



# EPA

# DATA TALK

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## PROCUREMENT FOR THE 1980's

**SAM BROWN**

**Director, National Computer Center**

The Project Management Office (PMO) is currently developing a detailed acquisition plan for the 1980's. This plan for future computer systems will contain not only the milestone dates but the methods to be used in the acquisition. The plan should be approved by the management around April 1. Major milestones are:

- o The release of the RFP - 4/1/79
- o The demonstration of the vendor's capabilities - 8/1/80
- o The final award - 9/1/81
- o The conversion of the COMNET workload - 7/1/82
- o Total implementation - 6/1/83

The major problem currently facing the PMO is obtaining adequate staffing to support the program. We have conservatively estimated that the program will require 25-30 man-years. This estimate is based on discussions with FEDSIM, the Federal Office of Conversion, and a review of the staffing requirements for a number of agencies conducting similar



⬆ Operators and technicians huddle around the main console of the U-1110 at the NCC.

procurements. The success of the program is dependent on early resolution of this staffing problem. In the meantime, the PMO is using the manpower that is available from MIDSD. A final decision on staffing is anticipated in April.

Most of the work required prior to the issuance of the RFP in April 1979 will be performed by the PMO. A general system study must be performed to determine the design of the future system(s). The benchmarks and demonstration philosophies must be developed for incorporation in the RFP. In addition, a number of studies required by the oversight agencies, such as A-106 and A-108, must be conducted before the RFP can be issued.

In summary, the 1980's acquisition is at a critical point. The next couple of months will determine whether we will be able to stay on schedule. Solving the staffing dilemma remains paramount.★

## DIRECTOR'S CORNER



Willis Greenstreet

One of the Carter administration's major goals is to reorganize the Executive Branch of the Federal Government. Most of you are familiar with the efforts to reform the Civil Service Commission, as that has attracted significant press attention. Another such reorganization effort is focusing on ADP management and its many ramifications.

I have been visited by four groups, each with a specific interest in governmental ADP: personnel, operations, procurement, and science and technology. The teams are normally composed of a senior person from industry and several government members. In general, they interview from a questionnaire, attempting to determine each agency's ADP management methods and their strengths and weaknesses. Further, they are looking for methods and ideas which can be transferred, as well as overall recommendations. I have been generally impressed with the attitude of the team members and feel they have identified the proper issues. I am impressed with the quality of the industrial members that are participating. I hope that they find ways to decontrol the ADP acquisition process as many feel it entirely too oppressive. I use the word "decontrol" as I feel that it is overcontrolled and not well-managed. I will keep you informed as events progress in this study.

We are entering an era of better service from the two computer centers. At WCC, the Data Center was above 95 percent available in January and all trends are favorable (MTBF - MTR, etc.) for

further modest improvements. The advance of Level 33 of the Univac operating system appears as of this writing to have occurred successfully. (During the planning for this conversion, we decided on a D-Day approach in advancing to Level 33. I kept wondering at which beach we were going to land.)

The Communications Network has shown striking improvement and is performing more nearly to COMNET and our expectations. Everything is not perfect, but you can reasonably expect this level of service, with minor variations resulting from component failures, in the future. We will continue with our several contractors and your assistance to make improvements in the service. I am expecting, in the near future, to put increased emphases and resources into the application software management area of our business. I welcome your thoughts on where and how this can be done most profitably.★

## NATIONAL NETWORK STATUS

Fred Kastner,  
Computer Specialist

COMNET has made considerable progress in network stability and reliability this quarter. They obtained the services of an AT&T network manager who will coordinate and supervise the circuit performance and aid in problem-solving. AT&T has also announced that the Denver-NCC and WCC-NCC wideband circuits are available. A maintenance contract negotiated by COMNET with Timeplex, Inc., actively involves Timeplex in multiplexer maintenance and performance. COMNET continues to test the software which allows 1004-type RJE terminals access to NCC.

Users experiencing network stability problems are urged to report them to COMNET (800-424-8647 or 202-537-2611) or to Fred Kastner at NCC (FTS 629-2931).★

## THE TRANSITION TO 1200 BAUD TELECOMMUNICATIONS

Fred Kastner

The popularity of 1200 baud data transmission for the purpose of interactive processing has grown considerably over the last several years. The major advantage of this type of processing is that it is obviously faster than the alternative, i.e., 300 baud transmission. While 300 baud support is normally sufficient for input operations, the increased data transmission speed offered by 1200 baud support is particularly advantageous while in output mode, listing output data lines or, more importantly, while utilizing interactive graphics packages.

For some time now numerous factors have prevented the development of a standard regarding NCC and WCC support of 1200 baud data transmission; however, the major contributing factor, rapid technological changes in the modem industry, seems to have reached a point whereby we can now standardize support of 1200 baud transmission requirements.

Data transmission at 1200 baud (120 cps) is available in either half-duplex mode (Bell 202 or compatible equipment such as the Anderson-Jacobson ADAC 1200 acoustic coupler) or full-duplex mode (VADIC 3400 or the new Bell 212 modem). At NCC, 1200 baud support has been limited by modem interfaces to the half-duplex mode, causing problems for NCC users in that the host system cannot detect when a user session terminates prematurely (since an incoming signal does not exist and cannot be monitored) and that the user receiving output data cannot break or interrupt the output.

Full-duplex 1200 baud support, on the other hand, has neither of these limitations and is becoming more popular and available due to technological advancements in the modem industry. The new Bell 212 offering, along with the VADIC

3400, has made the full-duplex capability very accessible and desirable. Users are now able to select either the Bell offering, available through local telephone companies, or the VADIC 3400 modem. Availability and maintenance of the full-duplex modems, formerly only provided by VADIC, can now be provided by local telephone companies due to the Bell offering and associated tariffs.

Because of this, NCC and WCC plan to eliminate half-duplex 1200 baud support in the near future. This will allow COMNET to reduce the number of different telephone numbers currently used to support 1200 baud applications. COMNET currently provides two VADIC 3400 access numbers and seven access numbers for Bell 212 modems. While 1200 baud port capacity at WCC is limited only by the number of modems, NCC is currently limited to four simultaneous 1200 baud users. WCC and NCC port capacity will be increased as the need arises. Users who have not already done so should replace their half-duplex modems or acoustic couplers with either the VADIC 3400 or the Bell 212 modem. (Anderson-Jacobson has indicated that they are currently designing a full-duplex 1200 baud acoustic coupler.) Questions regarding this information should be directed to Fred Kastner at NCC (FTS 629-2931).

EPA Data Talk is published monthly by the National Computer Center, Management Information and Data Systems Division, for EPA personnel and contractors interested in general ADP topics.

Comments and suggestions are solicited and should be addressed to:

Editor, EPA Data Talk  
National Computer Center  
Research Triangle Park,  
North Carolina 27711

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## NEWS FROM THE REGIONS

Ted Standish,  
Region III ADP Branch Chief

Based on recent experiences with transmitting the proposed regional management guidance and with coordinating status reports on the Model State Information System (MSIS), I urge all regions and headquarters offices to route data sets among themselves. Based on the information contained in the FY1979-FY1980 Zero Based Budgeting (ZBB) Manual, the Office of Planning and Management already plans to disseminate time-critical materials to regions using this method.

I am using this back-door approach to improve coordination between regions and between the regions and the headquarters on matters of mutual interest. We should all benefit from each other's comments on proposed systems, technical problems, management issues, etc. The comments from other regions on proposed systems for Region III have brought in new ideas and have identified additional concerns. As reported in the last issue of Data Talk, the regions have agreed to divide the responsibilities for responding to feasibility studies. Additionally, the draft management guidance for FY1979-FY1980 calls for increased coordination and communication among the regions. The use of data set distribution is a relatively painless way to maintain a minimum level of coordination.

As described in the information we provided on the MSIS status, the Office of Drinking Water has set up a data set specifying all known bugs and the status of the corrective efforts. I urge all regions to coordinate with the states who have installed MSIS to send them copies of the data set periodically. Also, in addition to reporting suspected bugs in the WCC version of MSIS to the Office of Drinking Water and SWORCC, I hope that the regions will inform each other of these bugs so all can speedily affect necessary avoidance actions.

On another front, Region III was the first region to undertake a formal word processing study and Region IV has also been reviewed. As a result of the study recommendations, Philadelphia examined several shared-logic word processing systems and went through a fairly elaborate evaluation process. We chose to install a Wang System 30 and it should arrive by the time you read this article. We are preparing a summary of our study and will be most happy to share our findings with interested persons.

Region III has also received Office of Enforcement approval to continue a data flow study of the Region's permit program. The permit program will describe the handling of all permit documents and will be an integral part of the Enforcement Management System. The study, being conducted by Arthur Young and Company, will be available to all regions. If you are interested in a copy, please let us know so that we can obtain sufficient numbers.

Items of interest in other regions are:

- Region II has gone to a facilities management contract under Development, Management, and Operation (DM&O) for the operation of their center.
- Congratulations to Curt Lackey in Region IV who, in view of position ceilings, has creatively augmented his staff by adding a new daughter to his family. This may be our best method of handling position crunches in the future. *(Congrats! - Ed.)*
- Tom Yates, Management Division Director in Region V, has selected Jerry Miller as the new ADP Branch Chief. Welcome to the crowd. *(Congratulations to Jerry, an NCCer made good. - Ed.)*
- Jim Sims in Region VI has now had a few weeks of experience as ADP Branch Chief. I feel it is only fitting that he and Jerry be given the pleasure of our company at another quiet, non-controversial branch chief meeting. I will contact all of

the Regions and get suggestions on time, place, and agenda.

- Finally, the Management Information and Data Systems Division Director's office has undergone a change in decor. It is a "must see" the next time you are at Headquarters.

Any items of interest sent to me for inclusion in Data Talk would be appreciated. If you care to write an article for Data Talk, please let me know. No response on either option will force an arbitrary and capricious decision as to the next author.☆

## DEVELOPMENT, MAINTENANCE, AND OPERATIONS CONTRACT

Frank Bullock, MIDSD

Computer Science Corporation (CSC) is currently providing task assignment services on 23 active tasks at a cost in excess of one million dollars. During January, CSC began work to complete the

balance of the system-level documentation of STORET; the Project Officer rated CSC's performance of the initial documentation task as excellent. Additionally, CSC started a quick-reaction task to report all federally-owned plants in the AEROS system file and to convert a Penalty Calculation program for processing at the NCC via the COMNET network. A quick-reaction task for the implementation plan for storage and retrieval of infrared spectra was completed.

CSC representatives attended the ORD ADP coordinator's conference in Cincinnati, Ohio, to present the provisions of the DM&O Contract. DM&O staff members supporting Region V in Chicago completed a course in INFORM, a data base management system implemented on PDP 11/70.

All readers are reminded that the DM&O contract is available to the entire EPA ADP user community. Users needing additional information about the contract should contact the DM&O project officer, Frank Bullock (PM-218) on (202) 755-4936. Also contact the CSC project director, Sid Stein, for informal liaison on (703) 533-8877.☆



◊ A view of the rear of the EPA Environmental Research Center located in RTP.

## "OOPS"

The March issue of Data Talk was in error where it indicated that the third ORD ADP Workshop would be held in March. The Workshop is scheduled for May 10, 11, and 12 at the Environmental Research Laboratory in Athens, Georgia.



## HIGHLIGHTS FROM THE WCC

Ken Byram,  
Technical Operations Branch

Here is a rundown of activities at the WCC which might be of interest to the wider ADP community:

✓ System reliability climbed to 95.6 percent, remaining above 95 percent for the second consecutive month.

✓ Circuit and telecommunication equipment testing over the last two months has resulted in substantial improvements in network reliability.

✓ Trouble reporting procedures have been streamlined and should be more responsive to user calls.

✓ Archiver runs in February and March removed 2,800 data sets from on-line packs. Since the Archiver began operation in November, space equivalent to six 3330 Mod II packs has been made available.

✓ The COMNET systems programming group, working with the EPA Systems Review Council, announced a number of software enhancements which will be implemented before the end of June.

✓ USER/SUPR, a system for reporting problems and enhancement requests, is currently tracking over 100 items. Status information is available to all users in an on-line data set.

✓ A pilot project on benefits available through production Job Stream Optimization using the GICS system was completed. The results were impressive: for example, an average reduction in computer utilization units of 23 percent for the four major update programs. Along with the optimization, several changes will make the update more regularly successful on the nights it is scheduled. The update was made more tolerant of system failures and restart procedures were documented so COMNET personnel on-site could restart the run should it be interrupted.

✓ Binders for the WCC newsletter, SIGNON, were distributed with the February issue, allowing users to maintain their own file of past issues.



This Remote Job Entry (RJE) facility, located at the Michaux Building just outside RTP, contains a card reader, line printer, and keypunch. Such RJE facilities may be located many miles from the NCC, yet users can process batch runs and receive printer output as though the computer were in the next room.

## WHY TRAINING IN ADP?

Maureen Johnson,  
Computer Specialist

Much time and effort over the past several years has been devoted to talking, reading, and writing about the ADP training needs of the Agency. Why all this concern about ADP training? The Agency is certainly very committed to ADP and dependent on its ADP capabilities. Agency requirements range from research to implementation plans to enforcement. And ADP dependency is reflected in the Agency's annual expenditures for ADP equipment, software, and contracts. Considering this commitment, dependency, and continuing expansion, perhaps the most important impetus behind ADP training is the rapid change and development of new ADP technology which results in knowledge obsolescence in less than three years.

What is achieved by improving ADP training programs? Improved, up-to-date training could improve the quality of software, reflecting better design and maintenance features. Contract management would become more consistent and effective if managers were exposed to new ADP planning techniques and development procedures. Data quality would improve through instruction of new vali-

dation methodologies. The "end users" would become more involved in software development planning if they understood what to expect from new software. Increased awareness of the impact of ADP on the Agency's missions would result in effective planning and allocation of personnel, finances, and physical ADP resources.

To accomplish these and other ends, fifteen training areas have been identified as follows:

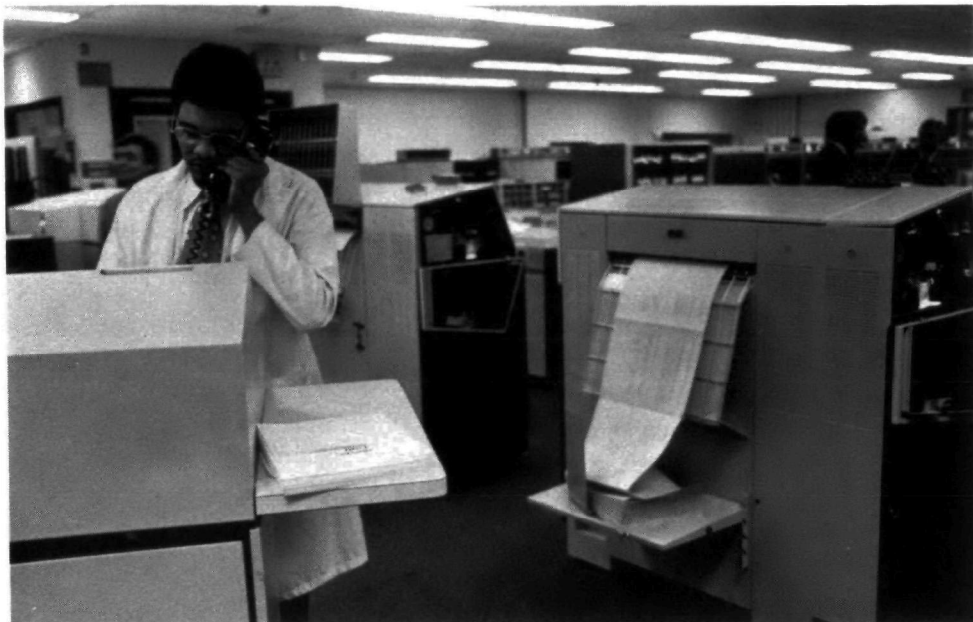
- ADP Project Management
- Executive Management Seminar
- EPA ADP Timesharing Utilization and Cost Reports
- System Development Cycle and Feasibility Studies
- Facilities and Services
- ADP Procurement
- Structured Design and Programming
- Distributive Processing
- Managing ADP Contracts
- Data Base Management
- Data Security/Privacy
- ADP Concepts
- Data Analysis
- Data Validation
- Human Engineering Approach to Design

These areas will be addressed beginning with plans for a two-week Structured Design and Programming course (Micheal Jackson Methodology) in early May. This will be followed by Executive Management Seminars, Project Management and the System Development Cycle, and ADP Concepts courses which will be presented at multiple locations throughout the summer. ☆



A technician, sitting at an interactive printing terminal, studies the computer's response to her input.





Barring unexpected, unavoidable system failures, the U-1110 at the National Computer Center is up and active 24 hours a day, every work day, and often runs well into the weekend to process backlogged work. The system can handle 60-70 interactive terminals simultaneously, yet each user at each terminal can operate as though he were the sole user of the system.

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ENVIRONMENTAL PROTECTION AGENCY

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Research Triangle Park  
North Carolina 27711

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