UPDATE: ACF SYSTEMS, SOFTWARE, DOCUMENTATION

For CDC CYBER Users

System update. The CYBER operating system, NOS, was upgraded from Version 1.4 to 2.0 (level 562) in early September. In general, the two versions are upward compatible. Those differences between 1.4 and 2.0 which might be troublesome to users unaware of them are summarized in the ACF writeup "IMPACT" (see the CYBER documentation section, below, for instructions on obtaining a copy). They include changes in the "USER" statements in batch and deferred batch jobs, and in the DEFINE, SAVE, ENQUIRE, and LIBEDIT commands; the redundant commands SETID and DISPOSE were withdrawn. Other changes discussed in "IMPACT" bear on a new "no-auto drop" status for certain local files; the effects of trying to terminate a CCL procedure (it results in normal EXIT processing); and an improved recovery procedure. Finally, users are warned that they must avoid giving their files and procedures names which are identical to any of over a dozen new line editor and IAF system commands.

Associated with the system upgrade were a slightly altered log-in procedure and a new account identifier: now, in order to log in to the CYBER, you must specify your computing "family". (This is "ACF" for all class accounts and for most individual accounts that were issued prior to the current academic year.) New
account holders are notified of the identity of their computing "family" when their accounts are issued.

Individuals who were using the CYBER prior to the upgrade can work quite comfortably, with only minor adaptations, on the new operating system. Because of this, they may not be taking advantage of some of the new features which NOS 2 offers. These include commands newly available with the IAF line editor (the editor which you invoke when you use the commands "PRIMARY", "NEW", and "OLD"). The new commands transform the line editor into a simple text editor and give it many of the functions for which individuals previously had to turn to text editors, like XEDIT. For more information, refer to the on-line help facility: type "HELP" and then, when prompted, "LINEDIT". Then, again in response to the "HELP" prompt, type any of the following new IAF line editor commands: ALTER, DELETE, DUP, MOVE, READ, WRITE, and WRITEN. An explanation of the command's function and use will be displayed. All HELP files associated with the line editor have been incorporated in a writeup "LINEDIT": to obtain a printed copy, follow the instructions in the documentation section, below.

Some other new -- or newly expanded -- commands which you might look into are "QGET", "SETJOB" (for the UJN option) and "ROUTE" (for the DC and UJN options). These commands give you greater control over your job. With "QGET", you can pull an output file from the "print queue" or from the "wait queue" (where your job will be sent if you specify "DC=TT" in the ROUTE statement, rather than "DC=PR"). By assigning a UJN (or "user job name") to your job, you can make it easier to track its course (by typing the command "ENQUIRE,UJN", for example). See the NOS 2 Reference Set, Volume 3, or the on-line HELP facility, for more about these commands.

Users of the LIBRARY command may be unaware that it has been expanded: it now allows you to add, delete, and replace components of the global library set, without having to replace it in its entirety.

"HELPME" and "EZ" are two experimental facilities which you might also wish to try. "HELPME" will give you brief descriptions of the function and syntax of a command, and then prompt you for its parameters. When you have responded to the prompts, your command will be executed. "EZ" is an abbreviated form of "HELPME". These still experimental utilities have a few bugs, but they seem quite useful, nonetheless. To use "HELPME", type "HELPME", or "HELPME," followed by the command with which you wish help. To terminate "HELPME" or "EZ" -- if you have made a mistake or decided not to execute a command, after all -- hold the "CTRL" key down, and strike "T". For more about these utilities, see the ACF writeup "CYBKIT1".

Software additions and changes. Since the installation of NOS 2, many libraries from sources other than CDC -- ZETALIB, LINPACK, and EISPACK, for example -- have been made "system resident"; as a result, you no longer need to precede their use with an "OBTAIN" statement. Using "OBTAIN" will still retrieve any of these libraries, but cause a message indicating their new status to be displayed on your screen.

Other non-CDC software products which have undergone changes since the last issue of the Newsletter include IMSL (International Mathematical and Statistical Library), BMDP (Biomedical Computer Programs P-Series), and SPSS (Statistical Package for the Social Sciences). IMSL Edition 9 offers 40 new routines and omits 19 included in Edition 8. IMSL 9 has a FORTRAN 66 (FTN4) and a FORTRAN 77 (FTN5) version: use "OBTAIN,IMSL66" to select FTN4 and "OBTAIN,IMSL77" to select FTN5. "OBTAIN,IMSL" will retrieve IMSL 8.X, the most recent version of Edition 8. See the ACF writeup "IMSL" for more information.
The default version of BMDP was updated to BMDP-81. It adds six programs to those included in the previous version of BMDP. "BMDP81", a 14-page writeup describing the changes, is available on-line, and the ACF writeups "BMDP" and "QBMDP" have been updated to reflect the changes. See the section which follows for instructions on obtaining writeups.

SPSS was updated to version 8.3. An SPSS 8.3 documentation packet includes an overview of the changes effected by the update. See the ACF writeup "QSPSS" for further information on the upgrade and on documentation of SPSS 8.3.

New versions of LISREL (Analysis of Linear Structural Relationships by the Method of Maximum Likelihood), and EFAP (Exploratory Factor Analysis Program) are expected in the coming months. These new versions also enable all the analyses done by COFAMM (Confirmatory Factor Analysis with Model Modification), which will soon cease to be available on ACF systems.

Updates to Pascal, M77, and SIR each fixed problems associated with previous versions but introduced no new features. The Pascal 6000 compiler, library, and tools are now at Version 3.3.0, the M77 compiler and library are at 2.2, and the database management system SIR (Scientific Information Retrieval) is at 2.1.0 M.

A new relational database management system, RIM (Relational Information System, Version 5.0), was installed on the CYBER last July. Relational databases are thought to be more flexible and more easily updated than the network or hierarchical organizations of other database management systems on the CYBER. To invoke RIM, type "OBTAIN,RIM." and then "RIM." Then, to use its fairly comprehensive internal help facility, type "HELP". Contact Ed Friedman (460-7293) to examine a reference copy of the RIM manual.

GPSS (General Purpose Simulation System) was removed from the system for lack of use. MNF (University of Minnesota FORTRAN [ANSI X3.9-1966]) has become obsolete; M77 (University of Minnesota FORTRAN [ANSI X3.9-1978]) should be used instead.

New and updated CYBER documentation. CDC has issued new documentation for NOS 2. Most notably, the IAF User's Guide and Reference Manual and the NOS Reference Manual, Volumes 1 and 2, have been replaced by CDC's NOS 2 Reference Set (4 volumes, Nos. 60459660 - 60459690). Volume 1 is an excellent introduction to CYBER use; Volume 3 is comparable in scope to Volume 1 of the old NOS Reference Manual. Volumes 1 and 3 are sold at the Bookstore; reference copies have been placed at all ACF sites, in the Computer Science Department's Help Room, and at the Bobst Reserve Desk. See the ACF writeups "QIAF", "RECREAD", and "REFLIST" for further information. "REFLIST" will also help you locate copies of these and other CDC CYBER manuals.

New ACF writeups prepared especially for NOS 2 were "IMPACT", "LINEDIT" (described earlier), and "RECREAD" ("Recommended Reading for New CYBER Users"). "RECREAD" suggests two syllabi which can help new users familiarize themselves with the ACF's CYBER system.

Nearly every ACF CYBER writeup required some updating for NOS 2. The following ACF writeups for CYBER users underwent important and, for the most part, extensive revision for the Fall 1982 semester and for NOS 2: "ACFINTR", "QIAF", "CYRKIT1", "REFLIST", "QPASCAL", and "QBATCH". Changes to other writeups were small but often critical. To check that your copy of a writeup has not been superseded, compare its date with that listed in the ACF writeup "DOCDATE".
Some new writeups and revisions were issued in connection with system, software, and hardware changes described elsewhere in this CYBER update section. They include "QM77", "QBMDP", "QSPSS", "BMDP81", and "QLCASE". "CONVERT" ("NOS 2 Conversion Guide") was written as an aid to CDC 6600 users who were transferring to the CYBER system. Other ACF writeups that have appeared since early summer are "Quick Multivariate", "Quick Multiscale", and "Quick Omnitab" ("QMULVAR", "QMLSCAL", and "QOMNI", respectively).

For a printed copy of any ACF writeup for CYBER users, type the commands 

```
OBTAIN,WRITEUP=docname,L=DOCCOP
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Replace "docname" with the writeup's "ACF document name" (e.g., REFLIST); substitute "WWH" for "TH" if your output folder is at Warren Weaver Hall.

**CYBER hardware additions**: Tape drives, upper and lower case print chain. Two tape drives have been added to the CYBER configuration, for a limited period of time, to assist users who have transferred from the CDC 6600. The seven-track, 556/800 bpi, tape drive and the nine-track, 800/1600 bpi tape drive, will be available until the end of this fiscal year (September 1, 1983). The CDC 6600 was "retired" on September 30, 1982.

The Warren Weaver Hall line printer can now print upper and lower case letters. Before they are routed to the line printer, however, mixed-case files must be converted, by means of the "FCOPY" statement, to the proper code. See the ACF writeup "QLCASE" for instructions.

**For IBM Users**

**System update.** The disk volumes reserved for WYLBUR usage have been changed. BOBST2 is no longer available. Datasets that were on BOBST2 have been moved to BOBST1, ACC001, and USER01. SCRO02 should be used only to save datasets temporarily. All datasets are scratched from this pack every Saturday night, or sooner, if space is needed. BOBST1, ACC001 and USER01 can still be used as "USE-and-SAVE" (U/S) volumes. Their status has not been changed. Please be sure to use the convention for naming files, i.e. WYL.GG.UUU.name, where GG and UUU are your WYLBUR group and initials, and "name" is your file's name. Files whose names do not conform to this convention will be purged from the disks.

WYLBUR was upgraded in June from Release 5.1 to 6.0. Along with enhancements of WYLBUR's capability, Release 6.0 brings three changes which may prove troublesome to a small number of WYLBUR users. (1) Over 12 new commands, and their abbreviations, must not be used in defining a PFK (Program Function Key). (2) Since the number of S-type variables in ExecutE files has been increased from ten to 100, problems may occur if S-type variables in WYLBUR EXEC files are not delimited, explicitly, by parentheses. (3) There are now two sets of command prompts: "COMMAND>" and "=" for the "UPLOW" (mixed case) situation, and "COMMAND?" and "?" for "UPPER" case mode. See the writeup "INTROWYL" for slightly more detail on these changes. A new User's Guide and Reference Manual are in preparation. Until they have been made available to us, "INTROWYL", in combination with the guide and manual published for Release 5.1, should meet the needs of most WYLBUR users.

**Software additions and updates.** A new release of SAS, 79.6, is being tested on the ACF IBM system. To try SAS 79.6, insert the statement "/*JOBPARM P=TEST" after your job card. The default version of SAS, 79.5, is obtained when this extra statement is omitted. See the August issue of IBM News, and the SASNEWS facility, for more information. (To obtain SASNEWS, insert the statement "PROC SASNEWS;")
after your "//SYSIN DD #" statement. Instructions for obtaining IBM News are in the Information and Directory at the end of this bulletin.)

New versions of LISREL and EFAP have been installed on the IBM system. The default version of LISREL is now Version V; it is accessed with the statement "// EXEC LISREL[,SIZE=ss,MIN=mm,SEC=nn]" (where "ss", "mm", and "nn" are replaced with the values appropriate to your job). Among improvements in the new version are the provision of automatic starting values; the computation of polychoric (including tetrachoric) and polychoric correlations, and various analyses of matrices of such correlations; the handling of missing observations; and new input and output features. Programs that have run successfully under LISREL IV should run under the new version with little or no difficulty. For those users who do not wish to switch to the new version immediately, LISREL4 will be retained until Dec. 1st, and can be accessed with "// EXEC LISREL4[,etc.] ".

EFAP II contains substantial changes from EFAP I in the input procedure as well as the output options, but the two programs are described as "numerically equivalent". EFAP II has become the default version. It is executed by means of "// EXEC EFAP ". The earlier version will be retained until Dec. 1, 1982 and can be invoked with "// EXEC EFAP1 ".

The default IMSL library is now Edition 9.0. IMSL is a set of 517 mathematical and statistical subroutines which can be called directly from a FORTRAN program. A number of routines associated with the previous version of IMSL have been replaced in or deleted from Edition 9.0, and there have been additions to the library as well. For further information, contact the ACF consultants at 598-7851.

On-line ACF documentation for IBM users. Two recent ACF writeups are an introduction to the use of WYLBUR on the ACF IBM system ("INTROWYL") and a JCL guide specially abbreviated for users of Assembler G (ASSMGJCL). In addition, a number of ACF writeups were reviewed for the beginning of the fall semester, and minor corrections were made to the "Simple JCL Guide" ("SIMPJCL"), and the "Assembler G User's Guide" (ASMG).

WYLBUR users can obtain printed copies of ACF IBM writeups by typing "use wyl.pb.pub.manual.docname" -- replacing "docname" with the writeup's document name (e.g., INTROWYL) -- and then "list off unn cc dest=r2". Batch users should insert the card "// EXEC MANUALS,NAME=DOCNAME" after a job card, again replacing "docname" with the writeup's ACF document name. If you do not know a particular writeup's "document name", consult the writeup "INDEX".

IBM News is an important source of information on software and documentation. See the "Information and Directory" at the end of this Newsletter for instructions on obtaining copies of it.

For ACF VAX Users

System update. VAX/VMS was upgraded from version 2.4 to version 3.0. Copies of DEC's VAX/VMS 3.0 Release Notes (AA-D015D-TE) are available in the reference racks at all ACF user work areas. The two versions are upward compatible. There were new features, however, as well as changes associated with the update, of which users should be aware. Differences which might prove troublesome were summarized in an "Impact" statement: for a printed copy, type "print nyu$aids:VMS3.0". Those changes which will of greatest interest to ACF1 users include a change in the default editor (it is EDT; SOS can now be invoked with the command "EDIT/SOS").
Software updates. The DEC-supplied PASCAL and FORTRAN compilers were updated. VAX-11 PASCAL Version 1.3, a maintenance update, includes some improvements and bug fixes, but introduces no major new features. For details, consult the PASCAL 1.3 "Release Notes": for a printed copy, type "print nyu@aids.pascal1.3".

While, by and large, Version 3 of VAX-11 FORTRAN is upward compatible from previous versions, FORTRAN users should review the VAX-11 FORTRAN Version 3 Release Notes (No. AA-H953B-TE) for an overview of new features and a few semantic changes -- particularly to the /CHECK qualifier -- which might affect programs in use before the upgrade. New features include an IMPLICIT NONE statement, and a /STANDARD qualifier which provides checking for source code that does not conform to the ANSI FORTRAN-77 standard. For more information on these and other changes, see the VAX-11 FORTRAN User's Guide and Reference Manual (Nos. AA-D035C-TE and AA-D034C-TE). Copies are available in the reference racks at all ACF user work areas.

Eunice, which allows UNIX programs to run under VMS, was updated in early October. The new version, 2.2, supports full UNIX-style filenames. For more on Eunice, type "help @aids eunice".

A new version of SPITBOL, 3.5 (ABAA-6734), is available. See the item in your system's BBOARD for instructions on invoking the new version; for a HELP-formatted version of the SPITBOL manual, type "help spitbol".

On-line documentation. With the release of VAX/VMS 3.0, DEC updated or replaced many of their manuals. In a few instances, the effect of DEC's revisions for most ACF users was so minor that replacement of the manual seemed unwarranted. The ACF writeup "VAXMAN.DOC", which lists the locations of reference copies of VAX/VMS manuals, has been updated to reflect our discretionary replacement of ACF manuals for VAX/VMS users.

The on-line HELP facility supplied by DEC with VMS 3.0 will now prompt you more explicitly for the subtopics you wish to pursue. Subtopics can be thought of as being arranged in progressively deeper levels within HELP. Exiting from HELP is now done by striking the "return" key: each "return" brings you up one level, the highest level being an exit from "HELP".

A second source of on-line help is now available in AIDS, which operates quite similarly to HELP, once invoked. The AIDS library is a repository for some of the information which was not supplied by DEC: many of the files come from one or another source at N.Y.U. AIDS entries tend to be more discursive than DEC's HELP library, sometimes taking a tutorial approach. AIDS will be revised and expanded, as time permits, with the goal of making it more consistently useful to the beginning or casual user of VAX/VMS systems at N.Y.U. At present, we recommend that novice users of VAX/VMS begin with AIDS and turn to HELP only if the topic they are seeking is not in AIDS. Occasionally, experienced users will also have need of AIDS, as some topics relevant to our local implementation of VAX/VMS are covered there, rather than in HELP. To invoke AIDS, type "help @aids", and strike the return key.

New users of the VAX/VMS systems at N.Y.U. will also be interested in two on-line documents issued since the summer. "VMSKIT" describes some aspects of our systems which may not be found in the DEC manuals -- e.g., the default version limit for files of the same name, and the local PLAN utility. "NEWUSER" introduces the utilities HELP, AIDS, MAIL, and BBOARD. A draft of "NEWUSER" was sent, via electronic mail, to each new account. That draft has been revised somewhat. For printed copies of these writeups, type "print nyu@aids:vmskit" and
"print nyu$aids:newuser".

* * *

UPDATE OF ACF USER SERVICES

Tutorial Sessions

CYBER tutorial sessions. The ACF "walk-in" tutorials in CYBER use, and in the use of the CDC text editor, XEDIT, have ended for this semester. Instructors can still arrange tutorials for their classes, however. To do so, contact Frank LoPresti, 460-7176 or 598-2993. Specially arranged tutorials can be adapted to the backgrounds and computing needs of particular groups of students.

Tutorials for faculty and research personnel. Groups of faculty and research personnel new to the CYBER or VAX/VMS may also arrange tutorials, in any of a number of topics in system or software use. Contact Frank LoPresti, 460-7176 or 598-2993, for further information.

IBM WIDJETS tutorials: "Walk-in" and specially arranged sessions. This semester's WIDJETS tutorials were scheduled for Mondays, Wednesdays, and Thursdays, October 18 through November 12, at 5:30 and 6:30 p.m. Participation in the sessions is on a first come, first serve basis, and sign-up begins, in Room LC-14, one hour before each session.

Instructors can have WIDJETS tutorials scheduled specially for their classes by calling Fred Huber, 598-7851. Tutorials in WIDJETS can also be arranged for small groups of faculty: call Frank LoPresti (598-29793 or 460-7176), if interested.

ACF Talks and Seminars

This semester, there will be two ACF talks, both taking place on Tuesdays from 1:15 p.m. to 2:45 p.m. in Room 613 Warren Weaver Hall. Reservations are unnecessary.

ACF consultant Bert Holland will give a general introduction to SPSS (Statistical Package for the Social Sciences) on November 9. His talk will be of interest to SPSS users on the CYBER and the IBM.

A second seminar, scheduled for December 14, will be given by ACF User Services staff members and Professor Willard Hansen, coordinator of G.P.A.'s Public Data Laboratory. They will report on the CensNYU Project, a joint effort to facilitate computerized access, on the NYU systems, of the U.S. National Census data. The discussion will include a review of format conventions which must be followed in order to apply FORTRAN, SPSS, and SIR programs to the data, and will be extended to cover the use of CENSPAK and CENTSAID, as well. Tape manipulations needed to work with the census data on NYU systems will also be discussed. The CensNYU Project was begun in the 1981/82 academic year.
Additional Notes on User Services and Documentation

Social Sciences databases available to ACF users. New York University maintains a number of data bases which can be accessed by researchers interested in exploring them. These files are made available through N.Y.U.'s membership in the Inter-University Consortium for Political and Social Research. At present, they are all stored on the IBM system, but tapes compatible with other ACF systems can be prepared easily. Other studies in the Consortium's Archives, but not at N.Y.U., can be obtained free of charge. A list of the data sets in the Consortium's holdings (Guide to Resources and Services 1982-1983) can be examined in Room LC-7 Tisch Hall. For a complete list of files and short descriptions of the studies at N.Y.U., see George Sharrard in LC-7 Tisch Hall. The following is a partial list:


ACF writeups for classroom instruction. The ACF will print multiple copies of ACF writeups for instructors who wish to distribute them to their classes. Blank request forms can be obtained in Rooms LC-7 Tisch Hall and 306 Warren Weaver Hall. They are distributed before the beginning of each semester to departments associated with CYBER class accounts. Please allow about a week from the time that the request is submitted. For help in selecting ACF CYBER writeups for your class, contact Estelle Hochberg (460-7397) or Frank LoPresti (460-7176); or, if your class will be using the IBM system, contact Bert Holland (598-7851).

Help in selecting manuals as texts. The NYU Bookcenter is beginning to assemble preorders for spring-semester textbooks. ACF staff will help instructors decide which CDC, DEC, or IBM manuals -- if any -- they should order as texts for their classes. Contact the following ACF staff members to schedule appointments: Frank LoPresti (460-7176) for classes on the CYBER, John Hailu (598-7851) for the IBM, Stephen Tihor (460-7396) for VAX/VMS.

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A REDESIGNED TISCH HALL SITE

If you are a user of the ACF site at Tisch Hall, you cannot have missed the construction and remodeling that has been going on. The Tisch Hall site is being redesigned and renovated to keep pace with the University's changing computing needs.

Progress to Date

While factors beyond our control have delayed completion of construction work, the facilities which we had anticipated would be ready by mid-September are finally beginning to take shape.

As we go to press, 30 interactive terminals connected to the portselector (switch), for access to all ACF systems, are functioning in Room LC-8, and more will be connected in the coming weeks; there are also 28 IBM WIDJETS terminals in LC-8; an HP-2000 BASIC lab is humming away in LC-11; the ACF consultants and advisers have been relocated to LC-7, where they are readily accessible to users of the terminals in LC-8; and full remote batch services (keypunches, card readers, line printers, and output folders) are up and running in Room LC-14.

Before and After

When first established, the Tisch site served a keypunch-and-card-input, batch processing community of users. Over the years, however, the requirements of N.Y.U.'s instructional and research computing communities have expanded and changed: the need for terminal-oriented, time-sharing facilities has grown markedly. Not only were there too few interactive terminals at Tisch, but, in addition, efforts to accommodate each year's rise in computer use -- while keeping within the existing design -- had finally resulted in a site that was noisy and inconvenient for users and staff alike.

We think that the redesigned Tisch site will be a big improvement over the one which it replaced. The new site gives more space to interactive terminals. The noisy batch facilities are isolated -- as is the first-level BASIC lab -- from the large interactive terminal room (LC-8) where the more advanced students will be able to work in carrels, in a library-like study environment. The ACF's advisory/consulting personnel are consolidated in one area where they are convenient to terminal users, rather than scattered in two less easily accessed offices, as before.

It looks like the delays and inconvenience will soon be a thing of the past, although there may still be some cosmetic work to be done. When it is finished, we believe that we will have changed a generally noisy and unpleasant site to a more effective and agreeable learning center, where students and faculty can work undisturbed, with easy access to computer services, reference materials, and consulting personnel.
AN N.Y.U. MUSICOLOGIST USES THE CYBER

[The cover page of the May 1982 issue of the Newsletter was decorated with the opening bars of a Mozart symphony. The computer-generated plot, produced at the ACF by Jan LaRue, aroused some curiosity. We asked Professor LaRue to tell us a bit about what he has been doing.]

With the aid of a two-year grant from the National Endowment for the Humanities, I have been computerizing my Thematic Identifier Catalogue of 18th-Century Symphonies. Conflicts in the attribution of symphonies -- more than 150 symphonies are falsely attributed to Haydn alone -- made the Catalogue necessary as a research tool for comparing sources. An ideal computer application, the Catalogue now contains entries for nearly 13,000 symphonies. Conceived of as a continually updated master file, the CYBER-resident database will be used to generate two publications: (1) a Symphonic Identifier, which will list all works by the opening notes in the first violin parts (the incipits), arranged alphabetically by note names; and (2) a Source Catalogue, arranged alphabetically by composer, containing the incipits in musical notation and followed by all available specifics, such as instrumentation, number of movements, and locations of manuscripts or prints. At present, a text editor is used to peruse the files, as well as to enter and modify the data. While the text editing commands which we employ are fairly routine, their application to this kind of task is an innovation in my field.

Donald Byrd, at Indiana University, devised a sequence of graphics programs which can produce music notes of various sizes, as well as the relevant alphanumeric-coded information about the music's source. These can be displayed, by means of other programs available on the ACF CYBER, on a CRT screen, on hard copy from the Zeta plotter, and even on 16mm film. The ACF's Ed Friedman and Frank LoPresti have been particularly helpful in getting my project into action.

Above and beyond its more obvious uses in musicology, this new application should be helpful to many catalogue projects in the humanities. It will be reported in a paper at the national meeting of the American Musicological Society (Ann Arbor, November 5-8). The presentation will include a nine-minute film, which I have scripted, with camera-work and technical production by Margaret Johnson, research assistant on the project.

The Catalogue will make possible another project of mine: a solidly documented history of the classical symphony. That study, begun in 1954, was stalled by problems of authenticity. Now, with the assistance of ACF staff and facilities, we are able to seek important correspondences within symphonic information; we have initiated a methodology that offers greater factual control than ever before achieved for this genre.

-- Jan LaRue
Professor of Music, FAS

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RATES FOR ACF COMPUTER USAGE

The following rates for the more commonly used ACF computer resources are presented for interest, and to provide general guidelines as to what the charges for your particular computer use might be. Use of certain resources unique to one system or another will incur additional charges.

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<th>Item</th>
<th>CYBER</th>
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<th>IBM</th>
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Comments Invited

If you have any comments, suggestions, or queries, please mail them to Estelle Hochberg, Editor, ACF/NYU Newsletter, 251 Mercer Street, New York, N.Y. 10012. Please mark the letter "For Inclusion In Newsletter". All letters will be read. Those of general interest will be considered for publication in the next issue of the Newsletter.
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>
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<tr>
<td>Card Submission</td>
<td>TH LC-14</td>
<td>IBM, CYBER</td>
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<td>WWH 311, 312</td>
<td>CYBER</td>
<td>Faculty, researchers only</td>
</tr>
<tr>
<td>Interactive Terminals</td>
<td>TH LC-8</td>
<td>IBM, CYBER</td>
<td></td>
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<tr>
<td>Hardwired</td>
<td>14 Washington Place</td>
<td>VAX, DEC20</td>
<td>Limited access to other systems</td>
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<td>TH LC-11</td>
<td>HP-2000</td>
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</tr>
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<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>All</td>
<td>Dial extension 4141 **</td>
</tr>
<tr>
<td></td>
<td>From 285 exchange</td>
<td>All</td>
<td>Dial extension 7911 **</td>
</tr>
<tr>
<td></td>
<td>From off campus</td>
<td>All</td>
<td>Dial extension 7381 **</td>
</tr>
<tr>
<td></td>
<td></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.

+ 4141 will access the MICOM only if dialed from a 598 number within N.Y.U.
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.)

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<thead>
<tr>
<th>From:</th>
<th>System:</th>
<th>Use:</th>
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<tr>
<td>Off campus</td>
<td>All</td>
<td>777-7600</td>
</tr>
<tr>
<td>598 Centrex</td>
<td>All</td>
<td>7001</td>
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<tr>
<td></td>
<td>All</td>
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</tr>
<tr>
<td>460</td>
<td>IBM</td>
<td>7911</td>
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<tr>
<td>285</td>
<td>All</td>
<td>7381</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>6272</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-7 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: Batch, use "// exec manuals, name=index", after your jobcard. WYLBUR, type "u wyl.pb.pub.manual.index", then "list".

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-7, Mon - Sat, 10 a.m. to 5:30 p.m., 598-7851.

Multiple Copies of ACF Writeups for Classroom Use: Estelle Hochberg, 306 WWH for CYBER; consultants, LC-7 TH, for IBM.** (Please allow about a week. Blank forms for CYBER writeups can be obtained in 306 WWH or LC-7 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 "u wyl.pb.pub.ibmnews(current)"; then "list"; or type "help ibmnews".

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:

Tape Purchase:

Tape Questions and Requests:

Terminal Problems (ACF equipment only): See Equipment

User Services

Student Advisement

CYBER: 14 WPL 460-7176 CYBER, IBM: TH Room LC-7
598-2993

Consultants

CYBER: TH Room LC-7 598-7851 IBM: TH Room LC-7 598-7851
WWH Room 307 598-3970
460-7398

Hours for Consultants and Student Advisers are posted at 14 WPL,
WWH outside Room 305, and TH Rooms LC-7.
See consult for advisers' hours.

User Work Areas

Mon - Fri 9 a.m. to midnight, Sat 9 a.m. to 4:45 p.m. *
(Note: WWH facilities are for faculty and researchers only.)

CYBER: Interactive terminals, self-service printers
14 WPL, TH Room LC-8 *, WWH Room 317; Bobst B-level *
Card readers TH Room LC-14, WWH Room 312
Keypunches TH Room LC-14, WWH Room 309, 310
Output folders (high speed printers)
TH Room LC-14, WWH Room 312

VAX: Interactive terminals, self-service printers
14 WPL, TH Room LC-8, WWH Room 317; Bobst B-level *
Output folders (main printer) WWH Room 312

IBM: Interactive terminals
WYLBUR TH Room LC-8, WWH Room 317, Bobst B-level *
WIDJETS TH Room LC-8
Card reader TH Room LC-14
Keypunches TH Room LC-14 Output folders TH Room LC-14

HP2000 Interactive terminals, TH Room LC-4

* The ACF terminals on the B-level of Bobst Library are available during
all library and study-hall hours. There are no ACF printers at Bobst,
and no self-service printers at Tisch.

Key WWH: Warren Weaver Hall; 14 WPL: 14 Washington Place; TH: Tisch Hall.

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New York University, CIMS
Academic Computing Facility
251 Mercer St.
New York, N.Y.  10012