 3, at the annual convention of the nation's communications engineers in San Diego. Over 1000 people attended the National Telecommunications Conference, NTC 74, sponsored by the IEEE Communications Society and the San Diego section.

"Advancing technology can increase the supply and lower the costs of almost everything we need," Dr. Ramo noted. "Scientific effort can improve our use of resources, both natural and human, to realize greater payoff and to give the society more options.

"In no field of science and technology is this more evident than in electronic communications," Dr. Ramo said. "Imagine the revolutionary changes that would take place in our way of life if someone suddenly produced an automobile engine which consumed only one-tenth the fuel of current cars, ran for 100 years rather than ten, weighed five pounds rather than 500, and still developed 300 horsepower. Imagine, too, that this engine could be manufactured inexpensively on automated production lines. An analogous revolution is not imaginary but rather is actually taking effect in the electronics industry today. With microelectronics developments and new systems conceptions, it is now possible to sense, gather, communicate, store, process, and present information in vastly higher quantities and yet at greater speeds and radically reduced costs. Information handling and communication are at the heart of most pursuits of man, whether in running factories, banks, airlines or hospitals. Economic synthetic 'brainpower' can make each human smarter at his job. The potential for increasing the value of every hour of man's time is tre-
mendous. Even though this new information technology is still largely unapplied, the first installations are already cutting costs and rendering better services,” said TRW’s executive.

Among specific examples cited were:

- New computerized electronic communication systems check credit standing quickly and inexpensively at department stores, banks, and air lines.
- Corporations using computerized cash flow control systems can operate with less cash, lowering interest cost and helping to decrease present high interest rates.
- New techniques for inventory control cut distribution costs and investment.
- Electronics communication techniques efficiently schedule operations in many areas, from factories to hospitals, cutting costs and improving service.
- Computerized traffic control at busy city intersections can smooth and speed automobile traffic flow, conserving gas and cutting air pollution.
- Professional services, including legal, health care, educational, and research, can be speeded by electronics communications and data processing systems.

“The widest possible utilization of new electronics communications techniques are inflation counters and recession resistors because they increase society’s options and provide cost effective alternatives to fill our needs,” Dr. Ramo continued. “But science and technology are not sufficient to give us a stable and prosperous economy. Nontechnological factors of money supply, government spending, and tax and regulation policies are overriding. If we mismanage these matters, then no matter how successful is our research in electronics and how aggressive the application of the research results, we will still have inflation. If governments, corporations and individuals overspend and overborrow, if all try to live above their incomes and we increase the money supply faster even than the most excellent technological effort can increase the availability of lower cost goods and services, we will remain in economic turmoil,” Ramo said.

“If we want to stop inflation without a severe recession, then we should encourage investment in new technology such as advanced electronics communications. These developments also require time. We must create conditions favorable for investing in research and development now in order to realize the benefits later. We should not ask only whether corporations are profitable, or too profitable, but rather what is being done with the generated profits. High earnings, if largely plowed back to fund re-

Dr. Walter Munk, Professor of Geophysics at Scripp Institute and Director of the University of California’s Institute of Geophysics and Planetary Physics, addressed the December 2 luncheon at NTC 74.
search and development to improve quality and lower costs, should be applauded. Shrunk profits that can at best foster stymied technological advance should be regretted. Corporations and individuals investing their incomes in cost-reducing new technological projects should be taxed less than those who do not. It is undeniable that a healthy economy requires sound government tax and spending policies. However, the soundness of those policies should be tested in part by whether they encourage the right new technological developments. Without such developments, inflation will continue in our technological society and we will possess only unacceptable recession as a tool to fight it,” Ramo concluded.

Fees Set for '75 NCC

Advance registration for the 1975 National Computer Conference to be held May 19-22 in Anaheim, California, is now underway.

The advance full-conference registration fee for the '75 NCC is $60 and entitles the registrant to a gold Everything Card—the key to a number of bonuses. This fee covers the total four-day program plus exhibits and includes a copy of the proceedings.

“In addition to a $15 saving over the on-site full-conference registration of $75,” stated Conference General Chairman Donal Meier, “there are special discounts on conference luncheons, an advance copy of the program booklet, and the immediate availability of housing forms. Considering this, and the fact that the current post-conference price for the Proceedings alone is $40, the benefits are certainly worthwhile.”

Other registrations available for the '75 NCC include one-day registration for program and exhibits for $25; full-time student registration for the entire four days, $10; four-day exhibits only, $25; and one-day exhibits only for $10. A copy of the proceedings is included in the price of full-conference registration only and is not applicable to student registration.

Further information on the '75 NCC may be obtained by writing '75 NCC, c/o AFIPS, 210 Summit Avenue, Montvale, New Jersey 07645—or calling toll-free 800/631-7070 (in New Jersey call 201/391-9810).

Keynoter Named for 1975 NCC

Jay W. Forrester, Germeshausen Professor at MIT's Alfred P. Sloan School of Management, will deliver the Keynote Address at the 1975 NCC on Monday, May 19 in Anaheim, California. Professor Forrester, a world-renowned authority in the fields of computer science and the dynamics of change, will discuss computer modeling of social systems with emphasis on the social and economic forces underlying current national inflationary trends. The announcement was made December 26 by Conference General Chairman Donal A. Meier.

In addition to his current work at MIT, Forrester has been a leading figure in the Club of Rome, and his landmark book World Dynamics led the Club of Rome to sponsor its much heralded Project on the Predicament of Mankind resulting in its widely discussed report, Limits to Growth.

“In view of present economic conditions, Professor Forrester's Address could hardly be more timely,” said Meier. “In addition to discussing forces underlying inflation, we look forward to his analysis of policies that might be utilized to deal with inflation, taxation, related monetary issues, and recessions.”

In addition to World Dynamics (1971), Professor Forrester is also the author of Industrial Dynamics (1961), Principles of Systems (1968), and Urban Dynamics (1969).

A native of Nebraska, Professor Forrester obtained his B.S. degree and his S.M. degree from MIT. He has been awarded honorary doctorate degrees in engineering from the University of Nebraska, Newark College of Engineering, and the University of Notre Dame. In addition, he holds honorary doctorate degrees in science from Boston University and Union College. His numerous awards include Inventor of the Year Award from George Washington University; the Valdemar Poulsen Gold Medal from the Danish Academy of Technical Sciences; the Medal of Honor and the Systems, Man and Cybernetics Society Award for Outstanding Accomplishment, both from the IEEE; and the Howard N. Potts Award from the Franklin Institute.

Professor Forrester is a member of the National Academy of Engineering; a Fellow of the IEEE; the Academy of Management, and the American Academy of Arts and Sciences; and a Benjamin Franklin Fellow of the Royal Society of Arts (London).

The 1975 National Computer Conference, to be held May 19-22 in the Anaheim Convention Center, will be the year's largest gathering of the worldwide computer science and data processing community. In addition to major addresses by distinguished national authorities, the conference will feature approximately 90 program sessions and an exhibit of the latest products and services available from the computer field.

Uncapher to Oversee Opening of AFIPS Washington Office

Keith W. Uncapher will serve as chairman of AFIPS' newly-formed Washington Activities Standing Committee, according to an announcement by George Glaser, president. The committee will open and oversee operations of the AFIPS Washington Office, being established to serve as a communications center between the information processing community and the Federal Government.

The AFIPS Washington Office is charged with three primary functions:

- Provide an objective and impartial information service to the AFIPS Constituent Societies.
• Establish contact with members of government agencies and Congressional staffs, and make experts available from the AFIPS constituency to such groups.
• Undertake extensive personal contact, in formal hearings and informal meetings, with government agencies and Congressional staffs, as a means of providing information directly to these groups.

In accordance with AFIPS status as a nonprofit, scientific and educational organization, the Board resolved that the "information to be provided to various agencies and other organizations shall be restricted to technical information which may be used in arriving at policies by such agencies, but shall not relate to policy guidance per se."

"The Board action in authorizing the establishment of a Washington Office," Glaser stated, "is an historic step and marks a major commitment by AFIPS in providing assistance to the Federal Government. I am particularly pleased that Keith Uncapher has accepted the appointment to head the Standing Committee to oversee this activity. Keith has made enumerable contributions to AFIPS and has been a major driving force in the establishment of an AFIPS presence in Washington."

Uncapher is a past president of AFIPS and is Director of the Information Sciences Institute of the University of Southern California. He is a member of the U.S. Air Force Scientific Advisory Board and a former chairman of the IEEE Computer Society.

According to Glaser, the Washington Office should greatly enhance AFIPS' ability to assist the Federal Government by supplying technical information and assistance, when requested, on computer-related issues; improve communications among industry, academic institutions, and federal agencies concerning research and development in computing; and supply information to AFIPS Constituent Societies about federal activities and policies affecting the information processing field.

Present plans, Glaser commented, call for establishment of the AFIPS Washington Office during the first part of 1975.

**Arthur P. Stern**

**Elected IEEE President**

Arthur P. Stern, Vice President and General Manager, Advanced Products Division, The Magnavox Company, Torrance, California, has been elected IEEE President for 1975. Stern joined Magnavox in 1966 and has directed advanced communication, control and information technology, and systems activities. He has also been a nonresident staff member of MIT. A member of IEEE's Board of Directors for three years, Stern just completed a term as Vice President—Regional Activities and has also served as Secretary.

Joseph K. Dillard, Manager, Advanced Systems Technology, Westinghouse Electric Corporation, East Pittsburgh, Pennsylvania, has been elected Vice President. Dillard began his engineering practice as a member of the Electrical Engineering Department of MIT. Joining Westinghouse in 1950, he became a manager six years later and is currently responsible for the engineering relationship of Westinghouse with electric power companies all over the world. Dillard, IEEE Treasurer last year, has also served as Vice President—Technical Activities.

Elected Regional Directors/Regional Delegates for 1975-1976 were:

Region 2 (Eastern)—William W. Middleton, General Building Engineer, Bell Telephone Company of Pennsylvania, Philadelphia, Pennsylvania; Region 4 (Central) Paul F. Carroll, President, Semiconductor Specialists, Inc., Elmhurst, Illinois; Region 6 (Western)—Director, Carleton A. Bayless, Systems Design Division Engineer, Pacific Telephone and Telegraph Company, Sacramento, California, and Vice Director, John W. Thatcher, JPL, Pasadena, California; Region 8 (including the United Kingdom, Europe, parts of Asia and Africa)—Dr. F. Louis Stumpers, N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands.

Elected Divisional Directors/Divisional Delegates for 1975-1976 were: Division II—John E. Barkle, Jr., Project Manager, Bechtel Power Corporation, San Francisco, California; Division IV—Robert A. Rivers, President, Aircom, Inc., Union, New Hampshire; Division VI—Dr. Robert W. House, Manager, Social and Systems Sciences Department, Battelle Memorial Institute, Columbus Laboratories, Columbus, Ohio.

**IEEE Members Reject Constitutional Changes**

Two proposed amendments to the IEEE Constitution, one to create a paid President and the other to reduce the number of signatures required to nominate Institute officers, were both defeated by a vote of the membership. The outcome of the balloting was announced by John J. Guerrera, 1974 President of IEEE, following receipt of the results from the Institute's Tellers Committee. Both proposals had been placed on the ballot by petition. Passage would have required approval by at least two thirds of those voting.

The proposal to have an elected paid President, serving a three-year term, was rejected by a greater than two-to-one margin. Of the more than 43,000 votes cast, 70% were against the change. Currently the IEEE President serves a one-year term and receives no salary.

The suggested amendment reducing the number of signatures required to place a name on the ballot from two percent (2%) to one-third percent (1/3%) was defeated by a vote of 24,001 against and 18,592 in favor.

In rejecting the two amendments, the IEEE membership supported their Board of Directors which had opposed both propositions. "I am delighted that our membership has reaffirmed the democratic nature of our Constitution through this vote," Guerrera said.

"Through constitutional amendments only two years ago we expanded the scope of activities in which the Institute and its members could participate, specifically in the area of professional activities," he continued. "Significant progress has been made, but more needs to be done! I feel confident that as the future unfolds, the goals of the Institute, both short and long range, technical and professional, will be achieved without the immediate need for further changes in the Constitution."

**COMPUTER**
Executive Interchange
Program Seeks Nominees

Nominations are being accepted for the 1975/76 President’s Executive Interchange Program. The Executive Interchange Program provides private sector executives, as well as federal executives, with the opportunity to work in challenging positions in the other sector for a one year period.

Work assignments, generally staff positions, are available in areas such as information systems, program analysis, budget and finance, legal, administration, personnel, training, management analysis and audit. Work assignments will be in Washington, D.C. area and depend on the executives’ skills and the needs of participating organizations. Compensation for each executive will generally be consistent with that earned just prior to the work assignment, up to a maximum of $36,000.

Candidates from the private sector are generally between the ages of thirty and forty and earn a minimum of $25,000 per year prior to selection. Candidates must also have high potential for advancement to senior management, a proven record of management ability, a history of rapid advancement, good placement potential with pertinent skills, and superior age/salary relationship.

Candidates must be nominated by their chief executive officer and be willing to relocate their families to the Washington area for the period of the assignment.

Typical participating federal agencies include the Department of the Treasury, Office of Management and Budget, Department of Commerce, Department of State, Environmental Protection Agency, Small Business Administration, General Services Administration, Atomic Energy Commission, Department of Health, Education, and Welfare, Department of Defense, U.S. Postal Service, Department of Interior, and Export-Import Bank.

The deadline for receipt of completed nominations for the 1975/76 Program is March 1, 1975. For further information, contact the President’s Commission on Personnel Interchange, Suite 1316, 1900 E Street, NW, Washington, D.C. 20415, or phone (202) 632-6834.

January 1975

new selections for your professional bookshelf...


The problems associated with testing electronic devices and systems continue to grow in complexity. This year’s Test Symposium—fifth in the series—explored test problems and strategies introduced by use of large-scale integrated semiconductor memory and logic devices.

Price: $16.00
Member Price: $12.00

“Computers in Cardiology,” Conference Proceedings, October 2-4, 1974

The conference brought together engineers, computer scientists, and clinical investigators to discuss the application and evaluation of modern digital computers to current problems in clinical cardiology. The emphasis was on engineering details of clinically useful systems. The papers cover many of the important emerging applications of computers: arrhythmia monitoring, catheterization laboratories, intensive care, information displays, and prognostic indices.

Price — $20.00
Member Price — $15.00


Large response of excellent papers produced the first 4-day microprogramming workshop in this long and successful series. Contains 57 papers presented at the workshop/symposium in Palo Alto sponsored by the IEEE Computer Society and ACM SIGMICRO; covers broad range of topics including microprogramming in minis, large-scale machines, and networks; high-level languages for microprogramming.

Price: $15.00
Member Price: $10.00


Held in Copenhagen, this conference featured over 70 papers focusing in such areas as mathematical methods, line processing and analysis, industrial applications, biomedical applications, picture and scene processing, speech recognition, character recognition, syntactic methods, and analysis of three-dimensional scenes.

Price: $25
Member Price: $18.75

To order: Use the multipurpose order form opposite page 70.
ADL Sponsors National Micro-
Processor Conference

Some 175 executives from the
United States and abroad heard 15
speakers consider economics, applica-
tions, and technology of micropro-
cessors at the First National Micro-
processor Conference held Dec. 2-3 in
Boston, Massachusetts. The conference
was sponsored by Arthur D. Little/ 
Learning Systems, the professional
educational component of the research 
and consulting firm. Presentations
were combined with discussions in
which speakers and attendees ex-
changed views on the potential of
microprocessors to increase industrial
productivity and reduce costs. 

In opening the conference, Norman
Zimbel of ADL estimated that the
market for microcomputer compo-
nents could grow to about $200
million by the end of the decade, with
a significant fraction of that volume
being accounted for by new markets.
Zimbel and David F. Millet, also a
senior professional at ADL, served as
co-moderators.

The first segment of the conference
program explored the impact on users
of microprocessors and of the depar-
tures they necessitate from the tradi-
tional design, development, and manu-
factoring processes. Speakers included
Lincoln Young, Marketing Manager at
Motorola, William Davidow, Manager
of Microcomputer Systems at Intel, and
John Weissmann, Manager of Micro-
Processor Product Development at
Rockwell International.

In the next segment of the confer-
ence, Robert Cushman, Special Fea-
tures Editor of EDN Magazine, Donald
Haring, President of Computek, David
F. Millet of ADL, and Philip Roybal,
National Semiconductor's Micropro-
cessor Market Manager, dealt with
specific hardware and software.

The second day of the conference
began with three presentations on the
development process. Robert Dukar-
ski, Chief Engineer at Applied Com-
puting Technology, outlined charac-
teristics and applications of currently
available system development hardware.
Darrow Lebovici of ADL presented
various approaches to software de-
velopment time and cost, and program
efficiency and ultimate manufacturing
cost. Andrew Knowles, Vice President
for Administration at Digital Equip-
ment Corporation, compared the
relevant characteristics of micropro-
cessors with those of minicomputers
and custom logic machines.

These speeches were followed by
three case studies in widely varying
fields. H. Richard Anderson, Project
Manager for Technical Products at
Monroe, looked at the use of micro-
processors in commercial products.
Joseph Bourque of Icon presented a
case study of the use of micropro-
cessors in numerical control tools.
Michael Ford, Vice President of
General Automation, traced the plan-
ning, design, and development of the
LSI 16 and LSI 12/16 minicomputer,
the first microprocessor-based mini-
computers available.

In the final presentation, Dr. Stuart
Madnick of MIT projected future
microprocessor applications in per-
sonalized computation, intelligent con-
trollers, and modular general-purpos
computers, as well as other longer
term applications.

Soviet Delegation on Software
Visits IMSL

International Mathematical and
Statistical Libraries, Inc. (IMSL), was
selected by the National Science Foun-
dation to host a delegation from the
USSR during their Houston visit. The
delegation, headed by Professor Victor
V. Shurakov, Dean of the Moscow Eco-
nomics and Statistics Institute, has a
primary interest in the "Theoretical
foundation for software for applica-
tions in economics and management." V. P.
Morozov, Laboratory Chief, Moscow
Economics and Statistics Institute, was
a member of the delegation.

Dr. James Gips, Department of Bio-
mathematics, UCLA, and Peter N. Bud-
zilovich, Representative of the U.S. State
Department and interpreter, accompanied
the delegation.

IMSL personnel presented the company’s
basic ideas in subroutine library develop-
ment, distribution, and maintenance.
Algorithm selection for a library, and
mathematical software portability prob-
lems and solution alternatives were
discussed.

The Soviet delegation’s interest area
coincided closely with IMSL’s, particu-
larly with regard to portability of math-
ematical software.

During their two week visit to the
US, the delegation also held discus-
sions at the Courant Institute, Tym-

IMSL has recently expanded its facilities, moving into new offices January 1, 1975. The new address is IMSL, Sixth Floor—GBN Building, 7500 Bellaire Blvd. Houston, TX 77036.

NBS Publications Available

The Commerce Department's National Bureau of standards has announced the publications described below. Order printed copies prepaid by SD Catalog Number from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. Foreign remittances must be in U. S. exchange and include an additional 25% of the publication price to cover mailing cost. Order microfiche copies prepaid by NTIS Number from the National Technical Information Center, Springfield, VA 22151; the price is $1.45 (domestic) or $2.95 (foreign) per copy.

FORTRAN Analyzer Details of a FORTRAN analysis package are presented by Gordon Lyon and Rona B. Stillman of NBS's Institute for Computer Science and Technology. Examples illustrate a current operational level which gathers FORTRAN statement and frequency-of-execution statistics; arguments support a simple technique for monitoring FORTRAN executions.

Order printed copies of the 28-page publication, $8.00 prepaid, by SD Cat. No. C13.45:849; microfiche copies by NTIS No. COM-74-50998.

Computer Performance Evaluation

The Eighth Meeting of the Computer Performance Evaluation Users Group (CPEUG), sponsored by the U. S. Army Computer Systems Command and NBS, was held December 4-7, 1973. The 17 papers included in these proceedings represent a major source in the limited literature on computer performance, evaluation, and measurement.

Order printed copies of the 155-page publication, $1.80 prepaid, by SD Cat. No. C13.10:401; microfiche copies by NTIS No. COM-74-50931.

Preliminary Prospectus for an NBS/NSF Software Engineering Handbook Series

The National Bureau of Standards and the National Science Foundation have announced a joint project toward development of a Software Engineering Handbook which would be produced with wide participation from the professional computing community.

The goal of the handbook is to ease the continuing burden that programmers and systems managers face in obtaining practical technical guidance for designing and producing high quality computer software. It is believed that a wide spectrum of practical material has become available in recent years: this reference material is scattered widely among sources and publication forms, and should be aggregated and recast concisely. The Software Engineering Handbook would accomplish this in a desk reference for individual programmers and managers.

Initial impetus for the handbook was provided by a planning session held March 4-6, 1973, under auspices of ACM, NBS, and NSF. Committee recommendations are being distributed with the handbook prospectus.

The NBS Institute for Computer Sciences and Technology (ICST) is organizing the editorial and support staff to complete pilot technical material for the handbook. Potential contributors can obtain the prospectus by writing to Software Engineering Handbook, National Bureau of Standards, Institute for Computer Sciences and Technology, Computer Science Section (TECH A265), Washington, D. C. 20234.