CURT LACKEY SELECTED AS WCC PROJECT OFFICER

BILL ALLEN, COMPUTER SPECIALIST

CURT LACKEY

In July, EPA Data Talk announced the appointment of new Project Officers for the NCC and WCC. Tom Rogers, the NCC Project Officer, was featured last month.

Curt Lackey, the new WCC Project Officer, is a new face in MIDSD/NCC. Although located at Washington's Waterside Mall, Curt will report to Don Fulford, Chief of the Data Center Branch at the RTP facility.

Since 1973, Curt has been ADP Branch Chief for Region 4, Atlanta, where he managed the region's ADP resources and provided data processing liaison with EPA Headquarters. He was instrumental in the successful installation and efficient use of the regional PDP-11/70. Atlanta was one of the first regional offices to acquire this minicomputer.

Before coming to EPA, Curt served in the U.S. Air Force for seven years, four of which in the Pentagon (D.C. traffic won't be new to him), one year in Vietnam as Chief of Computer Operations, Data Management Agency, and one year at Randolph AFB, Texas, where he was involved with the procurement of the Advanced Personnel Data System for the Air Force. A native South Carolinian, Curt was born in 1942, and in 1964 received a B.S. in mathematics from Clemson University. He then moved to Atlanta where he entered Georgia Tech and graduated with an M.S. in Information Science in 1965.

Curt, who enjoys his work, is also active outside ADP. He plays paddleball and golf, and is active in church choir groups. His wife Judy and their three children, the youngest of which is six months old, are in the process of moving from Atlanta to Annandale, Virginia, where they will live until finding a more permanent residence.

Welcome to the MIDSD organization, Curt! We certainly can use your talents and experience to provide the IBM users with the high quality utility they expect and deserve.

DIRECTOR'S CORNER

Willis Greenstreet

This month I want to emphasize the initiation of EPA's National ADP Institute (NADPI). The first courses were held in July. The NADPI will become a major aspect of EPA's ADP Program as we move into the 1980's. The following excerpts from an article which appeared in the North Carolina Leader describe it well. Vic Cohen of my RTP staff is to be commended for the good start of NADPI.

FOR THE 1980 COMPUTER LEAP

NSCU FACULTY PREPS EPAers

North Carolina State University is providing the teaching expertise for the Environmental Protection Agency's Automated Data Processing Institute in Raleigh and in [two] other states. The Institute is for EPA personnel from across the country. Sessions also will be held at Gaithersburg, MD, and Cincinnati, OH.

The NCSU professors, who will travel to all seminars, are: Dr. James D. Powell . . . and Dr. David F. McAllister, of NCSU's Department of Computer Science.

The NCSU professors will teach three courses. At the first level is "Basic Concepts," designed for lower level management people and others without a great deal of expertise in the computer field. The course will deal with applications of computer information in an introductory way. For example, it might explain weather forecasting by computer - how information about cloud cover, wind direction and relative humidity may be fed in to produce long-range weather reports, of interest to the EPA since it is involved with pollutants in the air.

At the second or intermediate level, a course called "Project Management" will concentrate on practical methods of managing a computer project. It is designed for mid-level managers, systems and management analysis [sic] and computer specialists.

At the top level, a course called "Executive Seminar," for the upper echelons of EPA managers, teaches more extensively how to make decisions based on computer work others do. It advises about how to ask for certain information, what to ask for.

The courses are being coordinated . . . by the NCSU Division of Continuing Education.

They are intended to acquaint their students with recent advances in computer technology, preparing the way for the tremendous leaps ahead expected by the 1980's.

Plans for several more years of courses are in the works, with the intention being to expand the courses in depth. A student who attended the first course, "Basic Concepts," might expect the next year to come back to course 1-a, he [John Schulze, continuing education specialist] says, explaining that this might be an enlarged version or offshoot of "Basic Concepts."

NADPI

Vic Cohen, Computer Specialist

The trees appearing on the cover of the brochure pictured at right announcing the "Executive Seminar in ADP" serve as the logo for EPA's newest ADP educational program called the National ADP Institute or NADPI (pronounced "nappy"). Implied by the logo is NADPI's goal of individual growth through education.

By researching effective classroom techniques, continuously surveying course needs, and developing, presenting, and evaluating ADP courses, NADPI will provide a high-calibre ADP education to all EPA employees.

This fiscal year, NADPI is offering a set of three courses each aimed at a different category of EPA employee: "Executive Seminar in ADP" for executives, "Project Management and the System Life Cycle" for ADP project managers, and "Basic Concepts in ADP" for those without prior ADP experience.

The NADPI program recognizes a number of new attitudes toward the way the government should operate. Draft reports from the President's Reorganization Project have repeatedly stated that computers are indispensable to the successful operation of the government. Of course, this idea is not new to EPA. As a young agency, EPA has easily taken advantage of technology, particulary automation. With the advent of OMB Circular A-109 and the approaching procurement of computer equipment and services for the 1980's, the Agency will produce new computer uses, methods of managing information, and perhaps, modes of organizational behavior. As ADP permeates the Agency, few staffers remain outside its influence. All of us

NADPI
an opportunity to grow
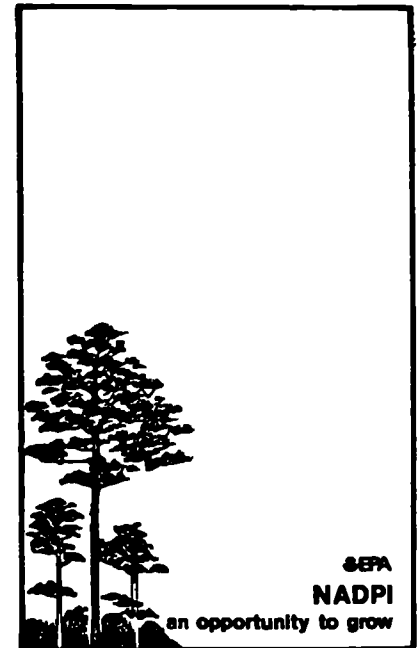
have a role in producing and reviewing data, distributing reports, consolidating and digesting information, or managing one or more of these activities.

The implication of this trend toward automation is that EPA must help its staff acquire computer skills and accept the changes computers will bring to the workplace. All NADPI courses will prepare EPA personnel for the developing information technology and will emphasize their role in the information process.

Compared to courses available from other sources, those of NADPI have several advantages. They are free to EPA employees. They will reflect actual EPA experiences through the use of tailored case studies. Most will be developed and presented by university faculty, and the students will receive continuing education credits (CEU's).

Next fiscal year, NADPI will undoubtedly repeat portions of the current schedule. The current project management course may be changed to include the use of a project management game, again customized to fit the EPA experi-

ence. But there will be renewed emphasis on users not formally trained in ADP, exemplified by a systems course specifically designed for personnel managers or environmental protection specialists. Other ideas include an ADP procurement seminar, a series in data analysis, a course in data base applications, and reviews of new books on management information systems.

The future looks bright for NADPI and all EPA employees are encouraged to take advantage of the unique opportunity it offers.

HIGHLIGHTS FROM THE WCC

Maureen Johnson

✓ Curt Lackey, newly-appointed EPA Project Officer for the WCC, is rapidly familiarizing himself with the management of the contract. Having served as the ADP Branch Chief for Region 4, Curt brings a valuable user perspective to the direction of the data center. Jim Platten and Neil McNamara will be working with Curt at Waterside Mall.

✓ A new project management and control system, PC/70, from Atlantic Software, Inc., will soon be implemented at the WCC. Descriptive information on this system will be presented in future issues of EPA/WCC SIGNON.

✓ A schedule and plan will soon be completed for the implementation of IBM's Multiple Virtual Storage (MVS) operating system. Generally, MVS is expected to increase productivity in applications development, expand operations flexibility, and improve system performance. Copies of a COMNET working paper describing MVS may be obtained from WCC Users Support.

✓ Robert T. Caravella has joined the WCC staff as Deputy Project Director. And the positions of Security and Fire Protection Officer, Quality Assurance and Certification Officer, Network Manager, and two Senior Performance Analysts have been filled.

✓ Morino Associates, Inc., has been awarded a subcontract to study WCC performance monitoring requirements prior to the development of a Performance Monitoring Information System.

✓ Under development is a new user orientation package, providing new users with pertinent information about how to use the WCC and where to obtain assistance.

NEWS FROM REGION 3

Ted Standish, Region 3 ADP Branch Chief

Work is continuing at a steady pace on the design of the Hazardous Waste Data Management System for the Hazardous Waste Program. Several meetings of the Steering Committee were held and, as a result, we at Region 3 sent to the other regions information on a design proposal for the Notifications System and the Permit Issuance System. In addition, we also requested regional comment on several data processing issues. We will keep the regions informed as work on this system progresses.

Last week, Arthur Young and Company briefed the Steering Committee on the status of the Data Standardization Project. Committee members agreed that Arthur Young should define alternative ways for the Agency to implement a Data Management and Standardization Program. This briefing was videotaped and will be sent with a briefing document to each region.

Region 3 arranged for WCC Users Support to operate the Model State Information System on a daily basis. We have documented this arrangement. At the end of the fiscal year, together with User Support, we will issue a report on the advantages and disadvantages of this arrangement.

The meeting of the regional Branch Chiefs should occur in October, in conjunction with either the meeting of the minicomputer regions or the proposed Agency Data Processing Conference. As soon as I have a firm date, I will let each of you know.

Please let me know if you have any information you wish to include in this column.

NETWORK ACTIVITIES

Fred Kastner

The General Services Administration recently granted approval for seven new data circuits. This will allow EPA and COMNET to proceed with a network reconfiguration to improve accessibility and reliability for San Francisco, Dallas, New Orleans, Grosse Ile, and other northeastern cities.

RJE access to NCC is still not available over the network facilities. COMNET is testing the capability and cannot at this time provide an implementation date.

COMNET currently provides WATS lines and commercial numbers in Washington to access NCC and WCC with 1200 bps full-duplex VADIC modems. But access to either system with similar Bell 212 modems is limited to local Washington commercial numbers. To service Bell 212 modem users

outside the Washington dialing area, COMNET will install WATS lines by August 2.

Users are reminded and encouraged to report all communications problems. If you are not satisfied with problem resolution or if you are still experiencing problems, please contact me a (919) 541-2932 or (FTS) 629-2932.

EPA/MLAB CONTRACT

Robert Young, ADP Network Services, Inc.

EPA has awarded a contract to ADP Network Services, Inc., through First Data Corporation, to provide a "Mathematical Modeling Time-Sharing Service" to all EPA locations throughout the country. This service centers around the MLAB software package developed by NIH and resides on a DEC System-10 in Ann Arbor, Michigan. The network is readily accessible by phone from most major U.S. cities.

MLAB is an interactive system for mathematical modeling. The heart of the system is a curve-fitting program which will adjust the parameters of a model function to minimize the sum of the squared errors. Mathematical operators and functions, routines for teletype and CRT plotting, and mechanisms for saving data between sessions provide a powerful and convenient environment for data manipulation, arithmetic calculations, and building and testing models. MLAB was originally designed and programmed by Gary Knott and Douglas Reece. It was inspired by earlier work of Richard Shrager at NIH and uses the Marquardt-Levenburg method of curve-fitting.

The user communicates with MLAB by typing commands. Most commands are executed at once, but a few, such as the FIT command, will

prompt the user for additional information. Should the user have questions, typing "HELP" will put the system documentation at his disposal.

In addition to its suitability for quick and convenient curve-fitting, MLAB provides facilities for data manipulation and graphics. Models are expressed as real-valued functions of arbitrary numbers of independent variables and parameters. These functions may be expressed in terms of the built-in operators and functions, other functions defined by the user, and recursively in terms of themselves. Systems of differential equations may be specified and solved or used to implicitly define functions to be used as models in curve-fitting.

The graphics routines provide a means of rapidly examining the results of a fit, and, using a CRT display, a graph can be prepared for publication. Special facilities for drawing perspective views of 3-dimensional surfaces or space-curves are included. Various means of modifying the views are available.

The most salient feature of MLAB is its civilized interface with the users. Its statements are simple and direct, and all unnecessary details relating to pure programming have been suppressed. Functions are evaluated interpretively, avoiding the need for user programming.

A comprehensive set of assumptions or "defaults" is in force to allow command components to be neglected when desired. The PDP-10 monitor is easy to interact with, and no elaborate operating system control specifications such as JCL are required. The use of files is relatively simple.

MLAB has been used to solve differential equations, fit models to data, and produce pictures for publication in a variety of situations.

The system is available to all EPA personnel. For more information on MLAB or to set up an account, please contact:

David Cline
Environmental Protection Agency
Athens, Georgia 30605
(404) 546-3123
(FTS) 250-3123

or

Bob Young
First Data Corporation
2011 Eye Street, N.W.
Washington, DC 20006
(202) 872-0580

The commercial number for the National Communciations Network is (202) 537-2611. Marvin Rosenstein is the Branch Chief for Region 1. EPA Data Talk gave this information incorrectly in the June issue.

DEVELOPMENT, MAINTENANCE & OPERATIONS CONTRACT

Anne Parkis

[Editor's Note: Anne Parkis, formerly of the WCC Project Office, accepted the DM&O Project Manager position within MIDSD. This position became vacant when Frank Bullock transferred to the Department of Defense. Anne welcomes any questions or comments concerning the DM&O contract and can be reached at 755-2839.]

Elgin Fry of the Office of Pesticide Programs (OPP) must process huge quantities of site/pest data to analyze the composition and effect of various pesticides. Elgin asked CSC to supply professionals in entomology, agronomy, microbiology, plant pathology, and plant physiology, who will encode pesticide data into a computer-compatible format, run the data through the COMNET computer system after key-to-disk conversion, and verify the computer edit output before sending the data on to EPA scientists for final analysis. The key-to-disk conversion is performed by CSC under the DM&O contract. With CSC's help, Elgin and the OPP will soon get the bugs out of their systems.

Bruce Almich is establishing a Minicomputer Software Exchange for the EPA PDP-11 user community. This exchange should help eliminate duplicate minicomputer software development in the Agency and provide software sharing to PDP-11 users. The exchange will be developed through two DM&O contracts. The first will produce minicomputer documentation standards and policies/procedures for the exchange. Draft copies of the results will be distributed for review and comment at the EPA minicomputer managers meeting scheduled this fall. The second contract will establish and operate the exchange.

The CSC staff at the Large Lakes Research Station (LLRS), Grosse Ile, just published their first newsletter giving their user community general interest information concerning data operations. Dr. Swain, Station Director, wrote, "I think reviewing it that you will discover why we consider Ralph [Allen] and his group to be such a valuable asset to the overall LLRS program." Anyone interested may request a copy from Bill Richardson, the EPA Project Officer.

AGENCY SAMPLE FILE CONTROL SYSTEM

Bruce Almich, Computer Services and Systems Division

Computer Services and Systems Division (CSSD) is currently engaged in the design and implementation of data management software for the EPA analytical service laboratories. A prototype "Sample File Control" (SFC) system for ERC-Cincinnati is in the detailed implementation design phase and will run on the EPA-Cincinnati PDP-11/70 minicomputer under Inform-11. The prototype is expected to be operational by the end of 1978.

During 1979, the CSSD-developed automatic telecommunications network (available to all PDP-11 IAS sites using HASP) will be augmented to provide automatic data exchanges of laboratory sample backlogs and results through PDP-11 batch jobstreams between laboratory minicomputers and the regional RJE minicomputers. Thus the laboratory minicomputers will serve as data concentrators, reporting on automated instrument analytical quality control, sample status, and project results before the data is either purged or sent to the national data bases, either STORET or SAROAD. The SFC system is also designed for entry of manual results data into the PDP-11 data base and as a protocol for

automated entry by other mini-computers. These machines would be programmed to transmit the appropriate PDP-11 Batch Inform jobs and receive reports via HASP emulators and 4800 baud synchronous telecommunications with the PDP-11 SFC systems.

A larger Regional Service Laboratory Sample File Control System is now in the Data Elements Dictionary definitions phase of implementation design.

Delivery of Sample File Control systems to primary users is scheduled for 1979, with all major design issues to be frozen during the fall of 1978. Anyone interested in obtaining further design or status information is invited to request a copy of the recent report from CSSD and/or to be added to the design documents mailing list.

STATUS OF ADP STUDIES

Ed Franklin, Project Officer

Of the current nine active and seven proposed Directives of Work (DOW) under MIDSD's Feasibility Study contract with Arthur Young and Company, four projects are nearing completion and are in an EPA review phase. The Hazardous Waste Data Management Supplementary Study and Underground Injection Control System Feasibility Study are now being reviewed by EPA Headquarters and the regions. MSED is now reviewing the alternatives definition evaluation and cost analysis for their Emissions Data Feasibility Study.

For further information from MIDSD on these studies call Ed Franklin (755-0879) or Mike Carpentier (755-0623).