Many people buy a microcomputer without giving thought to the cost of obtaining service for the computer in the event that some component fails. Yet, most equipment is sold with only a 90-day warranty, and after that period, an individual has to pay both for part replacements and for the labor associated with any repairs. Fortunately, service contracts are available for microcomputers -- just as is the case with many home appliances -- and can be obtained either at the same time that the micro is purchased or, in most cases, after.

It is difficult to say how likely it will be that any given brand of microcomputer will need service within a given interval of time. This is partly because microcomputers are a relatively new phenomenon. Many particular brands of micros or microcomputer product lines are very new indeed, having actually been on the market for less than a year or two.

From informal observation, however, it seems a good bet that eventually your computer will need repair(s): a disk drive will fail, the printer will stop working well, the video monitor will cease to display, and so on. It is possible that none of these things will happen until the computer is one or two years old, or more. On the other hand, you could purchase a $3000 computer system, and then, six months after purchase, be faced with a $500 repair bill. No one can predict for sure.

Service Contracts continues on Page 2.
Thus, it may make good sense to obtain a service contract of some kind. You have a variety of options as to the source of service. Prices vary, but the typical cost of a contract is about 10-12% of the purchase price per year. Generally, the more you pay for a service contract, the more you get.

Here are some of the sources from which a service contract can be purchased.

1) The manufacturer. E.g., from IBM for an IBM Personal Computer.

2) The store where you bought the machine. Most stores have service centers and offer service contracts.

3) A third-party maintenance organization. In the last few years, a number of big companies have begun servicing personal computers which they do not themselves manufacture, most commonly IBM PC's. Some notable examples are Xerox (Americare Division), Control Data Corporation (Back-Up Division), and NCR. New York University has an agreement with the Sorbus Service Division of MAI which provides a small discount on service to members of the NYU community. For more information on this arrangement, contact the NYU Purchasing Division at 598-2660.

There are a number of considerations which you might weigh while shopping for a service contract. For example, if you wish to have one agreement covering all the components of your system, you may find that Option 1 is ruled out: you cannot expect a computer manufacturer to service all brands of all computer components. Another factor to consider is whether you prefer to have on-site service or are willing to take a broken machine to a service bureau. And you may wish to purchase a service contract from a vendor who also gives you the option of obtaining a loaner machine in case yours needs to go into the shop.

Obtaining a service contract for your micro is a very good idea. If you elect not to obtain one at the time of purchase, you should consider very seriously obtaining one during the first year afterward. If you have just purchased a micro, and it is still under warranty, find out if it will be more costly to obtain a service contract after the warranty runs out. Some service agreements require that computers which have passed the warranty period be examined first, before issuance of the contract, and that examination may cost you an additional fee.

About This Newsletter...

This is the second issue of the ACF Microcomputer Newsletter. A publication of New York University's Academic Computing Facility (ACF), the Microcomputer Newsletter is intended for current and prospective microcomputer users in the NYU community. It is one way in which we hope to provide information which will help them select and use personal computers and personal computer software.

We welcome your comments, suggestions, anecdotes and ideas. Please send them to: The ACF Microcomputer Newsletter, c/o Gary Chapman, ACF Microcomputer Laboratory, 251 Mercer Street, New York, N.Y. 10012. Those contributions which we feel will most benefit our readers will be included in future issues of the newsletter.

The Microcomputer Newsletter is a joint effort of the ACF's Microcomputer Laboratory and its Documentation Office. We hope to publish bi-monthly during the academic year. This issue of the newsletter was written on a XEROX 8010 STAR Information System, and printed on a XEROX laser printer. It was written by Gary Chapman and Estelle Hochberg.
The ACF Microcomputer Bulletin Board: A New Facility For Micro Users At NYU

NYU now has an electronic bulletin board which is devoted to information on microcomputers. The ACF's Microcomputer Bulletin Board was implemented by the Academic Computing Facility as part of INFO, a new experimental information system. Currently, INFO offers information on the software available on some of the computer systems at NYU, and help in logging on to the NYC computer systems, in addition to the Microcomputer Bulletin Board.

Electronic bulletin boards are a fairly common means by which users of microcomputers contact each other, to ask questions and share information about micros and microcomputer applications. The new ACF Microcomputer Bulletin Board is intended for both current and prospective microcomputer users at NYU. Like other electronic bulletin boards, it allows individuals to read notices that have been posted and to send notices for others to read. It is hoped that the new bulletin board will encourage an exchange of microcomputer information that is of particular interest to the NYU community.

Anyone who has a modem and a microcomputer or terminal can access INFO and the ACF's Microcomputer Bulletin Board. In addition, the two facilities can be reached from any terminal which is connected to the NYU Computer System Selector (or "switch"). This second category includes the public ACF terminals on the B-level of Bobst Library, the terminals at all ACF sites except 14 Washington Place, and those terminals in instructors' offices around campus which are "hardwired" to the "switch".

Like other electronic bulletin boards which micro users dial up, ours is a program that is running on another computer -- in this case, on one of the ACF's VAX minicomputers. Right now, to access INFO and the Microcomputer Bulletin Board, you first connect to one of the ACF's VAX computers, following the directions given just below. (You do not need to have an account on this VAX to connect to INFO.) A more direct means of accessing the INFO system will be implemented in the coming weeks.

If you have a microcomputer or a terminal (plus a modem), you can access the bulletin board in the following way.

1) Connect to the NYU Computer System Selector (the switch) by dialing 777-7600. (If you are dialing from within the University and from the 598 exchange, you can dial 4141, instead. Use this number only from within the University.)

2) You will receive a prompt that looks like SELECTION? In response to this, type ACF5 and press the RETURN key. Press the RETURN key again when you receive the "GO." prompt.

3) When you are asked for a "Username," type INFORMATION

and press RETURN.

4) You will then be connected automatically to INFO, the information system containing the Microcomputer Bulletin Board. You will be placed in INFO's main "menu," where you will be offered instructions in using the Bulletin Board, as well as the other facilities which INFO offers. There is further help available within the INFO system if you need more assistance.

In the near future, you will be able to access INFO directly from the NYU Computer System Selector. A message will be posted
License Agreements: Some Legal Issues of Software Use

Editor’s Note: In recent months, there have been newspaper reports of suits regarding the copying of software. At our request, the Vice Chancellor’s office kindly forwarded the following discussion of some of the legal issues associated with the use of software.

Software for microcomputers is generally protected by copyright, and the right to use the software is usually governed by the terms of a contract called a license agreement. Under such an agreement, one is only buying the right to use the software, rather than buying the software itself, and the agreements generally contain restrictions on the types of use that can be made of the software, including its being copied. In some cases, a purchaser will have to sign an agreement showing acceptance of the manufacturer’s terms. In other cases, an agreement will be printed on the packaging of the diskettes containing the software. The agreement will state that opening the package indicates acceptance of the other terms of the license agreement.

The specific terms of the license agreements vary widely among the software manufacturers. At a minimum, all place restrictions on the right of the licensee to copy the software. Many will allow only a single back-up copy to be made; others will provide a back-up and forbid all copying. Most licenses include some restrictions on who can use the software. Some licenses restrict the use of the software to a single CPU, others restrict use to a specific individual. A wide variety of other restrictive terms may be included in license agreements. Because the terms of the agreements do differ, detailed and particular advice on the permissible uses of software packages is not possible. Uses that are allowed by one license agreement may be forbidden by another. The Office of Legal Counsel does advise that people . . . carefully review the limitations on copying and lending which are part of their contracts and license agreements for such computer software, and, notwithstanding any sales person’s representations, adhere strictly to the terms of such documents. Even should no such documents exist, duplication of computer software should not be undertaken without the express permission of the owner of the copyright of such software.

For the full text of the Office of Legal Counsel’s statement on the use of computer software, please write to the Office of the Vice Chancellor, Bobst Library, Room 1233.

Microcomputer Bulletin Board continues from Page 3.

on the Microcomputer Bulletin Board in advance to warn users of this change.

The ACF invites all members of the NYU community who are using microcomputers, or who are thinking of obtaining one, to read the new Microcomputer Bulletin Board and to contribute any information which they feel will help other micro users at NYU.
Ask "Dr. Micro"

Ask "Dr. Micro" is a question-and-answer column which we plan to include in each issue of the ACF Microcomputer Newsletter. In it, we try to address questions of general interest to our readers. We welcome your questions: instructions for mailing them are given at the end of this article.

Visitors to the ACF Microcomputer Lab often ask about transferring information from one computer to another. Situations in which information transfers between computers might be desirable are fairly common. For example, an instructor might work with two different computers, one at home and one at his or her office, and wish to combine parts of data files or documents created on the two machines. Or there may be more than one kind of computer used by a department or research team. Two colleagues with two separate machines may wish to collaborate on a publication.

1. How can I move information from one computer to another?

There are really two important issues relating to information transfers between computers. The first focuses on the means available for making a transfer. Once the transfer has been effected, however, there is the additional question of whether or not the information will be usable on the second computer. We will deal with each of these questions in turn.

Transferring information between computers can be fairly straightforward. When the same brands of microcomputers are involved, the task may be as simple as using the first micro to write the information to a floppy disk, carrying the disk over to the second micro and reading it in. Complications can arise, however, when different brands of computers are involved in the transfer, since they may vary considerably in the way they store information on disks. Another type of obstacle can occur if the computers involved in the transfer are not connected to each other in some fashion.

Transfers between larger computers. Here at NYU many of our "mini" computers are "wired" physically to each other, and there is software which allows a user to move a "file" of information from one system to another. In cases where this hardware-software link among systems does not exist, a person can use magnetic tape. A user can copy the file (which has usually been stored on a very large, shared disk) onto the tape. Magnetic tapes resemble the tapes used on reel-to-reel tape recorders, and each large computer has a "tape drive". Consequently, one can "record" a file onto a tape from one machine, take the tape and mount it on a second machine's tape drive, and then "play the tape back" and copy the file off the tape onto the second machine's disk.

Transfers involving micros. But what if you want to move a file from one microcomputer to another, or from a microcomputer to one of our larger systems? Here is an overview of the options which exist for making physical -- i.e., hardware -- connections between computers.

1) Run a wire directly from one machine to the other, and send information over the wire. This is called a null modem. It is impractical for most home micro users, but may be a feasible connection between micros in two instructors’ offices, for example.

2) Use modems on both machines. Connect to the telephone system, and use the telephone wires for sending information.

Dr. Micro continues on Page 6.
3) Write the information to a floppy disk on one computer, insert it in the second computer's drive and attempt to read it. For this approach to work, both machines must have similar floppy disk drives, and the second machine must be able to read information off the disk created by the first machine.

To use either of the first two options, you must have proper communications software on the two machines being connected. The file transfer program Kermit is an example of this kind of communications software. Kermit is supported at NYU for file transfers between microcomputers and many of the larger NYU computer systems. Kermit does error-checking during the movement of information, to help ensure the accuracy of the transfer. Error-checking is particularly important when phone lines are used, since static can garble information being transmitted. Useful as Kermit is for transferring files between micros and minis or mainframes, however, it is also frequently used for transferring information between two microcomputers, particularly when the two micros cannot read each other's disks.

The third option -- to create a disk on one micro and read it on another -- is attractive. First, it is a fairly convenient means of transfer, and second, the likelihood of inaccurate transmission of information is considerably decreased, as compared with connections via wire or telephone lines. (While it is possible to create a bad disk, it is not very likely.) Unfortunately, different brands of microcomputers store information on floppy disks in quite different ways -- an example of "incompatibility" -- and, in fact, often use disks which will not even fit in the drives of other machines. When disks of the same size are involved, however, "incompatible" micros can sometimes be made to read each others' disks. This is usually accomplished with the aid of a software program -- like "Uniform" and "Xeno-Copy," for example, both of which are used for transferring files between IBM PC's and CP/M-based micros such as the KAYPRO.

It is worth mentioning that sometimes, when direct transfer of information between two machines is not possible, a third machine can be used as a go-between. Thus, if computers A and C are incommunicado, it might still be possible to move information from computer A to computer B, and then from B to C.

2. Once I have transferred the information to a second computer, will I be able to use it there?

Say that you have found a way of transferring information from a "source" computer to a "destination" computer. There is still a possibility that you may not be able to use the information on that second computer.

The following not uncommon scenario illustrates what can happen if you are unaware of the danger.

1) Professors Jones and Smith are collaborating on a series of publications. Professor Jones has an IBM PC, and uses the wordprocessing program WordStar to write articles which he intends to send to Professor Smith for suggested revisions.

2) Professor Smith also has an IBM PC, but uses the wordprocessing program WordPerfect on his machine.

3) Since both machines use the same diskettes, Professor Jones sees no problem in sending Professor Smith a disk with a copy of his article on it. He does so.
Dr. Micro continues from Page 6.

4) When Professor Smith attempts to examine the article, using his WordPerfect software, he finds that he has opened a very odd-looking file. The file appears to have many strange characters in it, and, as an example, he notices that the last character in each word of the text has been replaced by an unusual symbol.

What's the problem? Like much software, WordStar stores information according to its own scheme, and uses special symbols to keep track of such text formatting information as underlining, bolding, and so on. These special symbols are understood by WordStar, but NOT by most other software packages.

What's the solution? If two machines (or, as in our example, two users) do not employ the same application software, the information you transfer from machine to machine must be in a format understood well by both. This usually means transferring pure ASCII files, i.e., files which contain only the ordinary characters and involve no special formatting or encoding conventions. ASCII is the most widely accepted scheme for translating characters into numbers. (All information is actually stored as numbers.) It is the standard code used on virtually all micro- and mini-computers. Much computer software, like wordprocessing packages, can deal well with "pure ASCII" files.

Inexpensive "conversion" software which can translate a normal WordStar file to a pure ASCII file is available, and can be found by searching in microcomputer publications or in software guides. Fortunately, many other wordprocessing packages permit the creation of pure ASCII files upon command from the user.

"Dr. Micro" will gladly try to answer questions from microcomputer users at NYU. Send questions to "Dr. Micro", c/o Gary Chapman, ACF Microcomputer Laboratory, 251 Mercer Street, New York, N.Y. 10012. Questions of general interest to our readers will be included in subsequent issues of the ACF Microcomputer Newsletter.

The ACF Microcomputer Laboratory

The Academic Computing Facility's Microcomputer Laboratory is a resource for faculty and research staff at NYU. It is a place where they can come to try out different equipment, and to obtain some guidance in selecting microcomputer software and hardware. The Lab is located in Warren Weaver Hall, Room 317. Visitors are urged to call to make appointments. Hours between noon and 8 p.m., Mondays through Fridays, are generally available. Call Gary Chapman, at 460-7160.

Microcomputer Documents from the ACF

The ACF's Microcomputer Laboratory and Documentation Office have prepared several small documents intended to help members of the NYU community select and use personal computers. The following publications can all be obtained from the ACF Documentation Office, 251 Mercer Street, Room 306. (Copies are also available in the Microcomputer Lab.)

- The ACF Microcomputer Laboratory, a description of the purpose and resources of the Lab
- Books and Periodicals Available for Reference (at the ACF Microcomputer Laboratory)
- Guidelines for Selecting a Microcomputer
- Suggested Microcomputer Readings, a list of books and articles which provide advice on selecting microcomputer hardware and software
- Guidelines for Using KERMIT at NYU.

The Academic Computing Facility, New York University
Shopping for Software: Some Notes on Discounts and Site Licenses

Microcomputer owners commonly purchase at least a few software packages -- for wordprocessing, communications, database management, and so on. Understandably, people are interested in getting the best prices that they can.

Shopping around. At the present time, micro users at NYU must shop around as widely as they can, if they wish to find the lowest price for an item of software. Typically, this means comparing prices offered by a variety of computer stores and mail order houses. However, New York City is rich in software vendors whose sale prices can be quite competitive. In addition, while mail order houses' prices are often lower, local stores are more likely to provide assistance in the use of a software package.

Discounts for NYU faculty and students. Institutionally-related discounts are more difficult to arrange for software purchases than for hardware. Unfortunately, NYU does not have agreements for software discounts like those which it has arranged for hardware. There is one mail order company, however -- Corporate Software in Canton, Mass. -- which offers discounts of 33% to 36% on IBM-compatible software to individuals at NYU. NYU faculty and students would still do well to shop around and compare prices.

Site Licenses. NYU is now exploring opportunities for obtaining site licenses for microcomputer software. A site license is an agreement between a software manufacturer and an institution like NYU. With a site license, the institution pays a one-time or an annual fee. In exchange, it is given the right to use multiple copies of a given piece of software without further charge.

If the University were able to make a suitable site license agreement with a software company, it could mean considerable savings to micro users in the NYU community. Site licenses for microcomputer software, however, are not so very easy to obtain, and establishing a useful site license arrangement is, at present, a somewhat complicated undertaking.

Site licenses have been available for a number of years for the use of certain software products on mainframes and mini-computers. Site licenses for microcomputer software, however, are just starting to become available, and in only a very few instances. At present, most major microcomputer software manufacturers do not have site license programs, and some have completely rejected the idea for the foreseeable future. One exception is Select Information Systems, which is currently promoting a site license for its "Freestyle" wordprocessing program which runs on IBM PC's and compatibles. Some of the companies which reject the notion of site licenses do offer bulk discounts to educational institutions; however, these discount agreements sometimes stipulate that a large quantity of the software item must be purchased at one time.

A few site licenses have been arranged by individual schools within the University. The benefits of these licenses, however, do not extend to the rest of the University community. For example, GBA has arranged a site license for LINDO, a linear programming package from Linus Schrage of the University of Chicago. The license gives free on-site use of LINDO to any member of the faculty of GBA or BPA. For further information on the LINDO license for the Schools of Business, call Susan Rovi, at 285-6080. BPA has arranged a site license for the word-processing program XyWrite. That agreement extends to both faculty and students in BPA and GBA. Further information on the XyWrite agreement can be obtained from Carey Gister (598-3515).

We will try to keep our readers posted on further developments in software discounts and site licenses for micro users at NYU.
Utility Software for Your IBM PC

Utility programs are a category of software which microcomputer users often ignore. Utilities are programs that facilitate the use of a machine and provide capabilities which the computer's "operating system" alone does not offer. They differ from application software programs like word-processors, spreadsheets, and database managers, in that they are not used directly in "production work" -- that is, in producing or managing data.

Operating systems often come with a set of utilities. With PC-DOS, for example, the small programs to format a new diskette (FORMAT), to copy files from one disk to another (COPY), and to examine the contents of a disk (CHKDSK) are all utilities.

In addition to such basic utilities; however, there are a variety of other utility programs on the market. Some of them can provide invaluable service to a user. There are programs for use with IBM PC's and for other microcomputers, as well. Typically, they cost between $50 and $100.

This article will focus on two utility products: the Norton Utilities and the DataLife Disk Drive Analyzer. Both are for use with IBM PC's. The ACF Microcomputer Laboratory has these programs, and we have found them to be quite useful. We feel that, in many ways, they typify the best of the utility software currently available for micros. We do not, however, endorse these products specifically over others which may serve the same functions.

Retrieving "Deleted" Files

The Norton Utilities are useful because they enable you to "unerase" a file which you have deleted. Human fallibility being what it is, accidental erasures of files (or groups of files) are very common.

On an IBM PC, however, a "deleted file" is not actually erased. Rather, deleting a file only causes a change to be made in the disk's directory (its table of contents). The directory's entry for that file is altered so as to indicate that the file is now a "deleted" one, and the space on the disk which was allocated to that file is marked as free for re-use. As a result, sufficiently clever programs (like the Norton Utilities) are able to recover all or part of a file that has been deleted on an IBM PC.

The Norton package contains other utilities, as well. Other programs in the set give users the capability to sort a directory in alphabetical order, list directories on a disk, reset the hues of a color monitor, get general system information, search for text in files, and completely erase a file or disk.

The Norton Utilities (Version 3) are widely available in computer stores and through mail order houses at a list price of $99.95. They can also be ordered directly from Peter Norton, 2210 Wilshire Blvd., Santa Monica, CA 90403 (same price).

Testing Your Disk Drive

The parts of a microcomputer system which are most susceptible to failure are those with moving parts -- i.e., the disk drives and the printer. Disk drives can fail suddenly, or can go through a period of sad decline and intermittent malfunction, a period which can be particularly dangerous when a user is trying to store or retrieve data on disks.

Most significantly, for disk drives to function properly, they must be able to rotate a disk at the proper speed, and the head which reads and writes information must be properly aligned with the disk. Imagine what would happen if a record player spun too fast or too slow, or if the needle were oriented at the wrong angle for the grooves in the record.

Microcomputer User Groups

An important part of the personal computing phenomenon, since its beginning about ten years ago, has been the emergence of innumerable local "user groups". Throughout the country, owners of one or another kind of micro, or individuals who use their computers for particular kinds of applications, have banded together to share information and to help each other to make good use of their machines.

User groups can be especially helpful to new owners of micros. The problems and confusions which many new micro users experience can frequently be cleared up with just a little advice from a more experienced user. User group meetings also give individuals an opportunity to hear about all kinds of fascinating new products, or about novel ways in which people are making clever use of their machines. Finally, many user groups publish newsletters and distribute free, public-domain software to their members.

There are a great many micro user groups in the New York region -- some of which actually meet on the NYU campus. The following is a brief, incomplete list of groups which may interest you.

Northeast Association for Computing in the Humanities  
c/o Prof. Alan Margolies  
John Jay College of Criminal Justice  
The City University of New York  
(212) 725-2772

NYPC: The NYU IBM Personal Computer Users Group  
360 Central Park West  
New York, N.Y. 10025  
(212) 222-9027  
(718) 886-3647

New York University Medical Center Personal Computer Users Group  
c/o Dr. James Mihalcik, M.D.  
Department of Anesthesiology  
550 First Avenue  
New York, N.Y. 10016  
(212) 340-5072

The Manhattan IBM Micro Club  
c/o Helaine Head  
360 Central Park West  
New York, N.Y. 10025  
(212) 222-9027

New York University Medical Center Personal Computer Users Group  
c/o Prof. Alan Margolies  
John Jay College of Criminal Justice  
The City University of New York  
(212) 725-2772

The New York Mac Users Group  
CUNY  
c/o Wayne Smith  
33 West 42nd Street  
New York, N.Y. 10036  
(212) 644-0170

The Amateur Computer Group of New Jersey  
c/o Carol A. Ziemba  
IBM PC Users Group  
P.O. Box 319  
South Bound Brook, N.J. 08880  
(201) 757-1600 (ext. 2633)

Central Connecticut User Group  
c/o Rich Paterson  
Computerland  
131 S. Main Street  
West Hartford, Ct. 06110  
(203) 561-1446

NYPC: The NYU IBM Personal Computer Users Group  
360 Central Park West, #614  
New York, N.Y. 10025  
(212) 533-NYPC

If you know of other groups which members of the NYU community might wish to join, please drop a line to the ACF Microcomputer Laboratory, c/o Gary Chapman, 251 Mercer Street, New York, N.Y. 10012. We plan to include an updated list of user groups in future editions of this newsletter.
Many software packages for the IBM PC make extensive use of the keypad and function keys on the PC's keyboard. Different packages define these keys differently. We have included this chart for IBM PC users to copy, fill in, and keep as a handy reminder of key definitions in the packages which they use.
An Overview Of The Academic Computing Facility

The Academic Computing Facility (ACF) provides the computing services for the general academic community at NYU. Faculty and students use the ACF's computing services for research and instruction in all academic areas.

- **Computer Systems** include an IBM 4341 (running an MVS operating system and offering WYLBUR), a CDC CYBER 170/730 (its operating system is NOS 2), and several DEC VAX 11/780's (running VMS and UNIX operating systems).

- **Central Clusters of Terminals and Printers** are located at Tisch Hall (lower concourse), 14 Washington Place, Warren Weaver Hall (third floor, faculty site), Bobst Library (B-Level, terminals only), and Education Building (second floor). Dial-in access to our mainframes and minicomputers is through 777-7600.

- **Software** includes a wide array of languages, "word-processing" programs, and statistical and graphics packages. These include BASIC, PASCAL, C, FORTRAN, ICON, ADA; SPSS, SPSS-X, SAS, SAS/GRAPH, LISREL, NCAR.

- **Databases** available for research include a variety of surveys in economics and the social sciences. For example, the Inter-University Consortium for Political and Social Research databases and the U.S. Census data are available on magnetic tape. (Contact 598-7851 for further information.)

- **Tutorials** in the use of the systems and their editors are given regularly during the academic year. Tutorials in special topics are also arranged at the request of faculty.

- The **ACF Seminars**, a series presented each fall and spring semester, bring speakers on topics of particular interest to our users. Past seminars have covered the use of graphics packages, and of SPSS, UNIX, text editors, and electronic mail systems. Other seminars have dealt with special topics in PASCAL programming, and with microcomputers.

- **Consultancy** in the use of our computers is offered at each of the ACF sites. Help in the use of statistical packages is specially available in Tisch Hall (Room LC-7, 598-7851). Warren Weaver Hall consultants are for faculty (460-7398), while help for students using the CYBER is offered at 14 Washington Place.

- **Writeups** and other documentation describing the use of our computers and computer products (language compilers, statistical packages, text editors, and so on) are produced for distribution to classes as well as to individual users. (Call 460-7397 for further information.) Reference collections of software manuals and guides are provided at all ACF sites.

- The **ACF/NYU Newsletter** includes summaries of technical information on our systems and software, and announcements of tutorials, seminars, special documentation and user services, and such. A copy is mailed to each individual account holder. (To add your name to the mailing list, please submit the form included in the present bulletin.)

- The **ACF/NYU Microcomputer Newsletter** will provide timely information bearing on the selection and use of microcomputers and microcomputer software. (To add your name to the mailing list, please submit the form included in this issue.)

- A **Microcomputer Laboratory** is available to faculty who wish to examine microcomputers and microcomputer software packages, and explore their uses in instruction and research (460-7160).

- **Accounts** on ACF computer systems are obtained through the ACF Accounts Office, 251 Mercer Street, Room 305 (460-7427).

For further information on computing hardware and operations, contact Terry Moore (460-7156); on software or communications, Ed Franceschini (460-7291).

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The director of the Academic Computing Facility, Professor Max Goldstein, and his staff are available to respond to questions about general policy issues and concerns -- on all modes of computing (micros, minis, and mainframes) -- and will be glad to arrange meetings with departmental groups or individual faculty members.
How to Get Future Issues of this Newsletter

If you would like to receive future issues of this newsletter, please fill out this form and send it to The ACF Microcomputer Newsletter, c/o The ACF Documentation Office, 251 Mercer Street, New York, N.Y. 10012. (No need to send us this form if you submitted one from the first issue of the Newsletter.)

Name: ___________________  Please check one:

Address (a University address, if possible, please):

__________________________________________

__________________________________________

__________________________________________

Please check here if you would also like to be included in the mailing list for the general newsletter of the Academic Computing Facility: ______.

Are you interested in other ACF resources, services, documents?

The Academic Computing Facility (ACF) provides a wide range of computing services to faculty and students at New York University. Microcomputer-related activities are just one part of what we do and of the facilities that we offer. [An overview is included on the facing page.]

If you are interested in learning more about the ACF and how our services might be of help to you, obtain a copy of the Academic Computing Facility Newsletter. That newsletter describes recent developments at the ACF, and contains a directory of ACF personnel and resources. For a copy, write or call the ACF's Documentation Office, Room 306 Warren Weaver Hall, 251 Mercer Street, New York, N.Y. 10012 (460-7397). To have your name added to the mailing list for the ACF Newsletter, please complete the form just above, and be sure to specify (by placing a check on the appropriate line) that you wish to be included in the general newsletter list.

Utility Software continues from Page 9.

This is just where a program like the Datalife Disk Drive Analyzer comes in. It allows you to test a floppy disk drive for such properties as its speed of rotation and head alignment. The intention is to make it possible for you to detect budding problems early and, if service is indicated, obtain it before a problem becomes serious.

There is another benefit of this type of utility: a feeling of security which can come from knowing that your disk drive is operating well. The two utilities discussed in this article can, in combination, give an IBM PC user an enhanced sense of having protected him or herself. If, for example, a floppy disk drive fails suddenly and damages a diskette, perhaps in the middle of some important operation, it may still be possible to recover information from the disk by means of a program such as the Norton Utilities.

The Datalife Disk Drive Analyzer costs $50, and is available from Data Encore, a Verbatim Company, Sunnyvale, California, as well as from computer stores and mail order houses.

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