

Vol. II, No. 4

April, 1976

WASHINGTON DEVELOPMENTS

FCC REJECTS ATGT DATASPEED 40 FILING

The Federal Communications Commission (FCC), through its Common Carrier Bureau, has rejected AT&T's tariff filing (Washington Report, 2/76) for the Dataspeed 40 terminal device, which sought to offer the device in connection with voice grade or Dataphone Digital Service (DDS) private line channels. The effect of the ruling will be to preclude AT&T from offering the Dataspeed 40/4, either directly or through an unregulated subsidiary.

Background. The FCC decision was based ultimately on whether the Dataspeed 40 was characterized as a "data communications" or "data processing" device. If it were the former, it could be offered by AT&T as a common carrier; if it were a data processing device, however, it could not be offered. The FCC ruled in its 1971 "Computer Inquiry" (Docket No. 16979) that communications common carriers may not directly provide data processing services; while this ruling would have allowed AT&T to provide the Dataspeed 40 (as a data processing device) offering through an unregulated subsidiary, AT&T was precluded from even this latter option by an agreement in an earlier consent decree with the U.S. Department of Justice, to the effect that AT&T would not enter an unregulated industry such as the data processing industry.

Rationale of the decision. In ruling on the proposed tariff the FCC stated that it must consider "all the relevant factors, such as the technical characteristics of the equipment, as well as its intended uses." (Emphasis supplied.)

The ruling distinquished between two classes of equipment, one in which equipment was designed and marketed for terminal-to-terminal message exchange, and another in which equipment was designed and marketed for the input, output, formatting and conversion of computer-based data, *i.e.*, intended for interaction with a computer. The Commission found the Dataspeed 40/4 to be equipment "whose primary function, design, and marketing is as an integral part of a data processing service involving the programmed interaction of the terminal device and a central computer processing and/or storage unit;" more specifically, it found the device intended to be a substitute for the IBM 3270 and similar equipment. The Commission noted that the Dataspeed 40 was not capable of terminal-to-terminal communication (without the use of additional data processing support), and emphasized that it was clearly not intended for this purpose, in either its design or marketing.

The ruling also indicated concern over possible unfair competition related to the Dataspeed 40. The petitioners opposing the Dataspeed 40 had indicated a fear that if the device were offered by AT&T directly, it would be cross-subsidized by other AT&T offerings, thus giving the common carrier an advantage in a non-regulated competitive market (*i.e.*, computer peripherals). Indeed, the rationale of the Computer Inquiry in requiring common carriers to offer data processing services only through subsidiaries was to make cross-subsidies from a common carrier to its subsidiary easily detectable.

Possible further inquiry. In discussing the consent decree itself, the Commission said that "we believe the appropriate manner to deal with this problem is through a petition seeking a revision of the Commission's rules, as well as a possible reopening of the 1956 consent judgement." This statement appears to substantiate informal comments that the FCC is considering a new Computer Inquiry.

SECRETARY OF COMMERCE ANNOUNCES REVIEW OF LONG-TERM TECHNOLOGY POLICY

Recently-appointed Secretary of Commerce Elliot Richardson has announced a new program with the objective, in part, of developing long-term technology policy which would contribute to protecting "America's vital interests in evolving frontiers." Richardson noted that U.S. economic development and our quality of life have depended on fundamental research and development of advanced technology. Based on his concern that the U.S. may be underinvesting in research and technology development, Richardson has directed his Assistant Secretary for Science and Technology (Betsy Ancker-Johnson) to perform a comprehensive review and analysis of U.S. technology policy. He also announced the creation of a departmental "Regulatory Policy Committee" to develop positions on regulatory issues. Seen in the context of President Ford's program to reduce Federal regulation, it would appear that the new Commerce committee is likely to have a deregulatory orientation.

INTERAGENCY COMMITTEE ON ADP HOLDS PLANNING CONFERENCE

The Interagency Committee on ADP (automated data processing), a group comprised of ADP policy officials and managers from the various Federal agencies, recently held a major conference on Federal ADP planning. The conference, which was closed to the public, was devoted to presentations by Congressional and Executive Branch spokesmen, and to discussion of prominent Federal ADP issues: centralization of ADP management, executive-legislative relationships, management information systems, personnel management, public/private sector responsibilities, and sharing of computer resources.

Congressman Charles Rose, Chairman of the House Ad Hoc Subcommittee on Computers, warned the Federal agencies that they would have difficulty in obtaining funds for ADP services and equipment if they did not improve their ability to explain Executive Branch ADP requirements to the Congress. Speaking for the National Bureau of Standards, Dr. Ruth Davis described her agency's activities to implement the Brooks Act; she noted that despite NBS proposals, "there [remains] no means for insuring compliance with Federal information processing standards." In the area of personnel management, the conference participants offered several recommendations for further development by the Civil Service Commission and the Interagency Committee, including the fostering of professionalism through a formalized certification and testing program, and the strengthening of Civil Service qualifications standards.

VICE PRESIDENT ROCKEFELLER ANNOUNCES INFORMATION POLICY STUDY

Vice President Nelson Rockefeller recently announced that President Ford had directed the Domestic Council Committee on the Right of Privacy (chaired by Rockefeller) to undertake a comprehensive study of issues related to "information policy." The Vice President stated that "[t] he Committee will examine a number of critical issues facing this country, including the political, social, economic and international consequences of our economy's growing information sector. Specific issues, such as the impact of computer and related technologies, the relationship between privacy and freedom of information, and access to information and information delivery systems will also be considered." The study will produce a report, due September 1, 1976, with recommendations on how the Federal government should organize to deal with matters of information policy; the Domestic Council Privacy Committee itself is not funded beyond October 1, 1976, and is expected to cease operation at that time.

EFTS COMMISSION HOLDS SECOND MEETING IN WASHINGTON

The National Commission on Electronic Fund Transfers held in March its second meeting. The Commissioners decided that they would not comment on the Federal Reserve System's proposed Regulation J, or other regulations proposed by any Federal or state agencies, until they are prepared to take a position on the basis of thorough investigation. The Commissioners also voted against a proposal to urge the States to abstain from acting upon state EFTS legislation until the National Commission produces its report, on the grounds that such action would be inconsistent with Congress earlier refusal to impose a moratorium on state EFTS legislation.

ABZUG HEARINGS ON COMMUNICATIONS INTERCEPTION

Rep. Bella Abzug (N.Y.), Chairman of the House Subcommittee on Government Information and Individual Rights, recently held hearings on interception of non-voice communications (*i.e.*, cable traffic) by U.S. intelligence agencies. The Subcommittee heard testimony from Western Union International, RCA Global Communications, and ITT World Communications. The hearings further pursued an earlier Senate investigation which had revealed that the National Security Agency intercepted cables from U.S. carriers by either picking up messages directly at their offices, or electronically intercepting them using its own electronic intelligence facilities outside the continental United States.

CONGRESS HOLDS HEARINGS ON EXPORT OF TECHNOLOGY

Both the Senate and the House recently held hearings on the export of U.S. technology, and related regulatory mechanisms. In the Senate, Charles Phipps of Texas Instruments (Manager, Strategic Planning) presented the highlights of the so-called Bucy Report prepared by the Department of Defense Task Force on Export of U.S. Technology. Among its many findings the Bucy Report concluded that non-communist nations, including those of Third World and particularly those of the Middle East, are "potential pipelines" for the transfer of high technology to communist nations. The Report also found that government-to-government scientific exchanges had the potential of transfering technology very actively, and as such "should be monitored to ensure consistency with restrictions on export of strategic U.S. design and manufacturing know-how."

Testifying in both the House and Senate, Peter McCloskey, President. of the Computer and Business Equipment Manufacturers Association (CBEMA) objected to the lack of clear policy guidance in Federal statutes which regulate East-West trade; he specifically objected to the "national interest" criteria used in assessing specific license applications under the Export Administration Act. McCloskey urged that Department of Commerce Technical Advisory Committees (which include industry representatives) be given a greater voice in formulation of policy related to technology export. He also argued that criticism of East-West trade policy relating to computer technology is unfounded, stating that "no significant military contribution has accrued to the U.S.S.R." as a result of U.S. computer exports.

NEWS BRIEFS

- The National Science Foundation (NSF) has published An Analysis of Federal R&D Funding by Function, Fiscal Years 1969-1976 (#, enclose \$1.80).
- ATET has filed with the Federal Communications Commission (FCC) for permission to install and operate a switched Dataphone Digital Service (DDS).
- The House Committee on Science and Technology plans to hold late April hearings on the impact of Federal research and development on the economy.
- Mr. Thomas W. Taylor will replace Russell C. Browne as Payments Systems Advisor to the Comptroller of the Currency, and as the Comptroller's representative to the EFTS Commission.
- The Department of Defense has cleared an AFIPS request for copies of the ARPA Information Processing Techniques Office budget submission to Congress for fiscal year 1977 (#); this document describes in detail the ARPA program outlined at the recent AFIPS White House Briefing (Washington Report, 3/76).
- The Privacy Protection Study Commission will hold public hearings in New York on April 21 and 22, on the record keeping practices of banks, savings and loan associations, credit unions and consumer finance companies.
- The National Bureau of Standards has published FIPS-PUB 38, Guidelines for Documentation of Computer Programs and Automated Data Systems, (#, enclose \$1.35).
- The Federal Home Loan Bank Board has published (1) a proposal (open for public comment through April 12) to extend the experimental use of remote service units by savings and loan associations (S&L's) to December 31, 1977, and (2) a proposed rule which would permit savings and loan account holders to authorize fluctuating payments (e.g., utility bills) to a third party, and would allow S&L's to accept an order from such a third party (e.g., a utility company) through an automated clearinghouse.

Compilation of State and Federal Privacy Laws is available for \$10.00 from Privacy Journal, Box 8844, Washington, D. C. 20003,

The National Science Board of the National Science Foundation has released a report entitled *Science Indicators*, 1974 (#, enclose \$4.60) which shows a weakening in U.S. science and technology.

AFIPS IN WASHINGTON

AFIPS EFTS COMMITTEE MEETS WITH NATIONAL COMMISSION; COMMENTS ON REGULATION J

Paul Armer, Chairman of the AFIPS Special Committee on Electronic Fund Transfer Systems (EFTS), accompanied by the Director of the AFIPS Washington Office, recently met with William Widnall and John Benton, Chairman and Executive Director respectively of the National Commission on Electronic Fund Transfers, to discuss prospective AFIPS interaction with the Commission. Both Widnall and Benton indicated a generally favorable reaction to the concept of providing AFIPS technological expertise to the Commission, and discussions are expected to continue on developing specific mechanisms.

In a separate development, Armer provided comment through AFIPS on the proposed amendments to the Federal Reserve's Regulation J, which deals with wire transfers between Federal Reserve Banks, and other aspects of the Federal Reserve's automated payments system. The letter comment submitted by Armer was initially drafted by Dan McCracken, Vice Chairman of the AFIPS committee, and was reviewed by committee members prior to submission. The comments focused on two specific areas. First, Armer pointed out that while privacy and confidentiality of account information was addressed in the amended regulation, the area was treated in a very cursory manner. In the absence of a specific definition of "adequate safeguards," prescribed appeal procedures for consumers, and related penalties on financial institutions and their employees for unauthorized disclosure, he argued, the proposed treatment was nearly meaningless. Second, Armer pointed out that while the press release describing the proposed amendment made reference to "payments on magnetic tape" (and implied the transfer of funds by physical delivery of tapes), the proposed regulation defined acceptable "media" much more broadly than magnetic tape, in a way that would make the Regulation applicable to a full scale Electronic Fund Transfer System. Armer urged the Board to restrict the definition of media to only transfers on magnetic tape, and to gain relevant experience in this area before publishing broad regulations which would reach EFT systems more generally.

AFIPS PRESIDENT RALSTON URGES CONTU TO EXPLORE COMPUTER-RELATED COPYRIGHT

The Director of the AFIPS Washington Office met in March with staff members of the National Commission on New Technological Uses of Copyrighted Works and was told that the Commission would, at its April 1 meeting in New York, determine whether it would investigate and make recommendations on copyright matters related to computer technology (Washington Report, 3/76)

As a result, AFIPS President Anthony Raliton has written the Commission, urging the Commissioners to go forward with investigation of these "important" issues, and to make recommendations which would lead to clarification of the relevant law. Ralston emphasized that AFIPS' interest in this area is not commercial, but rather, that the Federation wished to see the legal treatment of the area developed in a manner which is technically sound. "Both the Congress and the Federal Judiciary, by the nature of these institutions, are in a difficult position to consider all aspects (*i.e.*, legal, economic and technical) of [these issues]." Ralston said in his letter. He concluded, "[i] t is our hope that your Commission will apply its unique resources to give these issues the considered study which they demand."

STATUS OF H.R. 214 PRIVACY LEGISLATION

Rep. Charles A. Mosher has predicted that H.R. 214, a bill which would require court orders for government surveillance of many kinds of communications, will be approved within the month by the House Subcommittee on Courts, Civil Liberties and the Administration of Justice. The bill, as revised by the Subcommittee, is expected to include coverage of non-aural interception of electronic communications (*i.e.*, data communications) sent over wire; AFIPS had earlier been asked to provide technical comment upon this aspect of the bill (*Washington Report*, 2/76). While the proposed statute would not reach non-wire data communications, it would for the first time provide Federal statutory privacy protection for computer data transmissions, telegrams, and other non-verbal transmissions over wire.

AFIPS COORDINATES INFORMAL COMMENT TO STATE DEPARTMENT ON IBI

In response to a recent Federal government meeting (Washington Report, 3/76) discussing U.S. relations with the Intergovernmental Bureau for Informatics, the AFIPS Washington Office coordinated informal comment to the State Department. The comments submitted consisted of correspondence from Dr. Richard I. Tanaka, Chairman of the AFIPS International Relations Committee. and Mr. Isaac Auerbach, former Chairman of the same committee.

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Philip S. Nyborg, Director Washington Office

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Vol. II, No. 5

May, 1976

WASHINGTON DEVELOPMENTS

U.S. SUPREME COURT DENIES SOFTWARE PATENT

The U.S. Supreme Court has ruled in Dann v. Johnston that the program developed by Thomas R. Johnston is not patentable under existing law. The Court did not reach the broader issue of software patentability even though it was specifically raised by the petitioner in the case, C. Marshall Dann, the Commissioner of Patents and Trademarks. While the Court very properly decided the case as narrowly as possible, *i.e.*, on Johnston's specific application for patent as opposed to the broader question of software patentability, it could conceivably have reached the latter issue.

The Johnston program. The Johnston program, which is being sold as a computer program to banks and data processing companies, would read a magnetically encoded digit on customer checks and interpret it as a specific category of expenditures. The program would then store and sort this information such that it could produce a periodic statement organized according to customer-specified categories.

Rationale under existing patent criteria. Under existing law, patent protection may be granted only to ideas which are new, useful and non-obvious. Each of these criteria are a "term of art" in patent law, having a specific and detailed definition. "Non-obvious" is taken by the courts to mean that the subject matter sought to be patented must not be "obvious at the time the invention was made to a person having ordinary skill in the art . . . " The Court found that Johnston's invention was obvious under this standard for two reasons; first, banks already use computers extensively to process customer account information (including processing multiple accounts for the same customer), and second, the Johnston application was quite similar to an existing system which used a computer to maintain account information for the various divisions of large business enterprises.

Status of software patentability. Under the new Supreme Court ruling, the availability of patent protection for software remains uncertain. While some observers view the Court's limited holding, which did not rule against patentability of software, as in indication that it may be willing to allow patent protection for programs which meet the normal requirements for patentability, the point is conjectural at this time. Within the framework of the law it now stands, however, it remains possible that the Supreme Court will utlimately rule in favor of software patentability.

FCC CHAIRMAN ANNOUNCES PROPOSAL FOR NEW COMPUTER INQUIRY

Speaking at the recent Fourth Annual Conference on Telecommunications Policy Research (cosponsored by the Federal Communications Commission (FCC) and the White House Office of Telecommunications Policy (OTP)), FCC Chairman Richard Wiley announced his proposal for a new FCC "Computer Inquiry" which would re-examine the interrelationship between computer and communications technologies. Wiley is specifically proposing to the Commissioners that the FCC initiate a notice of inquiry and proposed rule making, and that it undertake a series of public sessions which would reach both the commercial and research communities regarding new technologies (both current and planned) and their applications. Particularly significant, Wiley indicated an innovative approach in which these public sessions would become part of the record in the formal Computer Inquiry proceedings.

The public sessions will be in two formats. First, Wiley indicated that he would propose a "Future Planning Conference" which would be oriented toward new developments in computer communications and their impact on FCC regulatory responsibilities; while the Future Planning Conferences are not themselves new to the FCC, Wiley's proposal to incorporate the transcript of the Conference into the Computer Inquiry record represents a novel approach to obtaining technical information from the research community, which is not normally a party to FCC proceedings. Second, Wiley described a proposed "Commission Demonstration Program" which would supplement written comments submitted in the course of the Computer Inquiry with live demonstrations and debate regarding communications equipment (including terminal devices). This program would attempt to elicit information pertaining to vendors, users and uses of such equipment; vendors would be allowed to comment on their own as well as competitors equipment.

OTP COMMENTS ON FEDERAL RESERVE'S PROPOSED REGULATION J

The White House Office of Telecommunications Policy recently submitted comments on the Federal Reserve Board's proposed Regulation J. (See *Maskington Separt*, 4/76). OTP's comments indicated concern that the proposed changes would permit the actual provision of EFT services by the Federal Reserve, an activity which would be "inappropriate and unwise." In a letter to the Director of the AFIPS Washington Office, OTP Acting Director John Eger described OTP's specific concerns:

"First, we have been witnessing for some time the steady development by the private sector of the generic type of services now proposed by the Federal Reserve Board. There do not appear to be any economic or technological reasons for the Federal Reserve to involve itself in the actual provision of these services. Accordingly, absent any compelling justification for government entry into this market, the private sector should be left to provide electronic funds transfer services in an environment that is free from government operational involvement.

Our second concern relates to the control of and access to the comprehensive body of sensitive and confidential financial information that will eventually be carried by electronic funds transfer systems. Operation of such systems by the Federal Reserve would give it direct and automatic access to this information. We seriously question the wisdom of creating an environment wherein a government agency would have such ready and unprecedented access to this vast amount of information concerning the day-to-day financial affairs of the public."

PRESIDENT SIGNS WHITE HOUSE SCIENCE ADVISER BILL

President Ford has signed a compromise version of legislation to establish a White House Science Adviser. passed by the House and Senate on April 26. It was anticipated that the President would sign the bill, since the compromise version was without most aspects of the Senate bill which he had found objectionable (*Washington Report*, 1/76). President Ford is expected to name the new science adviser very shortly; amid various rumors, Dr. Simon Ramo of TRW is considered to be a leading candidate for the new position.

The compromise bill (#) will give the new White House Office of Science and Technology Policy relatively limited budgetary authority, to "advise the President on scientific and technological considerations with regard to Federal budgets, and *assist* the Office of Management and Budget with an annual review and anaylsis of funding proposed for research and development in budgets of all Federal agencies" (emphasis supplied). The bill creates a President's Committee on Science and Technology (similar to a predecessor committee, the President's Science Advisory Committee) to bring together leading scientists for a two-year study of the Federal science and technology program. While the bill will make the new science adviser a member of the White House Domestic Council, one of the legislative compromises will preclude the adviser's membership on the National Security Council. Finally, the measure eliminates a proposed grant to each state, which would have been applied to development of state science and technology programs.

COMMUNICATIONS REFORM BILLS GENERATE GROWING CONTROVERSEY

The Consumer Communications Reform Act of 1976, a bill which would radically modify to the benefit of AT&T recent Federal Communications Commission (FCC) policy on specialized carriers and interconnection, has recently been introduced in various versions in both the House and Senate (primarily H.R. 12323 (#) and S. 3192(#)). The Act, which closely follows AT&T's original proposal, carries four key provisions First, it would restrict approval of specialized carrier (e.g., providers of data communications services, applications by requiring the applicant to show that the proposed service will not result in increased charges for telephone exchange service or "wasteful or unnecessary" duplication of common carrier facilities, and will not significantly impair the technical integrity of, or capacity for unified planning in the nationwide telephone network. Second, it would preclude the FCC from requiring charges for new common carrier services which exceed the incremental cost of providing such service; opponents argue this provision would allow AT&T to subsidize its new offerings through existing services, thereby forcing specialized carriers out of the market. Third the bill would allow acquisition of a common carrier by another common carrier. Finally, it would put jurisdiction over interconnection policy (regarding the connection of non-bell instruments to the network) exclusively under state jurisdiction, which would have a nullifying effect on " the recent FCC interconnection decision (Washington Report, 12/75).

Rep. Torbert Macdonald (Mass.), chairman of the House Subcommittee on Communications has responded to the Act by arguing that competition against common carriers would not necessarily increase local rates (contrary to AT&T's position), nor would it cause other undesirable redistributions of rates; he stated it to be in the national interest to allow competitive costs to determine rate structure. Specialized **cau**riers (*e.g.*; MCI and Datran) have also denounced the bill as an AT&T effort to legislatively eliminate competition, despite contrary policies implemented by the FCC and the courts.

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AT&T Chairman John deButts replied in recent comments at the AT&T shareholder meeting that FCC decisions allowing interconnection and selective competition in highprofit markets (*i.e.*, high-volume urban markets) threatened the technical integrity of the network as well as AT&T's ability to plan its facilities and operations.

NEWS BRIEFS

- H.R. 214 has been reported out of the House Subcommittee on Courts, Civil Liberties and the Administration of Justice, with the provision protecting computer data transmissions remaining in the bill (Washington Report, 4/76).
- The National Bureau of Standards Experimental Technology Incentives Program has published Federal Funding of Civilian Research & Development (#).
- A Federal Circuit Court of Appeals has stayed the FCC interconnection decision (Washington Report, 12/75) pending the determination of a suit filed by AT&T and other telephone companies.
- The National Science Foundation (NSF) has awarded a grant to Dr. John Hamblen of the University of Missouri to survey computer-related activities and programs in U.S. college and universities.
- The NSF Advisory Panel for Computer Science and Engineering will meet in Washington on May 11 and 12.
- NSF has published its Annual Report for 1975 (#) as well as its Guide to Programs for Fiscal Year 1976 (#).
- The Commerce Department has reported favorable trade balances in 1975 in electronics and business machines, with an 11% increase over the previous year in the approximately \$2 billion positive balance in computers and related equipment.
- The National Bureau of Standards (NBS) has published a proposed Guidelines for the Evaluation of Interactive Computer Services Delivered Through Networks (#).
- NSF has published Technological Innovation and Federal Government Policy: Research and Analysis of the Office of National R&D Assessment (#).
- NSF has published Federal Funds for Research, Development, and Other Scientific Activities, Fiscal Years 1974, 1975, and 1976 (# enclose \$1.80).
- The U.S. Interagency Committee on Automatic Data Processing (ADP) will meet in Washington on June 15 to discuss Federal ADP management; persons interested in attending may contact the AFIPS Washington Office.

AFIPS IN WASHINGTON

AFIPS PROVIDES COMMENTS ON SOFTWARE COPYRIGHT TO CONTU

In response to a request submitted to the AFIPS Washington Office by the National Commission on New Technological Uses of Copyrighted Works (CONTU), AFIPS societies recently commented on the issue of copyright protection for computer software. The request from CONTU executive director Arthur Levine enumerated ninc specific questions on which the Commission sought comment. The AFIPS Washington Office, working through the liaisons from the respective AFIPS societies, arranged comment from those societies electing to participate ACM, DPMA, and the IEEE Computer Society.

It should not go without recognition that the individuals invited to prepare comment by the participating AFIPS societies did excellent work in the extraordinarily short time period (ten working days) which CONTU allowed for preparation of comment. The individual participants were: for ACM, Herbert S. Bright; for DPMA, William J. Moser; and for the IEEE Computer Society, Herbert R. Koller and Nathaniel Macon. In addition to preparing written comment, each of these participants (with the exception of Dr. Macon) participated in the hearings which (ONTU held in Washington on May 6. In all cases, the participants spoke either as individual experts, or presented a summary of comments from various experts within their society.

The comments reflected a fairly widely perceived need for some form of software protection. While there was little support for the proposition that copyright provided the best legal vehicle for such protection (in contrast to approaches such as patent or trade secret), there appeared to be greater agreement within the societies on the desirable *characteristics* of software protection, and on the principle that protection should encourage software development by allowing a reasonable commercial return.

While existing copyright law precludes only copying of protected materials, the participants' comments supported the suggestion that software protection should be extended to include use (i.e., execution) as well. Further, the comments indicated that "copying" should be defined to include the reading (or copying) of a program into core memory for execution, a necessary prerequisite to "use." The commentators all indicated that approaches other than copyright may constitute the best solution; there was some indication that an entirely new legal system of protection (i.e., outside of patent and trade secret as well) should be considered. While there were divergent statements on whether software protection should extend beyond program code itself, the participants indicated that programs other than literal copies in the same computer language should, in some cases, constitute an infringing copy. The witnesses generally concurred that software protection, properly implemented, would increase the useful dissemination of software and not unduly restrict users.

AFIPS WASHINGTON ACTIVITIES COMMITTEE MEETS IN WASHINGTON

The AFIPS Washington Activities Committee (Keith Uncapher, chairman; Ralph Leatherman; and Frank Ryan), along with AFIPS executive director Robert Rector, met on April 20 at the AFIPS Washington Office. The Committee reviewed and discussed AFIPS' activities in Washington over the past year (the period for which the Washington Office has been in operation), as well as future activities and priorities for the Washington Office. The Committee also met briefly at the Federal Communications Commission, to discuss the planning for a propsective AFIPS computer communications conference with Mr. Dale Hatfield, chief of the FCC's Office of Plans and Policy. The Committee approved the development of AFIPS-provided testimony for the National Commission on New Technological Uses of Copyrighted Works (Washington Report, this issue), and directed investigation of several new activities and projects for AFIPS in Washington.

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Philip S Nyborg, Director Washington Office

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Vol. II, No. 6

July, 1976

WASHINGTON DEVELOPMENTS

REP. ROSE ADDRESSES NCC ON PUBLIC POLICY AND COMPUTERS

Rep. Charles G. Rose delivered a keynote address at the recent.National Computer Conference, urging members of the information processing field to assist the Congress in understanding computer technology and its capabilities, and in formulating a rational Federal government "information policy."

Present aspects of policy. Mr. Rose began by outlining several areas in which Federal information policy has begun to take shape. He cited the Brooks Bill as an early effort (in 1965) to deal with problems of Federal government computer procurement; he added, however, that the Brooks Bill is not being implemented completely, and that the Bill will need to be amended as technology changes. He also noted that the new legislation establishing a Presidential science adviser (Washington Report, 5/76) encourages the improved transfer of scientific and technological information, and directs the new Office of Science and Technology Policy to maintain adequate data bases on science, engineering and technology. Rose also pointed out the efforts of the National Commission on New Technological Uses of Copyrighted Works in the area of software protection (see Washington Report, 5/76).

Bose specifically urged AFIPS to consider a position on the suggestion recently made by John Eger, acting director of the White House Office of Telecommunications Policy, to create a joint Congressional committee on information policy. The committee would establish a Congressional focal point for formulating such policy, in contrast to the present situation where decisions are made in numerous groups within the Executive Branch.

Congressional use of computing. Rose gave his primary emphasis to Congressional use of computing, particularly data base access. Here he cited the need for educating the Congress, both for their own immediate needs and for a better understanding of the technical aspects of information policy, and challenged.computer professionals to provide the needed help, through the AFIPS Washington Office. He stated that the Office "can become a very great resource to us in the Congress in determining how we can draw down and promulgate the best kind of policy for the country, for your industry, for all concerns of the American public . . . [1]t may be a great and a very useful linkage between your organization and the Congress of the United States. I can't emphasize it enough."

With regard to present Congressional systems, Rose described the usefulness of data bases such as the Library of Congress "Scorpio" system (which contains digests of all bills presently before the Congress, and briefs on major issues) and the Federal Assistance Program Retrieval Service He emphasized, however, that the most important aspect of Congressional computer capabilities has yet to be implemented; Rose described the system which he envisions as follows:

"The greatest challenge that we are faced with in the Congress is making the legislative branch of government an effective overseer of the Executive Branch. That's our constitutional mandate. . . .

"We need to have the legislative branch of government tied into the executive branch. When the executive branch writes a check or transfers a fund or encumbers or rescinds money or does anything to a dollar, including spending it, their computer needs to notify our computer in the House of Representatives. Our computer can be programmed to notify the subcommittees of the House that have jurisdiction over that particular area so that a judgment and decision can be made as to whether that particular transaction is within the Congressional intent or was outside the scope of what we orginially intended."

FEDERAL EFTS DEVELOPMENTS

The Federal Home Bank Board (FHLBB) has amended its regulations (as earlier proposed -- Washington Report, 4/76), to extend the experimental use of remote service units to December 31, 1977, and to reopen the application period for operation of such units from August 1, 1976 to March 31, 1977. The Board has taken the position that operation of electronic fund transfer systems will furnish information which will be useful to both itself (in developing permanent regulations) and the National Commission on EFTS.

The Comptroller of the Currency, a different Federal agency which regulates national banks, has issued guidelines for the evaluation of EFT systems. According to an article appearing in *EFTS-Industry Report*, these guidelines indicate a need to deal with consumer and security issues prior to the interim or final reports of the National Commission on EFTS. The guidelines recommend that a bank should assure its customers that the personal and financial information which it accumulates will be used only for banking purposes, and that it should not be sold or divulged without written customer consent, unless required by law or within "generally accepted banking practices;" further, information processed by outside services must be treated with the same degree of confidentiality as transactions handled entirely within the bank. In the area of security, the Comptroller suggested that the National Bureau of Standards encryption algorithm be considered as a means of protecting transmissions between banking terminals and central processors, and recommended a number of other specific technical security procedures.

BELL BILL: PLAYERS AND ISSUES

The recently introduced "Bell Bill" (Consumer Communications Reform Act of 1976 -- see Washington Report, 5/76) promises to make Federal communications regulation a major political issue in the next year. Approximately 35 substantially similar bills have been introduced in the Congress to date, by approximately 75 members.

The primary policy issue in the controversy is whether AT&T should be allowed to reassert its monopoly status in communications, in contravention of recent FCC policies allowing limited competition by specialized carriers and valueadded carriers, particularly in data communications. However, a major factual issue has recently emerged which will play a key role in the controversy: whether revenues in those AT&T services subject to competition subsidize residential rates. AT&T staunchly maintains that competition will raise residential rates, while its competitors maintain that this is not the case; the FCC has stated that careful studies must be undertaken to determine who (*i.e.*, which user groups) subsidizes whom. Congress is expected to hold extensive hearings on these and related issues.

Groups opposing the AT&T legislation have organized the Ad Hoc Committee for Competitive Telecommunications (ACCT), which will establish a Washington office and expects to expend on the order of \$500,000 in its first year of operations. Present Committee members are Datran, ITT's U.S. Transmission Systems, MCI, and others; Satellite Business Systems, the North American Telephone Association, and Telenet are reported to support the Committee, while not becoming members. Both the Computer and Business Equipment Manufacturers Association and the Computer Industry Association oppose the legislation, and are expected to issue position statements soon. AT&T has been alleged by several of the opposition organizations to have undertaken extensive lobbying activities, including making personal contact with most members of the Congress and sending letters to its 3 million shareholders.

GAO REPORTS ON COMPUTER PROBLEMS RECEIVE CONGRESSIONAL ATTENTION

A recent series of reports released by the General Accounting Office (GAO) on the subject of computer-related problems in the Federal government have received considerable attention by Sen. Ribicoff, chairman of the Senate Committee on Government Operations. The series of three GAO reports deal with (1) computer-related crimes, (2) unreviewed automated decision making by computers, and (3) protection of Federal computer facilities against sabotage, fire and flood, fraud and human error. Regarding computer crime, GAO reported 69 instances of computer abuse resulting in losses of over \$2 million; most of the fraud involved "uncomplicated acts" made possible by inadequate management controls. GAO also reported that computers programmed for automatic decisions can cost the government a large but undetermined amount of money by issuing unreviewed payments and instigating unreviewed (and incorrect) actions in Federal agencies.

Sen. Ribicoff described these reports in considerable detail in remarks in the *Congressional Record*, and indicated that his committee staff is conducting a preliminary investigation into the problems identified by the GAO reports; he is expected to hold Senate hearings on the subject by the end of the year.

CURRENT FCC MATTERS

Tymshare has filed an application with the Federal Communications Commission (FCC) requesting authorization for a new subsidiary, Tymnet, to operate as a value-added carrier. Tymshare's non-regulated status has been an issue at the FCC tor some time, in an informal proceeding brought by Telenet, a regu-

lated competitor of Tymshare (Washington Report, 11/75). The proposed new service would include such capabilities as speed and code conversion, and storeand-forward message services.

Meanwhile, Telenet has filed with the FCC for the provision of a public packetswitched data communications service between the United States and the United Kingdom. The proposed system would interconnect the Telenet network with packet-switching facilities operated by the British Post Office, using the X.25 packet mode interface approved by the CCITT (an international telecommunications standards organization). The network will charge for service at a proposed rate of 1 cent per packet (128 characters of customer data), according to Telenét.

NEWS BRIEFS

- NSF has announced a reogranization of the Computer Science Section effective July 1, into the following programs, in which research proposals are now "welcome" and due by November 1, 1976: Theoretical Computer Science, Software Systems Science, Software Engineering, Intelligent Systems, Computer Systems Design, and Special Projects. Contact the Computer Science Section, Division of Mathematical & Computer Sciences, NSF, Washington, D.C. 20550, or call (202) 632-7346. Assistance may be obtained through the AFIPS Washington Office.
- Thomas J. Houser has been nominated as the new director of the White House Office of Telecommunications Policy.
- Dr. H. Guyford Stever, who presently serves as National Science Foundation (NSF) director and (within NSF) as Presidential science adviser, has reportedly been offered the position of Presidential Science Adviser within the newly created White House Office of Science and Technology Policy; four Republication senators have written President Ford opposing the possible nomination (which must be confirmed by the Senate), alleging abuse of the NSF grant award process.
- The Commerce Department has relaxed export controls on computer systems sold to Communist Bloc Countries, by allowing somewhat higher processing speeds and larger memory capacities.
- NSF's proposed Fiscal Year 1977 budget (Washington Report, 2/76) has been cut \$60 million by the House Appropriations Committee, but was later restored to the Administration's proposed level by the Senate Appropriations Committee; the likely result will be a compromise on half the cut proposed by the House.
- The House Committee on International Relations has produced a committee print on Science, Technology, and Diplomacy in the Age of Interdependence (#).
- The Federal Privacy Protection Study Commission has produced its first Annual Report (#), as well as its first report on a major area of investigation, Federal Tax Return Confidentiality (# - enclose \$1.45).
- The Institute for Computer Sciences & Technology of the National Bureau of Standards now provides disk calibration services for low, medium and high (12-disk pack) data surfaces; requests for information or submissions for calibration should be addressed to: Data Acquisition and Storage Section (magnetic disk), Computer Systems Engineering Division, Room B-212, Bldg. 225, National Bureau of Standards, Washington, D. C. 20234.
- NSF has released Federal Support to Universities, Colleges and Selected Nonprofit Institutions, Fiscal Year 1974.

AFIPS IN WASHINGTON

WASHINGTON OFFICE MAKES FIRST YEAR REPORT TO AFIPS BOARD

The first annual report of the AFIPS Washington Office was submitted to the AFIPS Board of Directors for its June, 1976 meeting at the National Computer Conference. The report, summarized below, described the activities of the Office in pursuing its objectives of informing the AFIPS societies of significant Washington developments and providing technological information to the Federal government.

Summary of the report. The Office has become integrated into the Washington community, and is becoming a focal point for dialogue on an increasing number of Federal issues related to information processing.

In terms of disseminating information, the AFIPS Washington Report has been established as a regular monthly publication. This publication (to which complimentary subsoriptions are available upon request) describes recent Federal developments as well as our current AFIPS activities in Washington.

In February of this year the Office arranged, in cooperation with AFIPS Headquarters, a White House briefing to senior officials of the AFIPS societies. At this briefing, Federal officials from the White House and various agencies discussed the current Government outlook regarding computers and telecommunications, Federal research and development in information processing, and international transfer of computer technology (Washington Report, 3/76).

With regard to providing technological information to the Federal government, the following comments and briefings (in approximate chronology) were arranged through the Washington Office:

- An address to the U.S. Interagency Committee on ADP, by the chairman of the AFIPS Washington Activities Committee.
- Briefing to the executive director of the White House Domestic Council Committee on the Right of Privacy, on the subject of Federal government "information policy."
- Testimony before the U.S. House of Representatives Committee on Science and Technology, Subcommittee on Domestic and International Scientitic Planning and Analysis; hearings on Computer Technology Transfer to the Organization of Petroleum Exporting Countries.
- Computer communications briefings to the Federal Communications. Commission (informal discussions by AFIPS experts, as well as plans for a major presentation to the FCC).
- Written comment, at the request of Rep. Charles Mosher, on the technological aspects of H.R. 214, a bill which would legally protect data communications over wire against surveillance.

Formulation of a panel of experts, at the request of the Federal Privacy Protection Study Commission, on private sector usage of the Social Sécurity Number.

Comments on the establishment of a White House science adviser, to Dr. Lewis Branscomb, a member of the Advisory Group planning for the (now established) Office of Science and Technology Policy.

Briefings on the technology underlying EFTS, to the National Commission on EFTS, and the White House Office of Telecommunications Policy, by members of the AFIPS EFTS Committee.

Informal written comment to the State Department on the (International) Intergovernmental Bureau for Informatics.

Written comment (by the AFIPS EFTS Committee) on proposed amendments to Federal Reserve Board Regulation J, which pertains to Electronic Fund Transfer Systems (EFTS) which may be operated by Federal Reserve banks and automated clearinghouses.

Written comment and testimony on the subject of software copyright, before the National Commission on New Technological Uses of Copyrighted Works.

AFIPS societies have permission to use material in the AFIPS Washington Report ' for their own publications, except that where an article title appears with an "(*)" clearance must first be obtained from the AFIPS Washington Office. Documents indicated by the symbol "(#)" are available on request to the AFIPS Washington Office. Where price is noted, make checks payable to "AFIPS."

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ZWEI BILDE FUR DAS ARBEITSZIMMER EINES GEOLOGEN

C. EUGEN WEGMANN

The drawings on the following two frames first appeared in Geologische Rundschau, b. 30, 1939.

The are are reproduced with the kind permis ion of Prof. Dr. W. Zeil, Hauptschriftleiter.

The first illustrates the scientific viewpoint; the second, the flow of scientific information.





