Postal Commission recommends electronic communications system

An electronic communications system regulated by the federal government and operated in conjunction with private enterprise has been advanced as a method of preserving both the public interest and the U.S. Postal Service. This proposal is contained in an April report by the Commission on Postal Service.

Origin of the report. The Commission on Postal Service was created by Congress in September 1976 to study problems and make recommendations concerning the USPS. Specifically, the commission was directed to determine the effect of electronic funds transfer systems on USPS, and to consider the operation of an electronic communications system by USPS.

The report incorporates the Committee on Telecommunications/National Research Council study, Electronic Message Systems for the U.S. Postal Service (Computer, April 1977, p.6), which endorsed demonstration projects in electronic communications to be undertaken by the federal government and private enterprise. The Postal Service Commission study was presented to the President and Congress April 18th by Commission Chairman Gaylord Freeman, former chairman of the First National Bank of Chicago.

Findings and conclusions. Advances in electronic communications since the 1960's suggest "disastrous consequences" for the USPS, according to the study. According to the report, the most profitable class of mail for the USPS, first class mail, is also the most likely to be diverted by electronic communications media. Another study, performed for the commission by Arthur D. Little, Inc., has suggested that by 1985 23 percent of all first class mail could be processed through electronic communications.

The Postal Service and the Treasury Department have not cooperated on the electronic funds transfer system. The Treasury Department has initiated a "Direct Federal Payment" system which is now under development. If the Treasury system is effective, the USPS system should be abandoned.

Recommendations. The commission criticizes the Postal Service’s planning for entry into electronic communications. It cites low priorities, little money, and lack of organizational stature. Recommendations include establishing long-term and short-term objectives in electronic communications as part of an integrated, overall, long-range plan.

As a long-term objective, it suggests development of a "nationwide, federally regulated electronic communication enterprise [which] would most likely succeed in achieving the major economies of scale necessary to support a system to manage both hard-copy and electronic communications...

As a short-term objective, it suggested that USPS begin immediate participation in cooperative test programs with industry. The commission held that such joint ventures minimize capital investment, reduce risk, and utilize the unique collection and development network and trained work force of the Postal Service.

Finally, it recommended careful analysis of the composition of the mail-stream as a means to adjust to the diversion caused by electronic advances.

The complete report is available in three volumes from the Commission on Postal Service, 1750 K Street, N.W.; Suite 801; Washington, D.C. 20006. Telephone is (202) 634-4174.

New "privacy act" supported

The Privacy Protection Study Commission in June will recommend to the President and Congress passage of a new act which will complement the Privacy Act of 1974, members of the Privacy Commission stated in a March meeting in Washington. According to an article in Computerworld, the commission will distinguish between the Privacy Act and the Freedom of Information Act, rendering the former "the sole vehicle for an individual seeking access to his own information."

New provisions. The commission is reported to be recommending that information obtained in the pursuit of national security, foreign policy, and law enforcement be exempt from access by the new Privacy Act. The new legislation would also substitute a more rigid test for determining what constitutes secure conditions for protection of personal data. In addition, the commission is recommending a legal requirement that data subjects be notified of all reasons for which data is collected. Finally, it suggests
a provision in the new legislation requiring an institution to reconsider a decision later shown to be based on erroneous or disputed information.

Costs of implementation. The Office of Management and Budget noted in March that total operating costs for implementation of the Privacy Act of 1974 from 1975 to 1976 amounted to $366.6 million, substantially lower than OMB's 1974 projection of $200-$300 million. Compliance with the publication requirements constituted almost one-half of the startup costs associated with fair recordkeeping practices, OMB said.

In April, in an action described as a reemphasis of previous policy, OMB Director Bert Lance advised federal agencies to further limit data collection on individuals. The federal government maintains some 6700 personal data systems, consisting of an estimated 3.9 billion records.

Other recommendations. The Privacy Commission is also expected to recommend abolition of the practice of requiring insurance or job applicants to give blanket authorizations to institutions for data gathered over an indefinite time period. It suggests limiting data gathering to a specified amount of time, such as 90 days. An individual should also be informed of what type of information is being collected, e.g., regarding character or general reputation. Insurance companies would be required to delete all information obtained on an individual not previously specified to him. According to the commission, an individual should be able to obtain access to information on which an institution's adverse decision concerning him is based.

The commission will publish the results of its two-year investigation this month. It is expected to release a single volume outlining its recommendations, followed by supplementary volumes detailing findings in each area of personal recordkeeping.

Copyrights favored by CONTU committees

Uniform legal protection of software is desirable and can be provided through copyrights with minor changes in the new Copyright Act, according to preliminary findings of the three-member Software Committee of the National Commission on New Technologies of Copyrighted Works (CONTU).

At a March meeting of the Computer Law Association in Washington, CONTU staff members stated that uniform protection of the law is best afforded for software through the Copyright Act. The staff members added that patents are an unsatisfactory form of protection because recent court decisions have held that software must be new and "unobvious" to be patentable. In addition, copyright protection for computer data bases is preferred by the CONTU Data Base Committee in its preliminary findings.

The committee reports have been criticized by various commission members and will be circulated this month with dissenting views.

Trade secret claims and contractually-based licensing agreements are presently used to protect software. The U.S. Copyright Office also registers works derived from computer applications in which substantial human effort is exerted.

A bill to extend the term of CONTU through July 1978 has passed the House and is pending in the Senate.

Minimum educational requirements established for computer scientists

Minimum educational requirements for the U.S. Civil Service Commission's new Computer Science Series, GS-1550, were promulgated by the Civil Service Commission (CSC) last month.*

Minimum educational requirements for computer scientists in pay grades GS-5 through GS-15 include completion of a bachelor's degree consisting of 30 semester hours of course work in math, statistics, and computer science. No less than 15 of the semester hours in math and statistics are specified in differential and integral calculus.

Duties of the computer scientist category are defined as requiring: "(a) professional competence in applying the theoretical foundations of computer science ...; (b) specialized knowledge of broad areas of applications of computing ...; and (c) knowledge of relevant mathematical and statistical sciences."

The requirements appeared in the Federal Register, April 15, 1977, p. 19896, and are effective as of April 15th. Further information is available from Raymond R. Yinger, personnel management specialist, Bureau of Policies and Standards, U.S. CSC, 1900 E Street N.W., Washington, D.C. 20415; telephone (202) 632-5612.

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House committee adopts policy statement on information processing

The Committee on House Administration has assumed responsibility for all information processing matters in the House of Representatives concerned with mechanization, automation, computerization, and related functions, according to a policy statement, “Information Processing and Computer Services Activities,” adopted in March. The committee has designated a Policy Group on Information to establish and evaluate policy on the operation of new services and systems in the House.

The group is empowered to oversee the activities of House Information Systems. It can direct HIS to develop statements of requirements, justifications, and cost analyses of new services and systems. The group can then evaluate all requests for new services and systems and recommend action to the committee.

AFIPS in Washington

Programmer job categories. A Technical Working Group of the White House Office of Management and Budget has tentatively adopted an AFIPS proposal for programmer occupational classifications to be used in the OMB Standard Occupational Classification Manual, which will be used as the basis for all federal data collection efforts related to the U.S. work force. Recent Bureau of Labor Statistics figures indicate that there were approximately 195,000 U.S. programmers in 1974.

The AFIPS proposal was developed by a panel consisting of Dr. Bruce Gilchrist, Donn Parker, and Dr. Raymond Berger. Essentially, it recommended deletion of several programmer categories (some of which were outdated or not in common usage) from the draft SOCM in favor of three broad classifications for business, scientific, and systems programmers. The final SOCM will also have a separate category for computer systems analysts.

Panel studying ANSI Z-39 Committee. At the request of the National Science Foundation and the National Commission on Libraries and Information Science, AFIPS has provided one member of a 13-person task force which is studying the activities and charter of the American National Standards Institute Z-39 Committee. Melvin Day, deputy director of the National Library of Medicine and a former president of the American Society for Information Science, will participate on the task force in affiliation with AFIPS.

The ANSI Z-39 Committee itself deals with standards related to libraries and information science; of particular interest to AFIPS, it deals with matters such as information system user protocols and data base formats. The task force, formally known as the Task Force on ANSI Committee Z-39, Activities and Future Directions, is under the sponsorship of NSF and NCLIS. Under the present plan, it will (1) recommend an organization to sponsor the Z-39 Committee and provide its secretariat and (2) assess the committee’s charter and present mode of operation.

At its initial meeting, the task force organized into six working groups on (1) the domain of the task force study; (2) the scope and mission of Z-39; (3) the selection of a secretariat(s); (4) the Z-39 planning approach; (5) Z-39 operations and physical location; and (6) reporting and liaison to the Z-39 Committee. Day will chair the working group on scope and mission of Z-39.

PCST membership. AFIPS recently received a request to provide names of past AFIPS officers to assist in evaluating candidates for the President’s Committee on Science and Technology. The request related specifically to the evaluation of candidates for a PCST member in the field of information dissemination.

PCST was created under the same legislation which established the White House Office of Science and Technology Policy and the position of the Presidential Science Adviser (now held by Dr. Frank Press). The committee is chartered to analyze the overall federal science, engineering, and technology effort, including its organization and objectives. PCST is required by statute to have one member qualified and distinguished in the information dissemination area, and to consider needs for “improvements in existing systems for handling scientific and technical information on a government-wide basis, including consideration of the appropriate role to be played by the private sector in the dissemination of such information.’’

The request to AFIPS (among others) was made by Dr. Lee Burchinal, of the NSF Division of Science Information, pursuant to a direct request from OSTP.

IFIP Congress 77/Medinfo 77 scheduled for Toronto

For the first time in 12 years, the International Federation for Information Processing will hold its triennial gathering in North America. Slated for August 8-12 in Toronto, Canada, the congress will convene more than 5000 computer scientists, managers, and executives from all over the world to discuss the latest developments in computing technology—hardware, programming, applications, and social implications.

IFIP technical program. In focusing on the congress theme, “The Maturing Profession—Perspectives and Prospects,” the program committee has devised a technical program that will cater to the specialist in many fields, and to those who are interested in obtaining an overview of developments in all aspects of information processing.

The technical program will bring together authoritative views of computer scientists, but special effort is being made to ensure the relevance of the program to business users as well by placing a greater emphasis on panels and mini-symposia based on verbal presentations rather than on formal papers.

The technical program will cover eight areas: theoretical foundations of information processing, computer hardware, computer software, computer networks, applications in science and engineering, computer aided design, applications in management and administration, and information processing and education.

Medinfo 77. To be held concurrently and in conjunction with IFIP Congress 77 will be Medinfo 77, the Second World Conference on Medical Informatics covering the broad field of information processing in medicine and public health. The conference program has been structured in three parallel sessions each half day so that such diverse groups as physicians, hospital administrators, health researchers, and computer scientists may each profit from a logical sequence of sessions with topics especially interesting to them.

Exhibition 77. Expected to attract 20,000 visitors, the IFIP Congress 77 Exhibition will parallel the technical meetings, with more than 100 companies displaying their products, systems, and services during the four-day event.

For further information, contact Canadian Information Processing Society, 212 King St. West, Suite 214, Toronto, Ontario, Canada, M5H 1K5.
Donald E. Rosenheim of IBM has been appointed general chairman of COMPCON 78 Spring, according to an announcement made last month by COMPCON Spring Standing Committee Chairman Sidney Fernbach of Lawrence Livermore Laboratory. The conference will be held February 27-March 2 in San Francisco, on the theme of “Computer Technology: Status, Limits, Alternatives.” Papers for the meeting are now being solicited (see p. 42 of this issue for details).

Commenting on the conference theme, Rosenheim stated that this year’s spring COMPCON will attempt to take stock of computer technology from the standpoint of both the designer and the user.

“We will examine where we are at present, try to understand the evolutionary limits of our existing technologies, and examine alternative approaches which may challenge these technologies,” he said.

Citing the computer’s role in industrial productivity, Rosenheim observed that living standards and quality of life in general are becoming steadily more dependent upon technological innovations in hardware, software, and applications.

“The continued advancement of computer technology may well be the key to the future well-being of the Western World,” he concluded.

Rosenheim, director of IBM’s Research Laboratory in San Jose, has been associated with that firm since 1951. His career there has included development work and instruction on the IBM 701 digital computer, digital computer research, high-speed logic and pulse techniques, and reliability research. Prior to assuming his present position, he worked at the T.J. Watson Research Center as manager of the Circuits and Systems Group, manager of the Solid-State Electronics Department, director of applied research, and assistant IBM director of research.
New programming course for high school students features handheld calculators

Texas Instruments Inc. has announced the availability this fall of a course for teaching fundamental programming with handheld calculators to students in high school and beyond. Developed by the University of Denver Mathematics Laboratory, the step-by-step course is designed for students with no previous knowledge of programming techniques or the use of handheld programmable calculators.

The lesson materials are designed to move students into simple, straightforward programming quickly. Students then proceed to advanced techniques involving conditional and unconditional transfers, loops, and on to subroutines. At each point, there are applications or problem situations at various levels of mathematics, which the teacher selects to help students understand the concepts covered.

Because the course features modular activities, sections of it may be used to enrich mathematics or science classes. Or the entire package can stand alone as a separate, mini-course in programming.

Come to MIDCON/77

A new professional exhibition serving marketing people is scheduled for November 8-10 in Chicagoland, which will be geared to the midwest market, which is traditionally noted for its high volume usage of electronic components, instrumentation, production, packaging, and peripheral devices. The forum will feature a program of 25-30 half-day sessions, with 300 plus exhibits, and a total expected attendance of more than 15,000, electronic technologists.

Overall, the format will be applications-oriented, stressing near-term usefulness to the engineer or manager, and placing less emphasis on theoretical or academic presentations. Sample areas of interest include computers and microprocessors, semiconductor utilization, telecommunications, consumer and appliance electronics, instrumentation, energy, components and devices, as well as management, marketing, and careers.

MIDCON/77 is sponsored by IEEE Regions Four and Five; IEEE Chicago and Dallas Sections; Mid-USA Council, ERA; Chicagoland and Southwest Chapters, ERA. For further information on the event, contact MIDCON/77, 999 North Sepulveda Boulevard, El Segundo, CA 90245; (213) 772-2965.

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