TABLE OF CONTENTS

Update of ACF Systems, Software, Documentation
CYBER........................................page 1
IBM........................................page 3
VAX........................................page 3
All Systems: The Micom Portselector........page 4
User Services Update
Tutorial sessions.............................page 4
Seminars....................................page 5
Additional Notes............................page 5
The ACF VAX Configuration....................page 6
Passwords and Account Security..............page 7
Summary of ACF System Access...............page 8
Information and Directory.....................page 9

* * *

UPDATE: ACF SYSTEMS, SOFTWARE, DOCUMENTATION

For CDC CYBER Users

Software additions and changes. LISP, TSP, and M77 have been updated since the last issue of the Newsletter, and a larger version of TSP has been added.

Version 5.1 of the University of Texas LISP programming language is now available. This version includes a "help" facility by means of which a user can retrieve the UTLISP Reference Manual's description of any LISP function. The LISP HELP is invoked from within LISP by typing "help", followed by the function's name. Until mid-March, you will also be able to invoke the previous CYBER version of LISP, 4.2; see the ACF writeup "Quick Lisp" (ACF document name "QLISP") for further instructions.

Documentation of LISP 5.1 is available for reference at the 14 Washington Place operator's desk and in Rooms LC-7 Tisch Hall and 317 Warren Weaver Hall. Refer to "QLISP" for further details on obtaining documentation of LISP. Contact Ed Friedman, 460-7293, if there are any problems with LISP 5.1.
TSP (Time Series Processor) Version 3.5 has been updated to include some modifications improving I/O efficiency, as well as some minor bug fixes. "BIGTSP", which permits approximately twice the number of observations allowed in TSP, has been available for some time (see the ACF writeup "QTSP"). TSP and BIGTSP should fill the needs of most users. If you think you may need a very large version of TSP, however, look into "MAXITSP", which is now also available on the CYBER: call Ed Friedman at 460-7293. TSP cannot be run in an interactive manner. A batch job must be submitted, either on punched cards or from a time-sharing terminal, as a deferred batch job, using the SUBMIT command. See the ACF writeups "QTSP" and -- for more about batch and deferred batch jobs -- "QBATCH".

The fast FORTRAN compiler M77 and its library have been updated to Version 2.0, which corrects many errors associated with the previous version. For example, the Post Mortem Dump (PMD) Analyzer now works and should greatly facilitate execution-time debugging of M77 programs. The previous version of M77 (1.0) will be available until mid-March. See the CYBER writeup "Quick M77" ("QM77") for further information, and for details on M77 documentation.

New and updated CYBER documentation. Nearly all of the more widely used CYBER writeups have been updated for the spring semester. Most of the updates have involved small additions or changes. Revisions or additions to "Quick BMDP" and "Quick Tapes", however, were a bit more substantial: "Quick BMDP" (ACF document name "QBMDP") has a more detailed example of the use of BMDP at a CYBER time-sharing terminal, and "Quick Tapes" ("QTAPES") now summarizes procedures for obtaining and registering magnetic tapes for use on the CYBER system. Refer to the writeup "DOCDATE" for a list of the most recent revision dates, and the kind of revision made.

Two writeups which have appeared since last November will help users select and find CYBER documentation. "TOPICS" is a topical index to ACF writeups for the CYBER. It lists, topic by topic, the ACF writeups to begin with, and is recommended highly for both new and experienced CYBER users. "REFLIST" indicates which CDC manuals for the CYBER system are sold at the N.Y.U. Bookstore, and where reference copies can be found. "CONSULT" gives the schedules and areas of expertise of the consultants and advisors at 14 Washington Place, and in Rooms LC-11 and LC-7 Tisch Hall; the spring semester edition will be available after February 19. All three writeups will be updated periodically.

Those interested in graphics software should examine "GRAFICS", "NCAR" and "NCARLIB". These writeups, produced earlier for the CDC 6600, were updated for CYBER users. "NCAR" and "NCARLIB" deal with the package of graphics subroutines from the National Center for Atmospheric Research (NCAR). "GRAFICS" is a selected list of writeups of graphics software available on the CYBER.

Instructions for obtaining copies of ACF writeups for the CYBER are given in the Information and Directory of this issue of the Newsletter, as well as at the end of each CYBER writeup.

(Update continues on following page.)
For IBM Users

Software additions and updates. The Wisconsin Multiple Time Series Program Package has been installed. The package consists of three programs: PRELIM provides data plots and descriptive statistics; STEPAR fits autoregressive models of varying orders, in a stepwise fashion; ESTIM (Estimation and Forecasting Program) fits and/or forecasts a vector autoregressive-moving average model. For documentation and further information, contact the statistical consultants in Tisch Hall, Room LC-11.

There is a new WYLBUR Mail facility available to all WYLBUR users. For instructions and further information, simply log in to WYLBUR and type the command, "help mail".

On-line ACF documentation for IBM users. Several new writeups have been issued in the past few weeks. "FORM" tells IBM users which codes to include on their jobcards in order to obtain ACF documentation. For a paper-printed copy of "FORM", WYLBUR users should "use wyl.pb.pub.manual.form" and then "list off unn cc"; batch users should insert the card "/exec manuals,name=\form" after a jobcard. This job can be run in any of the regular (not fastbatch) job classes. Single copies of all current ACF documentation for IBM users can be obtained in Tisch Hall, Room LC-8 or LC-11.

"SPSS9DOC" provides the new JCL necessary to run Version 9 of SPSS (Statistical Package for the Social Sciences), as well as a list of known bugs in this release.

"Index", the writeup listing all ACF on-line documents for IBM users, has been revised to include these new documents. For a copy of "SPSS9DOC" or "Index", follow the instructions outlined above for "FORM", replacing the word "form" with the appropriate document name ("SPSS9DOC" or "Index").

For ACF VAX Users

System update. VAX/VMS was upgraded from level 2.3 to level 2.4. The changes involved are minor and are unlikely to affect users. Details are available in a "bulletin board" entry. (See the "Information and Directory" at the end of this issue for instructions on the VAX BBOARD.)

Software updates. The text editor and formatter TEDI now resides in the directory NYU$LIB. Type "help tedi" for more information on invoking TEDI on the VAX, and on obtaining documentation of TEDI.

On-line documentation. Among the additions to the VAX HELP facility are entries dealing with tape use on the ACF VAX (type "help tapes"), with the VAX SPITBOL, with the use of the ELF system, and with the text editors TEDI and E. Some of the entries refer to additional on-line documentation. Minor updates have been made to a number of the HELP entries extant at publication of the last issue of the Newsletter. Finally, an entry that has existed for some time will be of wide interest. "Errors" describes the conventions and symbols employed in the error messages produced by the ACF VAX/VMS system and by a number of other facilities supplied by DEC.
A writeup showing where reference copies of DEC Manuals for VAX/VMS can be found, and giving purchase information, is now available on line. For a paper-printed copy, type "print nyu$lib:vaxman.doc".

**All Systems: MICON Portselector Update**

Since the last issue of the Newsletter, the Computer Science Department's DEC VAX 11/750 was put on the MICON, the "N.Y.U. Computer System Selector".

Dial-in users may have noticed that the MICON has been made less sensitive to user error: you can make up to three mistakes, while selecting a computer system, before losing your telephone connection to the MICON. There are now 42 ports allocated to dial-ups.

* * *

**UPDATE OF ACF USER SERVICES**

**Tutorial Sessions**

**CYBER Tutorial Sessions.** The two series of tutorial sessions given at 14 Washington Place in the fall semester will be repeated in February and March. The first series of regularly scheduled, "walk-in" tutorial sessions began Wednesday, 10 February. These sessions are open to all users of the CYBER, and are an introduction to the use of the CYBER time-sharing system, to simple file creation and manipulation, and to the use of the CYBER's IAF line editor. The tutorials take place at 10 a.m., 2 p.m., and 6 p.m., Mondays, Wednesdays, and Fridays, and will continue through Wednesday, 3 March, depending upon demand.

A series of walk-in tutorials on the use of the CYBER text editor XEDIT will begin, once this series has ended. They will also take place at the ACF's 14 Washington Place site, on Mondays, Wednesdays, and Fridays, at 10 a.m., 2, and 6 p.m., and will be at the introductory level. The walk-in XEDIT tutorials are expected to begin the first week in March. Watch the on-line Cyber "News" for an announcement; contact Frank LoPresti, 460-7176, if further information is needed.

**CYBER Tutorial Sessions by Special Arrangement.** Faculty or groups of students or researchers can arrange tutorials on introductory-level time-sharing use, on XEDIT, or on any of a range of topics in the CYBER system's use. The ACF staff has found that classes and groups of students with homogeneous computing needs can derive greater benefit from these specially scheduled sessions. Frank LoPresti is coordinating these sessions. For further information, or to arrange a tutorial, contact him at 460-7176.

**IBM WIDJETS Tutorials: "Walk-In" and Specially Arranged Sessions.** The ACF's User Services staff is also conducting a series of small-group tutorial sessions for WIDJETS users. (WIDJETS is a system enabling job creation and submission at
The sessions began Tuesday, 16 February, and are given in Room LC-8, Tisch Hall, on Tuesdays at 2 and 7:15 p.m., and Thursdays, at 2, 6, and 8 p.m. These ongoing "walk-in" tutorials will continue through Thursday, 3 March, if there is sufficient demand.

As with the CYBER tutorials, sessions will be specially arranged, upon request, for classes and groups of students. Instructors who would like to arrange tutorials in WIDJRTS for their classes should contact Frank LoPresti at 460-7176. Past experience has shown that class needs are better suited by prearranged tutorials.

**Seminars**

**SIR seminar.** A seminar on the application of SIR (Scientific Information Retrieval) is being organized by Allan Kolber of the N.Y.U. Medical Center's Institute of Reconstructive Plastic Surgery. SIR is a system for managing research data bases. The seminar will focus on SIR 2.0, which is soon to be installed on the CYBER and on the CDC 6600. Version 2.0 introduces many additions and improvements, as well as some new conventions. The seminar is tentatively scheduled for Wednesday, 14 April. For further information call 340-5158, or Frank LoPresti (460-7176).

**ACF Talks and Seminars.** As in the fall semester, the ACF has scheduled a series of talks and seminars. This semester, there will be four, all taking place on Tuesdays at 1:00 p.m., in Room 613 Warren Weaver Hall.

The first talk, a general introduction to SPSS (Statistical Package for the Social Sciences), will be given by ACF consultant Bert Holland, on February 23. It is intended for both CYBER and IBM users. On March 9, Ed Friedman, of the ACF's Systems Group, will discuss graphics software on the CYBER, VAX, and IBM systems.

The third talk is scheduled for April 13. Frank LoPresti, of the ACF's User Services, and Professor Willard Hansen of G.P.A., will discuss computerized access of the U.S. National Census data. Particular emphasis will be placed on the format statements appropriate to applying FORTRAN, SPSS and SIR programs to the data. As the Census data is stored on tape, the talk will also cover the tape manipulation needed to create a subset of the data pool. Professor Hansen is coordinator of G.P.A.'s Public Data Laboratory.

The last talk will take place on May 11. Its topic has not yet been set.

**Additional Notes on User Services and Documentation**

Demographic data base to become available. Special formatting is being done so that the U.S. National Census data will be available to ACF users of statistical packages. Work should be completed within the coming month. Check the on-line CYBER "News" for an announcement of the Census data's availability. (For instructions on obtaining "News", see "Documentation" in the Information and Directory at the end of this issue of the Newsletter.) For further information, contact Frank LoPresti (460-7176).
Reference copies of manuals added to those at Bobst, CIMS Library, and CSD Help Room. In the fall semester, the ACF began to place manuals on reserve at Bobst Library. The Reserve Desk is on Bobst's B-level, not far from where the public ACF terminals are situated. Since November, several CDC manuals for the CYBER system have been added to the Reserve collection, as well as a set of the more widely used DEC manuals for the VAX system. All ACF manuals on reserve are catalogued under the instructor name "Computer", and under their titles. The author's name is listed as "Control Data Corporation" or "CDC", for the CYBER manuals, and as "DEC", for the VAX manuals. We plan to increase the collection of ACF reference material on reserve at Bobst in the coming months.

Two other sources of reference material are open to subgroups within the ACF user community. In the past few months, the ACF has provided a set of selected CYBER and VAX manuals to the CIMS library, and the collection of reference material in the Computer Science Department's Help Room (1128 Warren Weaver Hall) has been expanded.

For a list of which manuals are available, and where, consult "REFLIST" on the CYBER, and "NYU$LIB:VAXMAN.DOC" on the VAX. (See "Documentation" in this issue's Information and Directory, for instructions.)

* * *

THE ACF VAX CONFIGURATION

(The ACF provides computer accounts on the CYBER, IBM, and VAX computer systems. In earlier Newsletter issues, we have outlined the hardware configurations of the ACF CYBER and IBM systems. The following is a sketch of the hardware supporting the ACF VAX system.)

VAX's are a family of 32-bit computers made by Digital Equipment Corporation (DEC). "VAX" stands for "Virtual Address Extension". The ACF VAX system is comprised of a VAX-11/780 processor with 4 megabytes of memory and the "peripherals" described below.

The configuration includes three disks: an RM05 and two RP06's. The RM05 holds 256 megabytes and serves as the system device. The RP06's each store 176 megabytes and are reserved for users. In fact, only one of the RP06's is currently in use: the other will be brought into service within the coming month.

The ACF VAX system also has an 800/1600 bpi tape drive, a 600 line-per-minute line printer, a console floppy disk drive, a console, and ports for 48 terminals. Character (or "cluster") printers are provided at 14 Washington Place, Room LC-14 in Tisch Hall and Room 318 in Warren Weaver Hall.

* * *
Passwords and Account Security

Whenever a computer system is used by more than one person or group, there is some concern that one user might gain improper access to another user’s account. Most modern systems have features that deter all but the most sophisticated abuser. Many individuals, however, neglect to make adequate use of the security facilities available to them. As a result, they fail to ensure that no one else can deplete their accounts, or examine or destroy their files.

When to Change Your Password

If you wish to guard your computer account against illegitimate use by other individuals, you must change your password regularly, and astutely. This is the practice of careful and experienced users of nearly all modern computer systems.

Each newly issued account comes with a password which has been assigned to it. Once you have received notice of your account’s issuance, you should change that assigned password as soon as you can. After that, you should make it a habit to change your password periodically. Always keep a private record of your password, but NEVER store that record in an on-line file.

Selecting a Password

Some thought should be given to the selection of a password. The general rule is to avoid the obvious and the short. A password need not be excessively long, but short passwords should be avoided. Moreover, such passwords as your name, initials, phone number, and social security number — or those of your friends and family — should be avoided. A password should be easy for you to remember but difficult for someone else to deduce, or guess, from publicly accessible information.

Most sophisticated computer users have developed idiosyncratic tricks for selecting or inventing passwords that are difficult to "crack". An example of one such trick is to take the name of one’s favorite author, last name first; follow this with an underscore; add the first name; and, finally, reverse the order of the resulting string of characters.

How to Change Your Password

The procedures for changing your password differ from system to system, but they are easy to follow. For instructions, CYBER users should consult the on-line "HELP" facility or the ACF writeup "QIAF", for an entry on the procedure "password". IBM WYLBUR users should type "help set" and then, when prompted, "keyword", for instructions on changing their WYLBUR passwords. VAX users should refer to the on-line HELP: type "help set password".

* * *
SUMMARY OF ACCESS TO NYU/ACF COMPUTING SYSTEMS

<table>
<thead>
<tr>
<th>Means</th>
<th>Location</th>
<th>System</th>
<th>Notes, and Usage Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card Submission</td>
<td>TH LC-8</td>
<td>IBM, CYBER</td>
<td>Faculty, researchers only</td>
</tr>
<tr>
<td></td>
<td>WWH 311, 312</td>
<td>CYBER</td>
<td></td>
</tr>
<tr>
<td>Interactive Terminals</td>
<td>TH LC-8</td>
<td>IBM</td>
<td>Student I/O via WIDJETS only *</td>
</tr>
<tr>
<td>Hardwired</td>
<td>14 Washington Place</td>
<td>CYBER</td>
<td>Limited access to other systems</td>
</tr>
<tr>
<td></td>
<td>TH LC-14</td>
<td>All</td>
<td>About one-half are for HP-2000</td>
</tr>
<tr>
<td></td>
<td>TH UC-49</td>
<td>All</td>
<td>Limited to BPA use</td>
</tr>
<tr>
<td></td>
<td>Bobst (B-level)</td>
<td>All</td>
<td>No consultation or hard copy</td>
</tr>
<tr>
<td></td>
<td>WWH 317, 318</td>
<td>All</td>
<td>Faculty, research users only</td>
</tr>
<tr>
<td>Dial-in</td>
<td>From 598 exchange</td>
<td>All</td>
<td>Dial extension 7001 **</td>
</tr>
<tr>
<td></td>
<td>From 460 exchange</td>
<td>IBM</td>
<td>Dial extension 7911</td>
</tr>
<tr>
<td></td>
<td>From 285 exchange</td>
<td>All</td>
<td>Dial extension 7381 **</td>
</tr>
<tr>
<td></td>
<td>From off campus</td>
<td>All</td>
<td>Dial extension 6272 **</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>Dial 777-7600 **</td>
</tr>
</tbody>
</table>

* "WIDJETS" is a terminal-oriented job creation, editing, and submittal system. There are 28 WIDJETS terminals in Tisch Hall LC-8. Accounts are available from the site manager.

** Strike "return" to activate computer selection. Select system. Then "return" to initiate log-in on CYBER and VAX; "shift-P, return" on IBM.
INFORMATION AND DIRECTORY

Accounts 305 WWH, Mon - Fri, 9 a.m. to 5 p.m., 460-7427

Administration and General Information
305 WWH, Mon - Fri, 9 a.m. to 5 p.m., 460-7427

Dial-Up Numbers (See previous page for further details.)

<table>
<thead>
<tr>
<th>From:</th>
<th>System:</th>
<th>Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off campus</td>
<td>All</td>
<td>777-7600</td>
</tr>
<tr>
<td>598 Centrex</td>
<td>All</td>
<td>7001</td>
</tr>
<tr>
<td>460</td>
<td>IBM</td>
<td>7911</td>
</tr>
<tr>
<td>285</td>
<td>All</td>
<td>7381</td>
</tr>
</tbody>
</table>

Documentation

ACF/NYU Newsletter is mailed to holders of Individual Accounts on the CYBER, IBM, or VAX. Inquiries: Estelle Hochberg, 306 WWH.

ACF Introduction and Directory, for holders of Individual Accounts: single copies are available in Rooms LC-11 TH and 305, 306, and 307 WWH.

Bookstore (N.Y.U.), 23 Washington Place, stocks commercially published software manuals. Inquire at information desk, lower level. Computer tapes are sold at stationery counter.

ACF Writeups, CYBER: Use "obtain(writeup=qindex)" for information. IBM: Use "/exec manuals,name=index".

Limited supplies of ACF guides and manuals are also distributed from 14 WPL, operators' desk, Mon - Fri, 9 a.m. to 10 p.m., Sat 9 a.m. to 6 p.m.; TH room LC-11, Mon - Sat, 10 a.m. to 5:30, 598-7851.

Multiple Copies of ACF Writeups for Classroom Use: Estelle Hochberg, 306 WWH for CYBER; consultants, LC-11 TH, for IBM. (Please allow about a week. Blank forms for CYBER writeups can be obtained in 306 WWH or LC-11 TH.)

On-Line Help Utilities (CYBER, VAX, IBM WYLBUR): Type "Help", strike return key.

On-Line News Bulletins are important sources of information on systems and operations, training sessions, new documentation, user and programming hints, and so on.

CYBER News: Use "obtain(writeup=news)" for time-sharing or batch. Replaced weekly.

IBM News: Updated as needed. Batch, use "/exec ibmnews". WYLBUR, type "help ibmnews", then "list".

VAX BBOARD: Type "bboard"; strike return key to list each message; type "Help" for further instructions; type "exit" to quit.

Reference Copies of Manuals: 14 WPL, TH room LC-7, WWH room 317; selected CYBER and VAX manuals are also available at the Bobst Library Reserve Desk (instructor is listed as "Computer"), the CIMS Library, and the Computer Science Department's Help Room (1128 WWH). For CYBER, type "obtain(writeup=reflist)"; for VAX, use "print nyu$lib:vaxman.doc".

(CONTINUED on following page)
Equipment Problems
at 14 WPL  Site Manager
at TH  "  , room LC-7
at WWH  Operations Personnel, room 312, or 460-7414
ACF Terminals at Other Locations: 460-7414

Street Addresses
Warren Weaver Hall: 251 Mercer Street
Tisch Hall: 40 West 4th Street
Bobst Library: 70 Washington Square South

System Status
CYBER, VAX: 460-7285 (recorded message)

Tape Librarian:

<table>
<thead>
<tr>
<th>System</th>
<th>Number</th>
<th>System</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYBER</td>
<td>460-7155</td>
<td>VAX</td>
<td>598-7901</td>
</tr>
<tr>
<td>IBM</td>
<td>460-7155</td>
<td>IBM</td>
<td>598-7851</td>
</tr>
</tbody>
</table>

Tape Purchase:
NYU Bookstore
stationery counter

Tape Questions and Requests:
CYBER, VAX 460-7155
IBM 598-7851

Terminal Problems (ACF equipment only): See Equipment

User Services

User Work Areas
Mon - Fri 9 a.m. to midnight, Sat 9 a.m. to 4:45 p.m. *
(Not: WWH facilities are for faculty and researchers only.)

--- ARTSPEAK illustration on back cover, courtesy of Prof. Henry Mullish. ---