

GAO

## ADP DATA LINES

ADP ADMINISTRATION - GS&C OFFICE OF ADP SERVICES  
U.S. GENERAL ACCOUNTING OFFICE



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DATA LINES is routinely sent to GAO ADP Representatives, CAPS Coordinators, and staff members who have asked to be placed on the mailing list. If you are not on our mailing list, and would like to receive DATA LINES, please contact Mike Resser, Assistant Editor.

We do not intend this forum to be a one way street. We solicit comments and articles on any area of ADP which staff members feel are important enough to be disseminated throughout GAO. Please direct all inquiries, comments, suggestions, and articles to Len Bahlman, ADP Administrator, or Mike Resser, Assistant Editor, Room 4131, Phone 275-6126.

**PLEASE ROUTE TO ALL STAFF MEMBERS INVOLVED IN ADP APPLICATIONS**

#### EDITOR'S NOTE

GAO has a tremendous wealth of talent and knowledge in the area of ADP, and we have received and published in DATA LINES some very informative articles by GAO staff. With the publication of the fourth issue of DATA LINES, I'd like to thank those of you in GAO who have taken the time and expended the effort to write articles for DATA LINES. Your efforts have helped make DATA LINES a well-rounded and useful publication. The original goal of DATA LINES was to provide a forum where anyone in the Agency could present articles and information relative to the vast area that is ADP. I would like to encourage all GAO staff to continue sharing their ideas and experiences in ADP with others, and welcome your contributions to DATA LINES.

## ADP NOTES - GENERAL ADP INFORMATION

OISS Becomes OADPS. Under the reorganization of the Office of the General Services and Controller (GS&C), the Office of Information Systems and Services (OISS) was renamed. Our new name is now the Office of ADP Services (OADPS), and became effective as of June 26, 1983. The purpose of this was to provide specific and concentrated focus for Agency ADP activities in this office. Library and records management functions are no longer the responsibilities of OADPS.

NIH Computer Center Newsletter. The NIH Computer center, Division of Computer Research and Technology (DCRT), issues a monthly newsletter entitled INTERFACE. The publication contains articles covering a wide range of ADP-related topics. For example, the May 1983 issue contained articles entitled:

- "Microcomputers and the NIH Computer Utility",
- "Microcomputer Communication with the NIH Computer Facility",
- "As Easy as ABC - Self Study Course Assisted by Computer Teaches WYLBUR",
- "Data Security Facility Well Received",
- "SPSS-X Goes Production".

In addition, INTERFACE contains book reviews on ADP-related matters, a question and answer column, listings of recent ADP publications available from NIH, and ADP technical notes. If you would like to receive INTERFACE, send a letter requesting to be placed on the mailing list to:

Chief - Computer Center Branch  
Joe Naughton  
9000 Rockville Pike  
Building 12B, Room 2N-207  
Bethesda, Maryland 20205

Renewal of FY 1983 ADP for Next FY. As noted in the June 27 Request for FY 84-85 Resource (Budget) Requirements, sent to Division, Office Directors, Budget Planners, and ADP Representatives, you are reminded that a GAO Form 557 (Request for ADP Service/Equipment) is due to ADP Administration of OADPS by August 15, 1983, for all FY 1983 current services and equipment which must be renewed for FY 1984.

Submission of New ADP Requirements. GAO Form 557's (Request for ADP Service/Equipment) for all new ADP requirements must be submitted once your Division, Office, Region, or Branch has received its approved FY 1984 ADP Budget.

ADP Equipment Stolen From GAO Headquarters. During the first part of June, some ADP equipment was apparently stolen from the GAO headquarters building over the course of a weekend. According to the Office of Security and Safety (OSS), the equipment, located in an office area not normally locked during non-business hours, was last seen on a Friday evening. The following Monday the equipment was discovered missing. The items taken include:

- a DEC VT 131 CRT with keyboard, vendor serial number 106225, manufacturer's serial number ABK 6907,
- a RACAL-VADIC 3451 Modem, vendor serial number 107656, manufacturer's serial number Z 337524, and
- a Scanset Model 415 Portable CRT, manufacturer's serial number 42040095.

The VT 131 and Racal-Vadic modem were leased, while the Scanset 415 was owned by GAO.

OSS, in cooperation with the FBI and the Federal Protective Service, is investigating the theft. ADP Administration strongly urges all individuals responsible for ADP equipment to insure, wherever possible, that all equipment is secured during non-business hours by, at a minimum, locking the rooms where the equipment is located.

ADP Inventory Status. With a few exceptions, the majority of GAO's divisions and offices have submitted their annual ADP inventory status reports. Thanks to the diligent efforts of those of you who compiled the survey information, we have obtained accurate and current data, and are busily making the necessary corrections, and updating the AFACS (ADP Funds Accounting and Control System) inventory data base. This year's inventory has highlighted several problem areas, including instances where:

- vendors making repairs exchanged equipment and OADPS was never notified of the change by the divisions responsible for the equipment,
- a division/office authorized removal of ADP equipment from the GAO building by a vendor without notifying ADP Administration, and
- divisions/offices received ADP equipment and failed to notify ADP Administration of receipt of that equipment, and of equipment serial numbers.

We hope to complete our update of the AFACS equipment inventory data base by August 15, 1983. At that time a corrected copy of each division/office's ADP equipment inventory will be sent to the division/office ADP Representative.

Free Computer Terminal Stress Reduction Pamphlet Available. Are the long hours you spend in front of your CRT giving you a pain in the neck or back? If so, you might find a free pamphlet, available from the Verbatim Corporation, of some use. The pamphlet was written by an exercise physiologist, and includes exercises to relieve the stress and strain which can build up during long sessions at a CRT. To get your copy, simply send a stamped, self-addressed legal size envelope to: Verbatim Corporation, "Tone Up at the Terminals", 323 Soquel Way, Sunnyvale, California, 94086.

Technical Requirements. When you send ADP Administration a GAO Form 557 for ADP equipment, in addition to listing your preference of make and model, please send ADP Administration detailed technical equipment requirements for your request. For example, please tell us your requirements for CRT screen width, special keyboard requirements, baud (speed) rate required (300, 1200, etc.), need for special options (e.g. printer port, extra memory, etc.). If you need a printer, do you need a keyboard send-receive model (KSR), or receive only (RO) printer. This information is important for the technical analysis ADP Administration performs on requests for ADP equipment. The more clearly we understand your technical requirements, the better we will be able to meet your needs, and obtain the best equipment at the lowest cost to the Agency.

Archival Storage of Automated Workpapers (Computer Tapes). We reported in the June issue of DATA LINES that the Records Management Branch of the Office of Publishing Services (OPS) would be sending to all ADP Representatives draft procedures for the handling of automated workpapers (computer tapes). We have been advised that these procedures were sent out on June 17, 1983 by Julius S. Brown, Director, OPS. ADP Representatives were to review the draft and provide comments on the procedures to OPS no later than July 5, 1983. Further questions, or requests for copies of the draft procedures should be directed to Ethel Forbes, Records Management Branch, OPS, on 275-6213.

Microcomputer Software Licensing Agreements. GAO is acquiring a diverse inventory of software for use with the various brands of microcomputers. Often, software vendors require that the purchaser sign a licensing agreement to avoid unauthorized use and duplication of the vendor's software. Only the GAO Contracting Officer may sign these agreements, which must also be reviewed by GAO's legal counsel. In order to expedite your request

for such software, it would be helpful if you could provide ADP Administration with a copy of any licensing agreement which the Agency may be required to sign. Please note that verbal agreements from software vendors are not sufficient to permit duplication of software by GAO, and until GAO has written permission, software should not be duplicated, and/or used on equipment for which it was not originally intended.

OSS Memo States Classification Markings Required on Information Storage Media. The Office of Security and Safety (OSS) issued a memo on June 15, 1983, detailing the need to mark all information storage media containing classified information with external classification markings. The memo stated that GAO Order 0930.1 prescribes that "...removable information storage media employed with automatic data processing (ADP) systems, typewriters, or word processing systems, shall bear external markings sufficient to assure that any recipient of the media will know that classified information of a specific level is involved. Examples of this media include magnetic tape reels, cartridges and cassettes; removable discs, disc cartridges, disc packs and diskettes; paper tape reels; and magnetic cards." OSS stated that the external classification markings should be of a conspicuous nature, and may be stamped, painted, written, printed, or affixed by means of a tag, sticker, decal or similar device. Such markings should be attached to the removable media, and on containers of such media.

OSS has available decals labeled "Secret" and "Confidential" for use in complying with the security marking requirement. You may obtain supplies of these decals by contacting Barbara Cornett, OSS, Room 4844, phone 275-4700.

ADP BOC's and Requisitions. Requisitions for ADP equipment and services can be very difficult to complete correctly. Also, there are very specific procurement guidelines and procedures which must be followed when completing the GAO Form 31 for ADP services and equipment. ADP Administration should therefore be the sole originator of requisitions (GAO Form 31) for all ADP Budget Object Classes (BOC's). The ADP BOC's are:

- 23.11 Rental of ADP Equipment
- 23.60 Rental of ADP Software
- 25.21 Computer and Other Services - Government
- 25.22 Computer and Other Services - Non-government
- 25.23 Maintenance of Computer and ADP
- 25.24 Maintenance of ADP Software
- 26.60 ADP Supplies
- 31.40 Capitalized ADP Equipment
- 31.41 Purchase of ADP Software

When you require any ADP item which falls into one of these BOC's (ADP equipment, software, services, etc.), you should fill out a GAO Form 557 (Request for ADP Service/Equipment), and route it to your division/office ADP Representative for review and approval. If the ADP Representative approves your request, he/she will forward it to ADP Administration for review and processing. Please do not complete a GAO Form 31 (Requisition). As part of the processing of your request ADP Administration will prepare the necessary requisitions.

Once ADP Administration has completed processing the Form 557, we prepare a Form 31 and forward it to the Office of Acquisition Management. Based on the Form 31 which ADP Administration sends them, the Office of Acquisition Management generates a GAO purchase order and/or other procurement documents to secure the needed ADP equipment or services.

WASHINGTON POST Publishes Listing of DC Area Computer Events. Each Monday morning, the WASHINGTON POST publishes the "Computer Calendar" for the coming week. The calendar is found in the newspaper's business section, and lists conferences, meetings, workshops, and courses dealing with ADP-related subjects scheduled for that week. Most items include a contact phone number for more information.

NIH Computer Center Training Schedule. The NIH Computer center offers a wide variety of courses designed to enable potential users to begin work at the facility, and allow those with experience to improve their efficiency. There is no charge to the student or agency. Three series of courses are available: IBM 370 courses, DEC-system-10 courses, and seminars focusing on specific areas where computers can be a valuable tool, as well as other computer-related topics. The NIH "Computer Training Courses and Seminars" brochure contains a description of each course to be offered within the next twelve months. The new brochure with the description, prerequisites, and terms for each course to be offered from October 1983 through September 1984, will be available in September. A supplementary schedule will be available one month prior to the beginning of each term. This will contain the name of the course, dates of the course, time and location. GAO users are not automatically placed on the mailing list. To get your name on the NIH training mailing list, contact the NIH Technical Information Service at (301) 496-5431.

NIH On-Line Billing Information. NIH does not support an on-line billing system. ADP Administration is investigating the possibility of developing such a system to be loaded at NIH for all GAO Accounts. Further information on development of this system will be provided by DATA LINES as it becomes available

#### ADP RESOURCE REQUIREMENTS - FY 84 AND FY 85

Editor's Note: The following article was summarized from the June 27, 1983 memo of Richard L. Brown, Director, GS&C, to heads of divisions, offices, regions, and overseas branches. We have included it to provide our readers with a better understanding of how ADP resource requirements are formulated within GAO.

Over the next several months we will determine how to allocate our FY 1984 appropriation, as approved by Congress. We will also develop our FY 1985 resource requirements for submission to the Congress. The first step in our budget formulation process is to gather resource requirements for the centrally managed budget accounts. On June 27, 1983, budget estimate schedules were mailed to Division/Office Directors, Budget Planners, and ADP Representatives for this purpose. Three copies of the completed schedules were due in the Budget Office (Room 3820) by Friday, July 22, 1983.

Our FY 1985 appropriation request to the Congress will be based on these resource needs. We cannot ask the Congress to provide GAO with funding to cover "Contingencies". Thus any resources requested to cover "Contingencies" will not be honored. Strong narrative justification for all resource needs must support the Agency's needs.

Following is a summary of key issues related to the submission of FY 1984 and FY 1985 ADP resource requirements:

1. As part of this exercise, offices were requested to submit a brief interim plan, highlighting the future of ADP direction and needs of the Division, Office, Region, or Branch. This information will help the Budget Office and ADP Administration in evaluating and providing for ADP equipment and service needs in FY 1984 and FY 1985. This interim plan, as well as the budget submission, should coincide with the long-range ADP plans for the Division, Office, Region, or Branch.

2. FY 1984 budget requests for ADP equipment and services, in total, should be in line with FY 1984 funding projections, submitted last year. However, offices were informed it was possible to shift amounts previously identified for specific services or equipment, to accommodate changed priorities and needs. For instance, if an office previously projected \$XXX for audit support teleprocessing and feels that microcomputer support, in whole or part, would be more beneficial and cost effective, they were permitted to indicate so on the budget schedules. Likewise, offices may want to procure another MICOM instead of a microcomputer, or vice versa, for administrative and audit applications.
3. GAO offices were informed that FY 1985 requests for ADP equipment and services should represent all known and potential requirements. Such requirements should fit in a logical fashion with the planned direction for the Division, Office, Region, or Branch, as shown in the interim long-range ADP plans.
4. In requesting equipment and services, offices were requested to keep in mind that some information requirements will be satisfied through the new CAMIS system, once it is implemented. All resource requirements for the CAMIS system, including equipment, will be submitted by the CAMIS team.
5. Offices were also requested to break down all resource requirements into one or more of the following five categories:
  - Audit (Non-TAG) - ADP Equipment and services in support of direct audit work, that is not performed by TAG.
  - Audit (TAG) - ADP equipment and services in support of direct audit work, that is performed by TAG.
  - Executive - ADP equipment and services in support of Division/Office/Region/Overseas branch management.
  - Administrative - ADP equipment and services used for clerical and secretarial support.
  - Other - ADP equipment and services in support of internal Agency systems, or for special applications, such as Claims work.

6. Inclusion of an ADP requirement in an organization's ADP budget submission does NOT constitute final approval of the requirement by ADP Administration. All ADP requirements for each fiscal year, whether on-going or new, must be submitted to OADPS, ADP Administration, on a GAO Form 557 (Request for ADP Equipment/Service) and must be approved by ADP Administration, OADPS.

GAO AUDIT SUPPORT TELEPROCESSING USER'S GUIDE  
by  
Leonard J. Bahlman, ADP Administrator - OADPS

General purpose computer teleprocessing support is currently available to the GAO audit staff from two commercial vendors (COMNET & EDS/OSD), and one Government facility (NIH). Comprehensive and current information and operating procedures are essential to the effective and efficient use of these ADP services. The GAO Audit Support Teleprocessing Services User's Guide has been prepared to provide GAO ADP users with information regarding these teleprocessing facilities and technical resources.

This guide, written by the Teleprocessing Services Section of ADP Administration within the GS&C Office of ADP Services (OADPS), was designed to serve as a reference tool providing GAO teleprocessing users with (1) the methods and procedures for obtaining computer support, (2) descriptions of the hardware and software resources available, (3) listings of contacts, reference sources, and technical support contained within OADPS and the teleprocessing centers, (4) fee schedules and billing information, and (5) instructions for using the on-line decision model developed by ADP Administration, when selecting the teleprocessing vendor to be used. In issuing this guide, we do not intend to enforce undue or unnecessary restrictions on GAO ADP users. Rather, our intent is to produce an environment that permits GAO to utilize the teleprocessing facilities for maximum benefit. Also, this guide is not meant to serve as a user tutorial. References are made to operational and informational manuals which should be consulted when using the various teleprocessing systems.

The user's guide is being distributed by ADP Administration to all GAO ADP Representatives. Copies will also be sent to each COMNET, EDS/OSD, and NIH account holder during the next billing cycle. As new accounts are established, copies of the guide will be provided. Additional copies may be requested by contacting the GAO Documents Facility on 275-6241.

The GAO Audit Support Teleprocessing Services User's Guide will be revised on an "as needed" basis. Revisions will reflect changes evolving from the teleprocessing operating experiences and from user feedback. GAO users are encouraged to submit suggestions and comments for the improvement of this guide. Specific questions regarding material in this guide may be directed to Suzanne Worth or Donna Wagner of the Teleprocessing Services Section of ADP Administration.

Following is a brief summary of the contents of the guide to teleprocessing services:

- . An introduction to COMNET, EDS/OSD, and NIH. The computer system and application and software packages available at each facility are described. The procedures for requesting data processing services through ADP Administration for one or all of the centers are detailed as well as general information on the schedule of courier services, training provided, documentation available, remote job entry (RJE) procedures, and a telephone contact list for each facility.
- . Guidelines for selecting a vendor. The decision as to which system is best suited to, and most cost effective for individual requirements can be difficult. ADP Administration has developed a system decision model based on the benchmark programs prepared for the FY 1983 procurement of teleprocessing services. The model considers the various system efficiencies as determined by these benchmark programs, and user experience and job requirements as described by the user. The model then analyzes these variables, and produces hard copy output/analysis of the user's inputs along with a report ranking each of the systems, and offering a selection of the best system for the user's particular application.
- . The types of technical assistance available from each facility.
- . Service charges and invoice information for each facility.
- . Sign-on and sign-off procedures for each facility.
- . GAO Master Library. A listing of the procedures and programs which are available in the master library at COMNET and EDS/OSD, as well as a brief description of how to use each procedure and program.

- . Automatic data set migration. Discussion of the automatic data set migration procedures for each vendor, as well as instructions for referencing migrated data sets at a later date.
- . Archival storage of automated workpapers.
- . General reference guide on Job Control Language (JCL). JCL is the IBM control language used by all three teleprocessing facilities. The JOB, EXEC (Execute), and DD (Data Definition) statements are described, as well as each installation's specific JCL conventions.

MICROCOMPUTER SOFTWARE TEST IN GAO  
by  
Felicia Turner,  
Evaluator, Atlanta Regional Office

GAO is conducting a year long test aimed at developing standards for procuring microcomputer software. Five divisions and five regions are involved in this effort. Each division is paired with a region and within each pair the same hardware and software will be used. Each pair, however, is testing different hardware and software.

Atlanta is paired with RCED and will be using a NorthStar Advantage. The Advantage is a dual processor (i.e. it has both an 8-bit and a 16-bit processor). San Francisco and GGD will be using IBM Personal Computers. The Personal Computers have been modified to run CP/M (the 8-bit operating system for microcomputers) software in addition to running under IBM's version of MS-DOS (one of the 16-bit operating systems for micros). Los Angeles and HRD will be using a portable IBM clone --the Compaq. The Compaqs have also been modified to run CP/M. Detroit and NSIAD are getting the Zenith 120. The Zenith is a dual processor like the NorthStar. The final pair--Dallas and AFMD--are using Radio Shack TRS model 12's and Kaypro's. Dallas and AFMD are the only pair lacking 16-bit capability and claiming no IBM compatibility.

Several different categories of software packages will be tested including an assortment of word processors, electronic spreadsheets and data base management packages. Each pair will test different packages from these categories. The packages being tested are generally the most commercially popular. For

example, we will be testing the Perfect and Star families of software, as well as Peachtext, Spellbinder, dBaseII, Supercalc, and others. Additionally, several communications packages such as Crosstalk and Move-It, and versions of high level languages will be tested. Although the currently accepted standard operating system for microcomputers in GAO is CP/M, some MS-DOS based software such as Lotus 1-2-3 will also be tested.

The packages will be evaluated in several categories including documentation, ease of use and functions performed. The software packages will be tested using actual audit applications. Test participants are responsible for identifying suitable applications from either ongoing assignments or from past assignments where the task was performed either manually, on MICOM, using timesharing or by any other means. By using actual audit applications, we hope to identify the software's functional characteristics most crucial and useful to our work.

We also intend to compare the packages' performance by completing identical applications using the different packages. The data used by one pair in completing an application will be selectively forwarded to other locations for use with different software. Only those applications identified as fully testing the claimed capabilities of the software will be done by all the participants.

The actual software test will run for about one year after all participants have received their hardware and software, or until sufficient numbers of applications are identified to satisfy the needs of the test. During the test, quarterly reports will be prepared; and at the end of the test a final report containing the recommended software standards will be issued.

GAO TELECOMMUNICATIONS STUDY PROJECT  
by  
Karen Gray, Systems Operations Staff

In response to the direction of Frank Fee, Assistant Comptroller General for Operations, Richard Brown, Director of General Services & Controller (GS&C), has initiated the GAO Telecommunications Study Project. This is a very critical time for GAO and all other Federal agencies, as well as private corporations, in relation to the telecommunications environment.

There are two trends characterizing the communications industry today. First, there is the literal explosion of voice and data communications technology and the integration of the two. The second trend involves the restructuring of the Bell system which presents opportunities, flexibility, and threats which most agencies and corporations have never been confronted with before. There is the probability of increased expenses if organizations are not actively planning for and managing with these new developments in mind.

The GAO Telecommunications Study Project is a combined effort to be accomplished by the GS&C Telecommunications Study Staff, the Telco Research Corporation, Nashville, Tennessee, and several GAO evaluators from the St. Louis sub-office, under the direction of Bob Lowe, Director, Systems Operations Staff.

Frank Fee has also established the Telecommunications Advisory Group to act as an advising and input mechanism to the study. This group is made up of the following members:

Richard L. Brown, Chairman

Walter Anderson  
Lowell Dodge  
Richard Fogel  
David Hanna  
Ronald Lauve

Allen Mendelowitz  
Archibald (Pat) Patterson  
Louis Paulson  
Warren Reed

The study objectives include:

1. An assessment of current GAO telecommunication operations, management and equipment.
2. An identification of future telecommunications needs for headquarters and field offices, including overseas offices.
3. An identification of short- and long-term opportunities for the improvement of existing situations, and meeting future needs leading to a well managed, cost effective telecommunications operation for GAO.

Due to the many physical moves taking place in GAO headquarters during the next several months as a result of the reorganization, we plan to begin the actual assessment of equipment and operations, and conduct the interview process in the field offices first. Once we have completed our study of the field offices, we will concentrate on GAO headquarters.

For further information concerning the Telecommunications Study, please contact Karen Gray on 275-4706.

## CAPS TOPICS

by

John Merryman, CAPS COTR  
ADP Administration, OADPS

In this issue of DATA LINES, I'd like to discuss several CAPS issues that affect your use of the system. Briefly, these issues are:

- CAPS Telecommunications: What we are doing, and what the user should do in the event of telecommunications problems.
- CAPS Terminal Maintenance: What we expect in our service contract, and how to obtain the service you require.
- Disk Storage: How to clean up your user files so as to improve your response time and reduce our monthly storage costs.

### 1. CAPS TELECOMMUNICATIONS

Many of the Regional Offices experienced difficulties communicating with CAPS during T&A entry on May 26, 1983. A major failure of the communications network, affecting both TELENET and WATS, caused poor system response, inability to sign on, and a variety of other communications problems. These problems mainly affected CAPS users located outside of the Washington, DC area.

ADP Administration has been in close contact with AMS upper management in an attempt to resolve the communications problems, and to limit the probability of similar problems occurring in the future. New CAPS Hotline procedures for recognizing telecommunications problems, as well as closer monitoring of communications lines by AMS Operations during periods of intensive system usage have been instituted. While there is no guarantee of 100% reliability for any piece of equipment, we have taken steps to minimize inconvenience to CAPS users.

We have not had a recurrence of the problems of late May. Some of the positive steps taken include:

- In June, we conducted a full-scale simulation of system usage, using one of AMS' other computers. An attempt was made to force failure of the telecommunications system by overloading with resource-intensive programs. The results of the test were helpful in identifying possible problem areas.
- New procedures have been instituted to trouble-shoot line problems. When the user calls the Hotline with a problem, the Hotline immediately contacts the AMS telecommu-

nications department, which has a variety of technical means to determine the nature of the user's difficulty. Normally, the user's bad line will be temporarily taken out of service and replaced with a good line.

- AMS has made several technical modifications to their equipment so that they can better monitor the condition of the telecommunications system.
- The Hotline is keeping a detailed log of any telecommunications problems and this information is regularly analyzed by OADPS to pinpoint any problem areas.

Users are urged to notify the Hotline as soon as possible if they are experiencing any telecommunications problems. This is particularly important during periods of peak system use, such as on T&A days. ADP Administration will continue to monitor the status of the system in an effort to insure that telecommunications are as trouble-free as possible.

## 2. MAINTENANCE OF CAPS HEWLETT-PACKARD EQUIPMENT

Several recent instances where problems occurred regarding service for GAO's Hewlett-Packard (HP) 2649A terminals and 2631A printers stress the need for a review of key points of our current HP service contract.

CAPS users are reminded that the major conditions of our maintenance contract specify:

1. A 4 hour response time for maintenance of terminals located outside the Washington, DC area between the hours of 8:00 AM and 9:00 PM, and
2. A next day service response time for maintenance of terminals located in the Washington, DC area.

The procedures for requesting HP maintenance service remain unchanged. Users outside of the Washington, DC metropolitan area may continue to contact their local Hewlett-Packard service office directly, at the following telephone numbers. The local service contract number is also indicated.

<u>Location</u>	<u>Telephone</u>	<u>Service Contract #</u>
Atlanta	404-955-1500	311227214A
Boston	617-861-8960	44502D144A
Chicago	312-960-5760	2603C3114A
Cincinnati	513-891-9870	2624C3124A
Dallas	214-231-6101	318524034A
Denver	303-740-2739	2411V0903A
Detroit	313-476-6400	2607A2234A
Kansas City	816-763-8000	2611C3134A

<u>Location</u>	<u>Telephone</u>	<u>Service Contract #</u>
Los Angeles	213-970-7660	241727894A
New York	212-971-0800	441250063A
Norfolk-Virginia Beach	804-460-2471	311925194A
Philadelphia	215-265-7000	442025714A
San Francisco	415-330-2590	242524264A
Seattle	206-643-4000	241021414A

CAPS users in the GAO headquarters building should continue to contact the CAPS Hotline, Room 7131-C, Telephone 633-0710, for HP terminal/printer repairs.

If users do not obtain what they consider appropriate service or response time on their HP service calls, they are urged to call me or send an immediate EMAIL message (GAO.J.MERRYMAN) so that I can resolve the problem without further delay. Users should also fill out a GAO ADP Vendor Complaint Form (GAO Form 86). GAO spends approximately \$50,000 yearly on the service contract for our HP equipment. If any user is not satisfied with the level of service rendered, I would be interested in knowing so as soon as possible.

### 3. CLEANING UP CAPS USER FILES

Your assistance is requested in deleting any unnecessary files from your CAPS REPORTS area. Many of these areas contain some very old files. Deleting these files would benefit you, the user, in several ways, including faster response time, and much less chance of your programs failing due to lack of space.

Under the current terms of our CAPS contract, GAO is billed for every half disk pack of storage used; we are paying between \$25,000 - \$30,000 monthly for disk storage costs! In order to avoid mandatory limits on our use of storage space, users are urged to delete any unneeded files from their user areas.

It is suggested that you log into your reports area and type the command "WDIR". If you turn on your printer, you will receive a listing of all files in your area together with the number of pages and the date the file was last written to. This will give you an idea of which files are old and may no longer be needed.

The following files, which account for most of the excess storage, should be deleted immediately after you have printed off a hard copy:

<NAME.RPT> - Report Files

The following files may safely be deleted at least weekly:

<NAME.Q\*\*> - Backup files

<NAME.TMP> - Temporary Files

<NAME.DMV> - Save files

<NAME.LOG> - Log Files

You should delete your EMAIL messages after the contents have been read and/or printed.

Delete <NAME.DMC> or <NAME.SMDC> files if you are sure you will not need to run the program again.

If you need any assistance in cleaning up your directory, please call the CAPS Hotline at (202) 633-0710.

NATIONAL BUREAU OF STANDARDS TAKES ACTIVE ROLE IN FEDERAL  
GOVERNMENT MICROCOMPUTER ARENA

by

Mike Resser, ADP Administration - OADPS

Microcomputers are becoming increasingly important in the work of many Federal agencies, including GAO. The National Bureau of Standards (NBS) of the Department of Commerce recently made two valuable contributions to Federal government use of microcomputers; the establishment of an electronic bulletin board to facilitate interagency sharing of microcomputer experiences, and the issuance of a special publication on recent Federal government microcomputer experience.

NBS Electronic Bulletin Board. Recognizing a need for Federal users to have access to and share information about microcomputers, the National Bureau of Standards (NBS) has developed the Microcomputer Electronic Information Exchange (MEIE) System. The system was started on May 1, 1983, and is operated by the Systems Selection and Evaluation Group of the Institute for Computer Sciences and Technology (ICST) at NBS in Gaithersburg, Maryland.

The MEIE contains an electronic bulletin board and a File Transfer Facility. The bulletin board serves as a clearing house for microcomputer users' questions and answers on equipment, software, problems, solutions, supplies, etc. Callers can either input their information to the bulletin board, or retrieve information already posted. Lynn Rosenthal of ICST stressed to DATA LINES that the viability of the bulletin board depends largely on the users. Callers must be willing to share their information with others in order for the service to be truly beneficial and effective.

The other feature of the system is the File Transfer Facility. This facility contains information useful to microcomputer users, and is updated periodically by ICST. There are a number of information files where users can obtain:

- listings of journals, newspapers, and magazines publishing microcomputer information,
- lists of Federal publications dealing with microcomputers,
- listings of microcomputer users groups in the Washington, DC area, and
- listings of microcomputer conferences, seminars, workshops, and classes.

The file Transfer Facility is accessible through CP/M driven public domain software.

Hardware for the MEIE consists of:

- Godbout CompuPro S-100 chassis,
- two double density single sided eight inch disk drives,
- Ithaca Intersystems Z-80 CPU card,
- Godbout Interfacer III SIO board,
- PMMI modem,
- Fulcram 64K static RAM board, and
- Tarbel disk controller.

The facility is available 24 hours a day by dialing 301-948-5718. Presently there is only one phone line, and users may frequently encounter a busy signal. ICST plans to add an additional phone line at a later date. Terminal capabilities needed to access MEIE include:

- ASCII compatible equipment, 8 data bits, no parity, one stop bit, 300 baud (with 300/1200 baud planned as a later addition)

ADP Administration has accessed the MEIE by using a Hewlett-Packard HP2649A CRT with an Anderson-Jacobson AJ 1259 modem. Settings on the HP were for duplex operation, 300 baud speed, and parity setting = "none". The AJ modem was set to operate in the low speed (LS) mode.

For more information, you may call Lynne Rosenthal of NBS at 301-921-3485.

NBS Microcomputer Experience Publication. NBS has also just published MICROCOMPUTERS: A REVIEW OF FEDERAL AGENCY EXPERIENCES (NBS Special Publication 500-102). During the week of June 27, 1983, ADP Administration sent a copy of this publication to all GAO ADP Representatives.

The publication presents the results of a recent study of Federal agency microcomputer experience, and includes information on available electronic bulletin boards for the ADP community to share information on microcomputer testing, problems, solutions,

meetings, etc. The publication is intended for individuals who:

- determine agency microcomputer policy,
- specify microcomputer requirements,
- evaluate, select, and procure microcomputers,
- use microcomputers,
- manage large numbers of users of microcomputers,
- expect to manage and use microcomputers.

The publication is divided into sections which include:

1. An introduction containing:
  - background information,
  - purpose, scope, and audience statements,
  - methodology of the study,
  - caveat,
  - overview of the document,
  - sources of information, and
  - a disclaimer.
2. Microcomputer management issues, including:
  - organizational attitude and approach to microcomputers,
  - need for an organizational approach,
  - role and focus of microcomputers,
  - pace of introduction of microcomputers,
  - types of management, and vehicles for management,
  - agency policy,
  - support activities,
  - acquisition, and
  - personnel issues.
3. Microcomputer technical considerations, which include:
  - application requirements
    - communications,
    - resource sharing,
    - security,
    - reliability and availability.
  - application software,
    - purchased or custom software,
    - programming languages,
    - system requirements,
    - application integration,
    - documentation and training.
  - operating systems,
    - configuration,
    - software,
    - transportation,
    - utilities.

- hardware,
  - basic system,
  - microprocessors,
  - storage,
  - other peripherals,
  - maintenance.

4. Summaries of Federal agency experiences, including:

- sample questionnaire,
- summaries of agency interviews,
- summary tabulation of agency questionnaires,
- tabulation of agency provided support.

5. Conclusions, which include:

- observations,
- trends,
- examples of agency microcomputer activities.

The publication also contains a very good bibliography of suggested reading on microcomputers. Appendices contain a list of Federal agency microcomputer contacts, information sources, electronic bulletin boards, and a listing of agency documents.

To obtain additional copies of this publication for your division/office, submit a GAO Requisition (GAO Form 31) to the Acquisitions Section of the GAO Library. Request MICROCOMPUTERS: A REVIEW OF FEDERAL AGENCY EXPERIENCES, NBS Special Publication 500-102 (GPO Stock # 003-003-02492-9). Cost of the publication is \$5.50.