

- It delegates to OMB responsibility for establishing policy for Government procurement of telecommunications facilities and services, formerly a function of OTP.
- It transfers all other functions of OTP, including policy development and the allocation and regulation of frequency assignments, to the Department of Commerce.
- It creates a new position of Assistant Secretary of Commerce for Communications and Information "to serve as spokesman for the Administration on telecommunications issues, and [to] assume responsibility for the functions transferred from OTP and those of the Office of Telecommunications in Commerce," according to OMB Director Lance.
- It retains OSTP but transfers all functions vested in the director of OSTP to the President, who may then redelegate various functions.
- It abolishes ISETAP, PCST and FCCST (established with OSTP through enactment of the *National Science and Technology Policy, Organization, and Priorities Act of 1976*), and transfers these organizations' functions to the President, who may then redelegate some or all of them.

Criticism of 'Reorganization Plan No. 1.' Congressional criticism of *Reorganization Plan No. 1*, as it pertains to telecommunications, computers and information policies groups, centered on the creation of the new Assistant Secretary of Commerce for Communications and Information. Sen. Abraham A. Ribicoff (D-Conn.), chairman of the Senate Committee on Government Affairs, suggested there will be "a lack of coordination" of telecommunications policies with the new Assistant Secretary of Commerce outside the White House. Sen. Ribicoff also expressed concern that the Assistant Secretary would "get lost in the shuffle." In addition, Rep. Jack Brooks (D-Tex.), chairman of the House Committee on Government Operations, questioned how the Assistant Secretary-designate, "not the juiciest job in the United States," could coordinate Government-wide policy.

BILL REGULATING EFTS INTRODUCED IN HOUSE

A bill that would extend Federal regulation to include control over electronic funds transfer systems (EFTS) was introduced in the House of Representatives in July by Rep. Mary Rose Oaker (D-Ohio). The bill, *H.R. 8387* (#), would empower the Comptroller of the Currency to oversee EFTS for national banks; the Federal Home Loan Bank Board to oversee EFTS for savings and loan associations; and the Federal Deposit Insurance Corporation, the Federal Reserve, and the National Credit Union Administration to oversee EFTS for their member institutions.

The bill incorporates some of the legislative recommendations of the National Commission on Electronic Fund Transfers (NCEFT) contained in the NCEFT's February, 1977, interim report. (The final NCEFT report is due to be released next month.) *H.R. 8387* was referred to the House Committee on Banking, Finance and Urban Affairs in July.

JUSTICE, USERS, SUPPLIERS, TRADE ASSOCIATIONS FILE COMMENTS IN 'SECOND COMPUTER INQUIRY'

The Department of Justice, the Ad Hoc Telecommunications Users Committee, AT&T, IBM Corp., the Computer and Business Equipment Manufacturers Association (CBEMA), the Computer Communications Industry Association (CCIA), and the Association of Data Processing Service Organizations (ADAPSO) have all filed recent comments in the Federal Communications Commission's (FCC) *Second Computer Inquiry*. The *Inquiry* is considering the role of a regulated monopoly, AT&T, and other regulated common carriers in providing unregulated data processing services, generally forbidden by the FCC.

In filings last May, the Justice Department opposed broad regulation by the Commission of unregulated firms which, though they may compete in certain areas with AT&T, are not now regulated by the FCC. Justice also said it "strongly supports the Commission's intentions to base its rules on marketplace standards, rather than simply technological standards."

The Ad Hoc Telecommunications Users Committee (composed of 15 users companies such as the Ford Motor Co. and Sears, Roebuck & Co.) opposed "a prohibition against the use of new technology for communications purposes." The Users Committee suggested that prohibitions against regulated carriers' entry into unregulated data processing activities should be confined to the "purpose and effect of the services provided," rather than be based on the processes or equipment used.

AT&T argued against an "overly restrictive view" of "communications common carriage." IBM, CBEMA, CCIA and ADAPSO, however, supported a broad definition of data processing, leaving it unregulated, and opening the field to more competition, they said.

FEDERAL MINICOMPUTER, TERMINAL STANDARDS TO BE ADOPTED BY NBS

A new Federal interface standard, called "RS-XYZ;" is planned by the National Bureau of Standards (NBS) to replace the current RS-232C interface between terminals and computers (especially minicomputers) and data communications equipment. According to a June 27, 1977, article in *Computerworld*, the RS-XYZ standard should be implemented this month. In addition, an eight-bit ASCII code (in lieu of the usual seven-bit code), and protocols standardizing the user-terminal interface, are under consideration by NBS. The eight-bit ASCII code could be implemented as a Federal standard early in 1978. A Federal Basic standard is also expected for 1978.

FIRST NATIONAL FACILITY FOR ELECTRONIC DEVICES RESEARCH ESTABLISHED AT CORNELL BY NSF

The first national facility for research on electronic devices with dimensions of less than one micron is being established at Cornell University in Ithaca, New York, with a five-year, five million dollar grant from the National Science Foundation (NSF). The facility, known as the National Research and Resource Facility for Sub-Micron structures,

is designed to find better ways to produce tiny patterns that can be incorporated into various electronic devices. The technology, planned for development in the new facility, could allow researchers to increase the density of components in an integrated circuit by as much as 10 times.

SECOND ANNUAL REPORT OF THE PRESIDENT RELEASED ON 'FEDERAL PERSONAL DATA SYSTEMS SUBJECT TO THE PRIVACY ACT OF 1974'

As required by the *Privacy Act of 1974*, President Carter in June submitted his *Second Annual Report of Federal Personal Data Systems Subject to the Privacy Act of 1974*. The report covers personal data systems maintained by the Executive Branch in 97 agencies during calendar year 1976. The study concludes that there was no "significant change" in the "scope and nature" of Federal personal data systems, nor was there any "significant change" in the use of computers to process personal data.

Specific findings include: (1) Ninety-seven agencies maintained 6,753 personal data systems containing 3.85 billion individual records at the end of 1976, a net increase of 11 agencies and 30 systems, but a net decrease of 34 million individual records from 1975; and (2) at the end of 1976, 29 per cent of the personal data systems and 74 per cent of the individual records were fully or partially computerized, as compared to 27 per cent and 79 per cent, respectively, at the end of 1975.

AFIPS IN WASHINGTON

AFIPS ESTABLISHES PANEL TO COMMENT ON REORGANIZATION OF FEDERAL COMPUTER-RELATED GROUPS, SUBMITS RECOMMENDATIONS TO OMB

AFIPS has established a panel to comment on the reorganization of computer-related groups in the Federal government. Chaired by Dr. Stephen S. Yau, Northwestern University, the panel consists of 13 members who prepared a consensus document for submission to the Office of Management and Budget (OMB).

At the direction of the President to begin a "comprehensive review of the management of administrative services within the Federal government," OMB has solicited comments on a "comprehensive reexamination of Federal data processing." Specifically, the OMB project is focusing on: (1) Improving productivity in the delivery of Government services through the application of computer technology; (2) improving the acquisition, management and use of these resources; and (3) eliminating duplication and overlap in agency jurisdictions dealing with computer issues.

Dr. Yau and Washington Office Director Philip S. Nyborg met August 11th with Mr. Walter W. Haase, OMB deputy associate director and project leader for this area of the Reorganization, to present the AFIPS consensus document. As a result of AFIPS President Theodore J. Williams' letter to President Carter (*Washington Report*, 8/77, p. 3), in which Dr. Williams expressed concern about the Reorganization, Mr. Wayne T. Granquist, OMB associate director for Administrative Management, suggested the meeting

with Mr. Haase.

The AFIPS panel recommendations are summarized verbatim from the consensus document:

1. An independent agency should be established to have cognizance over all Federal procurement and management functions related to data processing and communications; this, as explained below, should be the sole mission of the agency.
2. The Office of Management and Budget (OMB) should continue to provide Government-wide enforcement in this area, by exercising fiscal control.
3. Responsibilities of the independent agency should include authority over all other Government agencies concerning the following functions related to data processing and communications (except as noted):
 - a. Management policy, procurement, technical support and standards development and implementation (Exceptions would be weapons systems computers and procurements below certain minimum costs.)
 - b. Long range planning of data processing and communications operations as part of the regular budget cycle
 - c. Mandatory periodical total system performance evaluation and analysis of data processing and communications operations in all agencies
 - d. Providing technical consultants to other agencies
 - e. Maintenance of an inventory of well-documented software packages with the information on their performance
 - f. Recommendations to the Civil Service Commission regarding:
 - 1) Adequate job categorization with particular emphasis on software personnel
 - 2) Provision for adequate continuing education to enable personnel to remain abreast of rapid technological change
4. The following questions are recommended for careful further study:
 - a. Whether it is desirable to consolidate national policy functions, relating to computer and communications technologies, within a single group (*i.e.*, in either the proposed independent agency or within an existing department)

- b. (As indicated, we recommend that an independent agency is established, with the responsibilities outlined in item 3, above; however, if this recommendation is not adopted): Whether this agency should be placed within the Commerce Department
- c. Whether there should be established a Federal Data Administrator responsible for analyzing and facilitating the overall flow of Federal data

Members of the AFIPS panel (and society affiliations) include: Mr. Isaac L. Auerbach, Auerbach Associates, Inc. (first IFIP president); Mr. Joseph Cunningham (past ACM executive director); Dr. N. P. Dwivedi (IEEE); John M. Eger, Esq., Lamb, Eastman & Keats (AFIPS); Mr. George R. Eggert (DPMA); Dr. Bruce Gilchrist, Columbia University (past AFIPS executive director); Dr. Herbert Grosch (ACM president); Mr. William B. Groth, IBM Corp. (IEEE); Dr. Carl Hammer, Univac Federal Systems (ACM); Mr. Thomas McConnell, Atlanta Public Schools (past AEDS president); Dr. William Miller, Stanford University (SIAM); Philip S. Nyborg, Esq. (AFIPS Washington Office Director); Mr. H. Lewis Parker, Comsat Laboratories (AIAA); Dr. Anthony Ralston, State University of New York (past AFIPS president), Dr. Edgar Sibley, University of Maryland (ACM); Mr. Keith Uncapher, Information Sciences Institute (past AFIPS president); Dr. Willis Ware, Rand Corp. (past AFIPS president); and Mr. Sidney Weinstein (ACM executive director).

FIRST COPY OF AFIPS STUDY ON 'INFORMATION PROCESSING IN THE U.S.' PRESENTED TO WHITE HOUSE OFFICE OF SCIENCE AND TECHNOLOGY POLICY

The first copy of a new AFIPS study, entitled *Information Processing in the United States A Quantitative Summary* (see *Washington Report*, 4/77 p. 1), was presented in July to the White House Office of Science and Technology Policy (OSTP). The 85-page report updates a previous AFIPS study, *The State of the Computer Industry in the United States*, published in 1973. Accepting the report on behalf of Dr. Frank Press, OSTP director and Presidential science adviser, were: Mr. Philip Smith, OSTP assistant director, and Mr. William Montgomery, OSTP executive officer.

Incorporating some 34 figures and tables, the study includes previously unpublished and unassembled data on U.S. computer suppliers and users, personnel and education in the information processing field, and significant trends for the computer area. Presenting the report, AFIPS Washington Office Director Philip S. Nyborg noted that it is intended to provide summary data on the information processing field, establishing computer technology as a "non-scarce" national resource relevant to a broad range of policy questions. OSTP Assistant Director Smith described the study as "timely" and "very helpful."

In a letter accompanying the report, AFIPS President Theodore J. Williams wrote to Dr. Press: "We can envision that you may have need of further specific reports (or less formal input) on applications of computer science and technology to achieve national program goals and to solve national problems. As these needs arise, I urge you to regard the 110,000 men and women who constitute the 15 scientific and educational societies within AFIPS, as a continuing source of experts and expertise from the information

processing field. We would welcome the opportunity to usefully contribute to the important work of your office."

Mr. Nyborg, who co-edited the study, was accompanied by Research Associate Pender M. McCarter, co-editor and principal investigator working on the report. Mr. William Erickson, co-editor, was also employed by AFIPS to participate in the project as a part-time, temporary research assistant.

According to the study, world computer manufacturing and services revenues of U.S. firms are projected to double from \$31.9 billion in 1976 to \$64.0 billion in 1981, and world computer equipment shipments for U.S. firms are also forecast to double from \$15.9 billion in 1976 to \$30.5 billion in 1981. In addition, the report notes that, while the insurance and banking industries have the highest degree of computer usage in terms of the proportion of firms using computer equipment or services, the manufacturing sector is the biggest user in the U.S. in terms of total expenditures on computer equipment and services. According to the study, the total computer labor force (*i.e.*, individuals having full-time employment in traditional computer-related occupations such as programmer or analyst) is placed at 853,000. Finally, the report stated that while the percentage of gross national product spent on computer usage in the U.S. is increasing dramatically, the amount spent *per capita* is increasing at an even faster rate.

Public distribution of the study is scheduled this month by AFIPS at \$6.00 per copy. Initial inquiries should be directed to the Headquarters Office in Montvale, New Jersey, telephone (201) 391-9810.

NEWS BRIEFS

Implementation of a computerized switching system to transmit administrative messages between the National Crime Information Center and the nation's local and state law enforcement units is being reexamined by the Department of Justice, in view of Congressional opposition to the project.

The House Committee on Science and Technology last month convened hearings on the functions and operations of the Congressional Office of Technology Assessment (OTA), reportedly considering amendments to the Technology Assessment Act, which established OTA in 1972; among other recent activities, OTA is examining the basis for establishing a series of OTA technology assessments in the area of telecommunications, computers and information policies.

A bill to make a crime "the fraudulent or illegal use of any computer owned or operated by the U.S., certain financial institutions, and entities affecting interstate commerce" was introduced in the House in July by Rep. Charles Rose III (D-N.C.) and Rep. Robert F. Drinan (D-Mass.); the bill follows similar legislation introduced in the Senate in June (Washington Report, 8/77, p. 2).

Computer specialists are being sought by the Organization of American States (OAS) for short and long-term technical assistance missions to governments in Latin America and the Caribbean; further information is available from the Unit of Cooperation with Nongovernmental Institutions, Office of International Cooperation, OAS, Washington, D. C. 20006.

PRIVACY, OTHER DATA PROCESSING LEGISLATION GIVEN LIMITED CHANCES FOR
PASSAGE IN FIRST SESSION OF 95TH CONGRESS

Following presentation of the Privacy Protection Study Commission's final report in July (*Washington Report*, 8/77, p. 1), chances for passage of privacy and DP legislation introduced in the first session of the 95th Congress appear to be limited, according to a survey of higher-level Congressional staff members conducted by *AFIPS Washington Report* last month. Reasons for delay in consideration of legislation on DP and privacy include: uncertainty over adjournment (with estimates ranging from as early as this month to as late as Thanksgiving); receipt of Executive Branch comments on the Privacy Commission's recommendations; and consideration of other business, ranging from the Lance investigation to energy, lobbying and anti child pornography legislation.

In addition to the privacy legislation already introduced, new House legislation is expected concerning recordkeeping among educational institutions. The *Omnibus Privacy Act* is also anticipated, incorporating previous legislation introduced by Rep. Barry M. Goldwater (R-Calif.) and Rep. Edward I. Koch (D-N.Y.), as well as providing for a new Federal entity overseeing implementation of privacy legislation. In the Senate, additional legislation covering all areas addressed in the Privacy Commission's final report is expected from Senators Bayh, Heinz, Muskie, Percy, Proxmire, Ribicoff and Weicker.

NBS PROPOSES REVISION TO 'COMPUTER I/O CHANNEL INTERFACE'

The National Bureau of Standards (NBS) last month published a proposed revision (#) to the NBS' *Computer Input/Output (I/O) Channel Interface* (*Washington Report*, 2/77, p. 4) to be adopted as a Federal Information Processing Standard (FIPS).

According to the announcement of the revision, Vol. 42, *Federal Register* 42242 (August 22, 1977), "acquisition alternatives that comply with this standard shall be considered competitively with other alternatives so as to meet the Government's data processing requirements at least cost." Comments should be directed by October 21st to the associate director for ADP Standards, Institute for Computer Sciences and Technology, NBS, Washington, D.C. 20234.

COMMISSION ON FEDERAL PAPERWORK EXPECTED TO RECOMMEND NEW CABINET-LEVEL
DEPARTMENT INCORPORATING FUNCTIONS OF GSA'S AUTOMATED DATA & TELECOMMUNICATIONS
SERVICE; COMMISSION URGES COORDINATION OF INFORMATION POLICY OVERSIGHT FUNCTIONS

The Commission on Federal Paperwork, established two years ago by Congress, is expected this month to announce some 750 recommendations for reducing paperwork which could result in annual savings of \$10 billion, *AFIPS Washington Report* learned last month. At its final meeting in September, the Commission conditionally approved a recommendation establishing a Department of Administration that would combine the functions of the

Automated Data and Telecommunications Service (ADTS) as well as the National Archives and Record Service, within the General Services Administration (GSA); and the Bureau of the Census, within the Department of Commerce.

Recommendations pertaining to data processing are incorporated in an "Information Management" section of the final report. The Commission is expected to recommend consolidation of "the major paperwork, information and communications-related policy oversight functions and authorities" which it holds are "now dispersed and fragmented" among: the Information Systems Division in the Office of Management and Budget; ADTS within GSA; and the Office of Telecommunications Policy, in the Executive Office of the President.

The Commission on Federal Paperwork is also expected to favor improved "coordination of records and paperwork management programs and policies with related information policies such as statistics, ADP telecommunications, public-use reporting, and other similar activities." The complete report is scheduled for release early this month.

FIRST MEETING OF OSTP ADVISORY GROUP ON WHITE HOUSE INFORMATION SYSTEMS IDENTIFIES EOP INFORMATION NEEDS

The first meeting of the Office of Science and Technology Policy (OSTP) Advisory Group on White House Information Systems was held August 24-25 in Washington. The Advisory Group has been formed to identify information systems needs which can be accommodated to support the "decision processes" of the White House and the Executive Office of the President (EOP). Higher-level EOP staff members appeared before the Group to identify their information requirements.

At the first meeting, opened by OSTP Director Dr. Frank Press, Stuart E. Eizenstat, assistant to the President for Domestic Affairs and Policy, told the Advisory Group that the Office of Domestic Affairs and Policy requires more sophisticated document tracking techniques. For example, Mr. Eizenstat noted that there are "several hundred" legislative bills of interest to his office. In addition, Council of Economic Advisers (CEA) Chairman Charles L. Schultze cited the need for "large scale data bases," also for document tracking.

Advisory Group Chairman John Gosden of the Equitable Life Assurance Society solicits written statements from all interested parties to assist the Group with its work. The next meeting of the Group is scheduled for October 4-5 in Washington to continue briefings by EOP staff on their information needs. Other Group members include: Dr. William Cotterman, Georgia State University; Dr. Gerald Dinneen, Department of Defense; Dr. Vincent McRae, IBM Corp.; Mr. Jon Turner, Columbia University; and Dr. Russell Shank, UCLA.

NASA, ILLINOIS INSTITUTE OF TECHNOLOGY SURVEY USER NEEDS FOR VLSCS

The Ames Research Center of the National Aeronautics and Space Administration (NASA) and the Illinois Institute of Technology last month began conducting

a survey to determine projected user needs for very large scientific computer systems (VLSCS) which might become available in the 1985-1990 time period. Results of the survey, which may assist in developing design requirements for future VLSCSs, are expected to be published at a future date.

AFIPS IN WASHINGTON

AFIPS PANEL SUBMITS RECOMMENDATIONS FOR FIRST YEAR OTA PROGRAM IN TELECOMMUNICATIONS, COMPUTERS AND INFORMATION POLICIES

As a member of an Office of Technology Assessment (OTA) Working Group (*Washington Report*, 6/77, p. 4), AFIPS last month provided comments on a first year OTA program in telecommunications, computers and information policy. The Working Group was first established to describe the issues, identify policy options, and define research strategy to be considered in such a program.

In submitting the Federation's comments, prepared by a panel representing the AFIPS societies (also including individuals who have served on previous AFIPS panels), Washington Office Director Philip S. Nyborg wrote OTA Consultant Dr. Leland L. Johnson: "As is evident in our project recommendations, there are numerous issues in the telecommunications, computers and information policies area in which OTA could well serve its intended function of apprising the Congress of major technological change. For example, in its next session Congress will likely consider legislation related to national telecommunications policy, electronic banking, electronic mail, privacy, computer and telecommunications security, computer crime, standards, and copyright protection for computer programs. Clearly, these policy issues have major technological components, and the Congress will have substantial need for a credible, accurate and independent source of technical information."

The AFIPS panel listed projects which it recommended for primary consideration, given anticipated budgetary constraints, and projects which should be considered, if additional funding becomes available.

The projects recommended for primary consideration, given anticipated budgetary constraints were: (1) Assessment of the Impact and Operation of Federal Standards Activities; (2) Assessment of Technological and Economic Impact of Federal Legal Protection for Software and Data Bases; (3) Assessment of the Existence of Technological Problems Regarding Privacy and Security; (4) Assessment of Electronic Mail: Regulatory Aspects and Private Sector Role; (5) Assessment of Electronic Fund Transfer Systems (EFTS): Privacy, Security and Regulatory Aspects; (6) Alternative Approach to Projects 3, 4 and 5 (i.e., a case study approach considering privacy and security, the relationship of regulatory jurisdictions, and private sector involvement as these subjects concern electronic mail and EFTS); and (7) Assessment of Opportunities and Problems Resulting from New Applications and Techniques Arising Out of the Convergence of Computer and Communications Technologies. Projects recommended for

consideration if additional funding becomes available include: (1) Assessment of the Adequacy of Existing Computer Systems Audit and Control Techniques; (2) Assessment of Educational Technology; and (3) Assessment of Alternative Regulatory Approaches Regarding Offerings of Mixed Communications and Data Processing Services.

Participants on the AFIPS panel were: for AIAA, Mr. H. Lewis Parker, COMSAT Laboratories; for ACM, Prof. Peter Lykos, Illinois Institute of Technology; for AEDS, Dr. Judy Edwards, Northwest Regional Educational Laboratories; for DPMA, Mr. Bruce Spiro, Defense Communications Agency; for IEEE-Computer Society, Mr. Lynn Hopewell, Computer Sciences Corp.; for IIA, Mr. William E. Perry; for SIAM, Dr. Hans Oser, National Bureau of Standards; and from previous AFIPS panels, Prof. Vinton Cerf, Defense Advanced Research Projects Agency; Mr. Alex Curran, Bell-Northern Research, Inc.; and Mr. Frederic G. Withington, Arthur D. Little, Inc. Alternates included: for AIAA, Mr. Kenneth Hales, Boeing Aerospace Co.; and for AEDS, Mr. David R. Kniefel, New Jersey Educational Computer Network.

AFIPS REVIEWERS COMMENT ON APPENDIX TO PRIVACY COMMISSION'S FINAL REPORT

The Privacy Protection Study Commission last month released five appendices to its final report, *Personal Privacy in an Information Society*, sent to the President and Congress in July (*Washington Report*, 8/77, p. 1). At the request of the Privacy Commission, AFIPS volunteers reviewed and filed comments to the Commission's appendix entitled *Technology and Privacy* (#). AFIPS reviewers included: Mr. Paul Baran, Cabledata Associates, Inc.; Mr. Richard L. Bisbey and Mr. Dennis Hollingworth, Information Sciences Institute, University of Southern California; and Mr. Richard G. Mills, Citibank, N.A.

NEWS BRIEFS

Security procedures and controls for the Social Security Administration's (SSA) Data Acquisition and Response System, said to access personal information on millions of Americans, are deemed inadequate to prevent fraud and abuse, according to a recent report prepared by the audit agency of the Department of Health, Education and Welfare.

The National Science Foundation's (NSF) Research Applied to National Needs (RANN) program has been discontinued; according to an article in the September 5, 1977, issue of *Chemical & Engineering News*, NSF Director Richard C. Atkinson abolished the program because he is said to favor distribution of RANN projects throughout the NSF.

Total research and development spending in the United States is estimated to reach \$40.8 billion in 1977, nine per cent above the 1976 level of \$37.3 billion, according to a new study entitled *National Patterns of R&D Resources: 1953-77*, published by the National Science Foundation.

President Carter last month nominated Charles D. Ferris, general counsel to House Speaker Thomas P. O'Neill (D-Mass.), to succeed Richard E. Wiley as chairman of the Federal Communications Commission (FCC); Mr. Wiley resigned early last month.

operationally, at present or in the foreseeable future" in POS switches. However, the NCEFT did recommend that the Federal Reserve continue to provide "ACH-like services" (*i.e.*, automated check clearing house services), also encouraging private sector development in the same area.

Developmental Issues. In regard to developmental issues affecting EFT, the panel support nationwide deployment of EFT terminals with debit services (*e.g.*, POS devices). However, it also encourages "gradual expansion" of deposit-taking through terminals, an important economic issue with many financial institutions. POS/EFT systems can make money, the panel added.

Technological Issues. In reference to technological issues concerning EFT, the Commission is recommending that the FCC's registration program for interconnection of terminal devices to the public telephone network be extended to include EFT terminals. In addition, it suggests that communications protocols which are inconsistent with American National Standards Institute (ANSI) standards should be published as soon as they are adopted for use by EFT equipment manufacturers. According to the NCEFT, ANSI should "expedite the development of standards for numbering systems, message formats . . . [as well as] standardize invoice and billing systems."

In the area of security, the Commission recommends joint state and Federal action to develop uniform security regulation and security supervision. The NCEFT, perhaps surprisingly, noted that "few breaches" were found in EFT security. It added that "a balance will have to be achieved between the cost of security measures and the value of the losses they are designed to protect against."

Consumer Issues. In the general area of consumer interests, the Commission recommended that the Government should have the right to access EFT financial information when "legitimate needs of law enforcement" are served. However, the NCEFT also said that a consumer's permission should be obtained before information concerning his EFT records is released to a third party. Consumers should also have the right to correct inaccuracies in EFT records, the Commission held. In general, the panel found present legal safeguards for privacy of financial information as applied to EFT "inadequate."

In a finding that may disappoint some consumer groups, the NCEFT said it could uncover no evidence at present that would suggest a need to provide the equivalent of a paper-based stop order in EFT transactions. According to the Commission, such a stop order inhibits the guaranteed acceptance of payment achieved through EFTS at the point-of-sale.

The NCEFT would require a monthly written statement for consumers whenever an EFT transaction occurred. However, it would place the burden of proof on consumers to report unauthorized uses of EFT services. In addition, the Commission does not recommend the \$50.00 limit on a consumer's liability now provided with bank credit cards. Instead, under the panel's recommendations, a consumer could be liable for any loss when negligence is proven on his part, *e.g.*, carrying his personal identification number (PIN) with a debit card.

NCEFT Background. The Commission was established three years ago by Congress to recommend action and legislation in connection with the development of public or private EFT systems. In 1975, President Ford appointed 14 members.

NSF TASK FORCE RECOMMENDS NEW RESEARCH PROGRAM IN INFORMATION SCIENCE,
ABOLITION OF NSF DIVISION OF SCIENCE INFORMATION

In September, the National Science Foundation (NSF) Task Force on Science Information Activities recommended to NSF Director Richard C. Atkinson: (1) that a new research program in information science should be created; and (2) the NSF's division of science information should be dissolved. Information science is defined as the theoretical study of information as a phenomenon; science information is said to include all elements in the generation, storage, retrieval and dissemination of science material. The Task Force also recommended doubling of the current budget for information science and science information from \$5 million to approximately \$11 million.

OT SEEKS STANDARD MEASUREMENT OF DATA COMMUNICATIONS

The Federal Communications Commission (FCC) should develop standard measurement of the quality and reliability of data communications service provided by specialized common carriers, the Department of Commerce's Office of Telecommunications (OT) said in an August filing to the FCC. According to OT, customers presently experience difficulty in determining which data services are most useful because tariffs do not always provide complete descriptions of service quality. OT endorses standard measurement of data communications services in lieu of the implementation of mandatory performance and design specifications which it feels inhibit innovation and competition.

ALEXANDER NAMED HRIS DIRECTOR, REEDER BECOMES DEPUTY DIRECTOR

Boyd L. Alexander, acting director of the House of Representatives Information Systems (HRIS), has now been appointed HRIS director. Mr. Alexander is former director of Computer Services, Information System Division, Office of Management and Budget (OMB). He replaced Dr. Frank B. Ryan, who left HRIS to become director of Athletics and lecturer in mathematics at Yale University. Franklin S. Reeder, also a member of the OMB Information Systems Division staff, has been named HRIS deputy director.

FCC CHAIRMAN-DESIGNATE PROFILE: CHARLES D. FERRIS

Charles D. Ferris, nominated in September by President Carter to succeed Richard E. Wiley as chairman of the Federal Communications Commission (FCC), is general counsel to House Speaker Thomas P. O'Neill (D. Mass.). Prior to working with the speaker, Mr. Ferris was chief counselor to the Senate Majority Leader, general counsel to the Senate Policy Committee, and chief counsel for the Senate Majority. A physics graduate with a law degree from Boston College, the FCC chairman-designate also served as a trial attorney in the Civil Division of the Department of Justice. In addition, he holds a degree in Advanced Management from the Graduate School of Business, Harvard University. Mr. Ferris has not worked in data processing, an aide told *AFIPS Washington Report*. [Ed.. At press time, the nomination has been approved, and the new FCC chairman sworn in for a term ending June 30, 1984.]

AFIPS RELEASES PRINTED VERSION OF 'INFORMATION PROCESSING IN THE U.S.,'
FEDERAL GOVERNMENT STILL LARGEST SINGLE USER OF COMPUTERS IN U.S.; INSURANCE,
BANKING: INDUSTRIES MOST PENETRATED BY COMPUTERS; PRIVATE USE GROWS

AFIPS last month released to the public the printed version of *Information Processing in the United States A Quantitative Summary*, an update of a similar 1973 report. A presentation copy of the study was delivered in July to the White House Office of Science and Technology Policy (*Washington Report*, 9/77, p. 6). Incorporating some 34 figures and tables, the 55-page report includes previously unpublished and unassembled data on U.S. suppliers of computer equipment and services, computer users (by government and industry sectors), personnel and education in the information processing field, as well as significant trends.

The study notes that the Federal government is still the largest single user of computers in the United States, accounting for approximately six per cent of the total usage in the U.S. According to the report, the Department of Defense accounts for almost half of all Federal computer usage. However, it added that Government usage is not increasing as fast as in the U.S. at large. As of last year, the Government was said to employ some 9,600 computers.

In 1976, the study noted, U.S. computer users (mainly institutions in business, all government and education) spent \$38.4 billion including expenditures on computer goods and services, related salaries and overhead. While the insurance and banking industries have the highest degree of computer usage in terms of the proportion of firms using computer equipment or services, the manufacturing sector is clearly the largest user in the U.S. in terms of total expenditures on computer equipment and services, the report said.

In 1974, according to the study, the total U.S. computer labor force (including traditional computer-related occupations such as programmer, systems analyst, maintenance technician and keypunch operator) numbered 853,000. The manufacturing sector is listed as the largest employer of the computer labor force in a given field, the Federal government is the largest single employer of the computer labor force.

The report said world revenues of U.S. computer manufacturing and services firms are projected to double from \$31.9 billion in 1976 to \$64 billion in 1981, and world shipments of U.S. computer equipment are also forecast to double from \$15.9 billion in 1976 to \$30.5 billion in 1981.

Last year, according to the study, U.S. computer equipment manufacturers accounted for 87 per cent of the installed base of the world's computers, by value. However, the U.S. share of the world market is reported to be decreasing due to foreign competition (especially from Japan). By 1981, U.S. computer equipment manufacturers are expected to account for 81 per cent of the installed base of the world's computers by value, down six per cent from 1976.

U.S. exports of computer equipment are said to exceed imports by a factor of 15 to one and will result in a trade surplus of \$2.8 billion in 1977. At the present time, the study said, U.S. firms derive approximately 50 per cent of their revenues from overseas sales.

The AFIPS report is based largely on data provided by three major market research firms (*i.e.*, Arthur D. Little, Inc.; Auerbach Associates, Inc.; and International Data Corp.) as well as the Federal government. The study was edited by Philip S. Nyborg, Pender M. McCarter and William Erickson. Research for Chapters I, II, and III was performed by Mr. McCarter with the assistance of Mr. Erickson. A "Note on Future Trends" was drafted by T. B. Steel, Jr., member of the SILT Committee, SHARE, Inc. The report was formally briefed and presented at last month's meeting of the Interagency Committee for Automatic Data Processing, composed of some 50 representatives from Federal departments and agencies having significant computer usage.

HOUSE LEGISLATION WOULD LIMIT POST-SERVICE ACTIVITIES OF FEDERAL EMPLOYEES INTERACTING WITH GOVERNMENT ON SCIENTIFIC, TECHNOLOGICAL MATTERS

The Subcommittee on Administrative Law and Governmental Relations of the House Judiciary Committee last month held hearings on, favorably reported, and marked up *H.R. 1*, legislation that would restrict the post-service activities of Federal employees, with exceptions in some areas for "the making of communications solely for the purpose of furnishing scientific or technological information under procedures acceptable to the [Federal] agency concerned."

At press time, *H.R. 1* is being marked up by the full Judiciary Committee. However, as the legislation is now written, it would (1) impose a lifetime ban on the post-service activities of Federal employees prohibiting them from acting in matters in which they participated "personally and substantially" while with the Government; (2) impose a two-year ban on the post-service activities of Federal employees prohibiting them from acting in matters within the realm of their "official responsibility" while with the Government; and (3) impose a one-year ban on the post-service activities of higher-level Federal employees prohibiting them from acting in matters affecting the agency with which they were employed while with the Government.

H.R. 1 would not prohibit former Federal employees "with outstanding scientific or technological qualifications" from acting in scientific or technological matters with a Government agency, provided that "the national interest would be served" by such action, and it has approval of the agency head. In addition, the legislation would exempt Federal employees who are classified in higher Federal pay grades from the one-year ban on post-service activities (involving the department or agency with which they were formerly employed) provided that the agency determines no "undue influence" will be exerted by the former employee on "substantive agency action by virtue of his or her former association with the agency."

The AFIPS Washington Office has been consulting with both the Subcommittee on Administrative Law and Governmental Relations and affected individuals in an attempt to formulate what are deemed appropriate exceptions to the limits on post-service activities of Federal employees. The AFIPS proposals

would broaden the exemptions for post-service activities of former Federal employees adding, in addition to the exemption for the one-year ban on higher-level employees, an exemption for the two-year and lifetime bans on former Federal employees in circumstances where no "undue influence" will be exerted on "substantive agency action by virtue of the former employee's association with the agency."

NEWS BRIEFS

A limited number of complimentary copies of *Computer Software Management A Primer for Project Management and Quality Control* is available from the National Bureau of Standards (NBS): Computer Science Section, Technology A367, NBS, Washington, D.C. 20234; also known as *Special Publication 500-11*, the document describes preferred methods of software development and includes recommendations for specification and testing of software.

Computer Science and Technology Publications, containing numerous National Bureau of Standards (NBS) listings as of June, 1977, is available from the Institute for Computer Sciences and Technology, NBS, Washington, D.C. 20034.

The *1977 Winter Simulation Conference* is scheduled at the National Bureau of Standards (NBS) in Gaithersburg, Maryland, December 5-7; the program will consider applications of computer simulation in such areas as energy, criminal justice, behavioral science, agriculture, environment and health care.

A call for papers has been issued for *Trends and Applications 1978*, a symposium on distributed processing to be held at the National Bureau of Standards in Gaithersburg, Maryland, May 18, 1978; sponsored by the IEEE Computer Society, papers are sought describing practical experiences with distributed processing; further information is available through the Computer Society office in Silver Spring, Maryland, telephone (301) 439-7007.

Vico E. Henriques has been named president of the Computer and Business Equipment Manufacturers Association (CBEMA), replacing Peter F. McCloskey, who has been appointed president of the Electronic Industry Association; Mr. Henriques previously served as a CBEMA vice president.

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SPECIAL REPORT

SURVEY OF COMPUTER TRADE ASSOCIATIONS: PART I (ADAPSO)

The AFIPS Washington Office has conducted a survey of computer trade associations to summarize their positions on data processing issues before the Federal government. The survey, prepared by Research Associate Pender M. McCarter, is an attempt to review the issues which are perceived as important by industry-oriented groups in the information processing field during the last two years. In this first of four installments, the Association of Data Processing Service Organizations, Inc. (ADAPSO) is considered with respect to its membership, charter, organization and positions vis-a vis the Federal government.

Membership. Established in 1961, ADAPSO is a trade association representing the computer services industry, *i.e.*, companies engaged in providing timesharing, facilities management, software systems and products, and data center services. Its 967 member units include large national computer service companies as well as smaller local, regional and sometimes specialty firms, located in the the U.S., with affiliates in Europe, Latin America and the Far East.

Charter. ADAPSO was originally chartered to provide information on management for its member companies. Thus, it sponsors national and regional conferences and workshops on accounting, sales management, advertising, law, data communications, privacy and security and other related topics. As a registered lobbyist, ADAPSO has become involved directly in influencing legislation that concerns its member companies (discussed more fully below).

Organization. With national headquarters in Montvale, New Jersey, the association consists of a professional staff directed by Mr. Jerome L. Dreyer, executive vice president, who is responsible for overall operations. In addition to an elected board of directors and elected officers, ADAPSO is supported by special counsel in the areas of law, taxation and public relations. It consists of three "operating sections" including: Software Industry Assn.; Data Center Section; and the Remote Processing Services Section (concerned with the technical, legislative, legal and operating factors of companies engaged in data communications and interactive computing).

Positions. ADAPSO's positions on data processing issues before the Federal government during the last two years are summarized in various position papers provided to AFIPS by Mr. Dreyer:

Resolving Antitrust Disputes, "ADAPSO Position Paper #10, October 24, 1974. Congress would consider "a responsible and logical approach to the resolution of antitrust claims against IBM incorporating mediation, arbitration and litigation, and avoiding unnecessary burdens, inconsistent results, duplication and waste to the maximum reasonable extent."

- *"The Right to Privacy," ADAPSO Position Paper #11, February 12, 1975.* Congress, state legislatures, and "executive administrative agencies" should require the preparation of a privacy impact statement for every mass data bank weighing the benefits of mass data banks against the detriments.
- *"Governmental Licensing of Professional EDP Personnel," Position Paper #12, April 18, 1975.* "Computer professionals" should not be licensed through Federal, state or local certification. Licensing is not in "the public interest" because it "inhibits" free enterprise.
- *"State and Local Privacy Legislation," Position Paper #13, April 15, 1975.* State and local legislatures, councils, and "other governing bodies" should "withhold action in the privacy area until the Federal Privacy Study Commission has completed its study."
- *"Legislative and Administrative EFTS Action," Position Paper #14, April 15, 1975.* Federal, state and local officials, administrative agencies, legislatures, councils, "other government bodies," and the private sector should withhold action implementing major proposals for EFTS until the National Commission on Electronic Fund transfers (NCEFT) has completed its studies.
- *"Membership of NCEFT," Position Paper #15, November 22, 1975.* Congress should predicate extension of reporting times for the NCEFT on appointment by the President of a commissioner from "private life with special experience and qualifications in the computer industry."
- *"Postal Regulations," Position Paper #18, April 6, 1976.* Congress should amend the *United States Code* to exclude data processing materials from consideration as letters which "subjects" them to U.S. Postal Service rates (whether transmitted by independent carrier or the U.S. mail) and to the "well-known irregularities of the U.S. mail."
- *"Consumer Communications Reform Act of 1976," July 21, 1976.* Congress should oppose the *Consumer Communications Reform Act* because it will eliminate competition; bring computers, station and terminal equipment under regulatory control by the states; and grant antitrust immunity for future acquisitions by the telephone companies.
- *Law Enforcement Assistance Administration (LEAA) Procurement Practices, July 27, 1976.* Computer service companies should be allowed to act as both a designer of a computer system as well as an "implementor."
- *Financial Accounting Standards Board Statement #2, October 15, 1976.* The Financial Accounting Standards Board (FASB) should reevaluate *FASB Statement #2* defining the development/manufacture of software systems as a "current period expense."
- *Data Privacy and Security, April 17, 1977.* Data on a private citizen should be "adequately" protected from viewing, disclosure, or uses which are "not socially desirable."

[Ed.: Future reports in this series will deal with CBEMA, CCIA and IIA.]

CONGRESS, NATIONAL SECURITY COUNCIL STUDY FOREIGN RESTRICTIONS ON TRANSBORDER DATA FLOW

Both the Congress and the National Security Council are studying restrictions placed by foreign nations on the exchange of information among countries, i.e., transborder data flow. In conjunction with its hearings on revision of the *Communications Act of 1934*, the House Subcommittee on Communications considered U.S. policy on transborder data flow in early October. On October 26th, a committee of the National Security Council, Executive Office of the President, met for the first time to consider policy implications of the same subject.

Summarizing the implications of transborder data flow, Mr. G.R. Pipe wrote recently in the *AFIPS Washington Report* (3/77, p. 7), "The emergence of international data transmission networks, coupled with the realization that national legislation is effective only for domestic processing, has resulted in demands for the creation of international standards for the treatment of personal information. While the objectives of these laws have been widely applauded, the consequences of imposing restrictions on the movement of data may run counter to traditional free flow of information' principles. Additionally, some U.S. computer manufacturers, data sharing services, and multinational users are troubled about possible ~~con~~ ^{re}striction, or shrinkage of markets, resulting from the rules adopted by various countries."

Thirteen European countries are reportedly considering adopting laws which would restrict information flow to the country of origin. Two countries, Sweden and Germany, have already adopted privacy legislation affecting the exchange of information. Eight other countries, including Austria, Belgium, France, Canada, Denmark, Luxembourg, Norway, Finland, and possibly the Netherlands, are expected to support similar legislation in the next year.

At a recent meeting of the Organization for Economic Cooperation and Development, U.S. representatives opposed a precipitous international agreement restricting data flow. Representatives from Sweden, France, Austria and Germany supported an international accord standardizing conflicting national privacy laws. A French participant in the meeting expressed an interest in European development of its own data bases, independent of the U.S.

COMPUTER AUDITING IN THE EXECUTIVE DEPARTMENTS 'INADEQUATE': GAO

Internal auditing of automatic data processing and controls has been "inadequate" in some Federal agencies, according to a recent report of the General Accounting Office (GAO). Entitled *Computer Auditing in the Executive Departments: Not Enough is Being Done*, the study suggests

that audits be instigated in four areas: (1) systems design and development; (2) equipment acquisition; (3) specific applications; and (4) installation management. The GAO said, More work is needed by both Federal managers and internal auditors to make sure that audits adequately cover the four areas, and that computer-based information systems are better controlled."

The complete report, Number FGMSD-77-82 (dated September 28th), is available free-of-charge to non-profit organizations through the GAO directly at (202) 275-6241, or through the AFIPS Washington Office.

The GAO has also recently released: (1) *Millions in Savings Possible in Converting Programs, from One Computer to Another* (FGMSD-77-34, September 15th); (2) *Planning for Source Data Automation in Government Industrial Activities--Coordination Needed* (LCD-77-441, September 23rd); and (3) *Responsibilities, Actions and Coordination of Federal Agencies in International Telecommunications Services* (CED-77-132, September 29th).

NATIONAL SCIENCE FOUNDATION RELEASES 'GUIDE TO PROGRAMS'

The National Science Foundation (NSF) last month released its *Guide to Programs* (#--enclose \$2.20) reflecting NSF research projects for FY 1978. Within the Computer Science Section, programs in theoretical computer science, software systems science, software engineering, intelligent systems, computer systems design, and special projects are described.

The theoretical computer science program encompasses the theory of computation, numerical analysis and computational mathematics, theory of formal languages, and analysis of algorithms. The software systems science program covers "fundamental" questions of communicating with and controlling computer systems.

The software engineering program includes the methods, tools and techniques for specifying, designing and implementing "quality" software. The intelligent systems program covers computer-based systems which have such characteristics as pattern recognition, pattern generation and knowledge representation.

The computer systems design program includes the principles of computer systems design such as: computer system architecture, performance, graphics, man-machine interaction and logic design. The special projects program encompasses research projects, studies, workshops, and other activities which "might encourage the development of new fields of computer science research."

Proposals will be assigned to the appropriate program within the Computer Science Section.

AFIPS BRIEFS IAC/ADP: 'INFORMATION PROCESSING IN THE UNITED STATES'

AFIPS made its public presentation of *Information Processing in the United States: A Quantitative Summary* at a briefing given to the Interagency Committee on Automatic Data Processing (IAC/ADP) during the Committee's regular monthly meeting in Washington, D. C., October 11th. IAC/ADP is composed of some 50 representatives from Federal departments and agencies having significant computer usage, and is chaired by Ms. Roxanne Williams, director, Plans and Policy Division, Office of Automated Systems, Department of Agriculture.

Rep. Charles G. Rose (D-N.C.), chairman of the House Policy Group on Information and Computers, served as keynoter for the briefing. The major contributors of data for the report [including representatives from Arthur D. Little, Inc. (ADL); Auerbach Associates, Inc. (AAI); and the International Data Corp. (IDC)] acted as panelists.

Introducing Rep. Rose to the Interagency Committee, AFIPS President Dr. Theodore J. Williams said, "We are very proud of this new study, and hope very much that you will find it useful and valuable in your work." Mr. Rose, who previously addressed the AFIPS National Computer Conference in New York City in 1975, stated in his keynote speech to the IAC/ADP that the "establishment of new information systems and computer technology [has enhanced the] relative power [of Congress in relation to the Executive and Judicial Branches]." The North Carolina congressman was accompanied by Mr. Neal Gregory, staff director, Ad Hoc Subcommittee on Computers; and Mr. Boyd L. Alexander, recently appointed director of the House of Representatives Information Systems (HRIS) (*Washington Report*, 11/77, p. 3).

In the panel presentation that followed (chaired by AFIPS Washington Office Director Philip S. Nyborg), Mr. Robert E. Wallace, vice president, Commercial Industrial Division, AAI, considered the report's chapter on United States suppliers of computer equipment and services. As co-editor of the study, Mr. Nyborg summarized the section on government and industrial users of computers for James Peacock, director/Publications, IDC, who was unable to attend the briefing. Mr. Neal H. Rosenthal, assistant chief, Division of Occupational Outlook, Bureau of Labor Statistics, Department of Labor, considered the chapter on personnel. Mr. Frederic G. Withington, senior staff member, ADL; joined T.B. Steel, Jr., marketing supervisor, AT&T; in discussing future trends and implications.

In his talk on suppliers, Mr. Wallace noted that, "while the measures that the report uses are reasonable ones on which to judge the economic aggregates in the industry, they do not in any way reflect total computer power being delivered or available to the economies of the world."

According to the AAI executive, "A computer delivered today, for the same price as one delivered five years ago, obviously has many times the computing power of the 1971 counterpart."

Mr. Nyborg, in his presentation on governmental and industrial users of computer equipment and services, emphasized the trend toward mini and micro-computers as well as the emergence of "personal" computers.

Discussing the personnel section, Mr. Rosenthal stated that, with the exception of keypunch operators, computer-related occupations are "growing very rapidly, maybe three or four times as fast as the economy as a whole." The Labor Department official also announced that the Bureau of Labor Statistics is initiating the "Occupational Employment Statistical Survey" for more precise gathering of industry statistics.

Mr. Steel, who wrote the "Note on Future Trends" incorporated in the study, stated that, "The key problem [in the information processing field] is the development of software and the improvement of the productivity of the people who develop it."

Finally, Mr. Withington, commenting on implications of the report for the Government, said if the study's forecasts are all correct, "there will be a continuing and even an accelerating spread of small computer systems, intelligent terminals, word processing systems and the like throughout agencies of the Federal government, and evidently in the Legislative Branch as well as throughout the whole structure." According to the ADL executive, "this proliferation of the resource will truly bring with it new management problems: in the attempt to control the budget as a whole; in the attempt to maintain standards; and [in] the attempt to maintain . . . communicative ability, even within an agency, much less across agencies."

A short question and answer session followed the panel presentation.

Others attending the meeting, and introduced by the AFIPS President, were Mr. Pender M. McCarter, co-editor of the study and research associate, AFIPS Washington Office; as well as Mr. William Erickson, co-editor, a former, temporary AFIPS employee. Also in attendance were other AFIPS officials, including Executive Director Dr. Robert W. Rector.

The 55-page report is available for \$6.00 from AFIPS Press, 210 Summit Avenue, Montvale, New Jersey 07645, (201) 391-9810. There is a \$2.00 postage and handling charge for the first copy, and a \$1.00 charge for each additional copy, if the order is not accompanied by payment. A limited number of studies are available in the AFIPS Washington Office for sale in the Washington, D.C. area only.

OTA PLANNING STUDY IN TELECOMMUNICATIONS, COMPUTERS AND INFORMATION POLICIES
NEARING A PROJECT PROPOSAL TO OTA BOARD

As the U.S. Congress Office of Technology Assessment (OTA) planning study on telecommunications, computers and information policies approaches the submission of a program proposal to the OTA Board, AFIPS has continued

to work closely with the Congressional group in an effort to assist in the formulation of a technical agenda for the prospective program. AFIPS has worked with the planning study since its inception, earlier contributing a statement of critical issues in this policy area (*Washington Report*, 6/77, p. 4) and a formal set of program recommendations (*Washington Report*, 10/77, p. 4).

A final decision on the telecommunications, computers, and information policies program has been somewhat delayed by the appointment of a new director for OTA. There have been, for the past several months, careful and extensive procedures to identify the appropriate individual for this position. Dr. Russell W. Peterson, former governor of Delaware and former chairman of the White House Council on Environmental Quality (CEQ), has been offered the directorship by the Congressional Board which governs OTA. [Ed.: At press time, Dr. Peterson has accepted the offer, and will take office January 16th.]

The importance of the prospective OTA program can be well appreciated by considering the volume of data processing-related legislation before the Congress at any given time. Equally important is the significance of computer and communications technologies as viewed by the Congress itself. In this regard, the views of Senators Magnuson and Hollings are articulated in the following letter which argues the need for the prospective OTA program. This letter merits a careful and thoughtful reading, particularly in its discussion of "new technologies" (*i.e.*, digital technology has been the driving force in generating many if not most of the critical policy issues), "needs and interests of consumers," "industry structures," and "the question of competition." These matters can and will, to a significant extent, shape the future of the information processing field.

-- Philip S. Nyborg

January 25, 1977

*The Honorable Edward M. Kennedy
United States Senate
Washington, D.C. 20510*

Dear Ted:

We would like to raise with you an area of inquiry for OTA which we have been developing for some time and which we plan to propose at our February Board meeting.

The technological revolution in telecommunications is here. It began a little over two decades ago. Now we find ourselves on the verge of major social and economic changes as the introduction of these new telecommunications technologies become economically feasible. In the view of many experts, these technologies change the very assumptions on

which telecommunications policy should be based. Those responsible for policy formation must understand the alternative social consequences compelled by competing technological choices in telecommunications. Further, they must identify impediments to the introduction of desirable technologies. Without this prior thought and planning, the technology will be in control rather than the people.

The Communications Act, passed first in 1934, remains the prevailing governmental policy responsible for the shape, structure and function of the regulated communications industries. We are beginning to hear criticisms because technological events have steamed by, leaving the government policy to operate in the wake. The House Communications Subcommittee has announced plans to begin a total review of the 193 Act. Further, the Senate Subcommittee on Communications, which has oversight responsibility for federal telecommunications policy, expects to begin a review of each major policy area, and the underlying economic and social relationships. Our desire is to reevaluate the assumptions made in 1934 in light of the new technologies. This reevaluation will help us to identify the benefits and problems these new technologies may present our society, and to recommend the appropriate federal role. The subcommittees extensive agendas are fraught with technology assessment questions. We believe that a properly conceived OTA telecommunications project is essential to the success of these endeavors.

For example, in the common carrier area, the technologies for expanded services such as data processing, funds transfer, two-way visual communication, alarm systems and the like, are basically known and feasible. The real question is which combination of technologies will best benefit society. An assessment of the technologies, such as satellite, microwave, coaxial cable, and data processing, the services they can provide, the needs and interests of consumers and the possible trade-offs in cost, industry structures and services to users, will assist the subcommittees as they look into the question of competition and how to encourage the maximum use of best available technology.

New wire transmission technologies, such as optical fiber, are upon us and the introduction into telephone, cable, computer and broadcast activities, will have significant consequences. An assessment of these technologies, the roles they can play as well as the social and economic implications, would be of great assistance.

In the area of over-the-air transmission, technologies now offer substantial increases in the information capacity of the electromagnetic spectrum. These technologies may potentially change the whole premise of spectrum management and revolutionize mobile as well as fixed-point radio services. An OTA study of their economic and technical feasibility, impediments to their widespread use, and the consumer consequences of alternative system designs would be very helpful. To cite examples, teleconferencing and interactive video systems have direct applications to government service delivery as well as to private sector specialized groups, such as the handicapped. Second, coding data into signals may offer economically viable over-the-air services to specialized audiences currently without

broadcast service, such as deaf people rural areas, dispersed classrooms and special categories of consumer groups. Similarly, the overall quality of general audience entertainment signals or specialized mobile communications, such as citizens band and mobile telephone, can be greatly augmented by the introduction of computer technology to receivers and transmitters.

The examples that we have cited are illustrative of the activities that a telecommunications project could and should undertake. Our staff is preparing a more precise proposal for the February meeting and we would appreciate any input you would like to make. Technology in the telecommunications area is changing faster than in any other segment of our society. It has substantial implications on everyone's quality of life. It has rendered obsolete many of the previous distinctions between communications and data processing, between postal and telecommunications services, and between broad-band and narrow-band electronic communications. We can think of no other new undertaking by OTA that can be as exciting or as important to the Congress.

Sincerely yours,

Warren G. Magnuson/s/

Ernest F. Hollings/s/

Warren G. Magnuson

Ernest F. Hollings

NEWS BRIEFS

The Supreme Court recently refused to consider the U.S. Patent Office's claim that the "Regulator" program (Washington Report, 1/77, p. 3) is not patentable; "Regulator" adjusts priorities on computer programs.

President Carter has signed into law legislation to extend the term of the National Commission on New Technological Uses of Copyrighted Works (CONTU) through July 31, 1978.

The Federal Communications Commission's (FCC) telephone equipment registration program, allowing consumers to connect FCC-registered telephone equipment to the national telephone network without carrier-supplied protective couplers, was implemented in October, following the Supreme Court's refusal to review the FCC program.

In a recent report of the Department of Commerce, entitled Voluntary Standards and Testing Laboratory Accreditation, Commerce supported Senate bill, S. 825, creating an independent Government-financed standards board and an Institute of Standards and Accreditation within the National Bureau of Standards.

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