THE STACK

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Volume.7 No.12 DECEMBER 1983

OFFICIAL NEWSLETTER OF
THE LONG ISLAND COMPUTER ASSOCIATION, INC.

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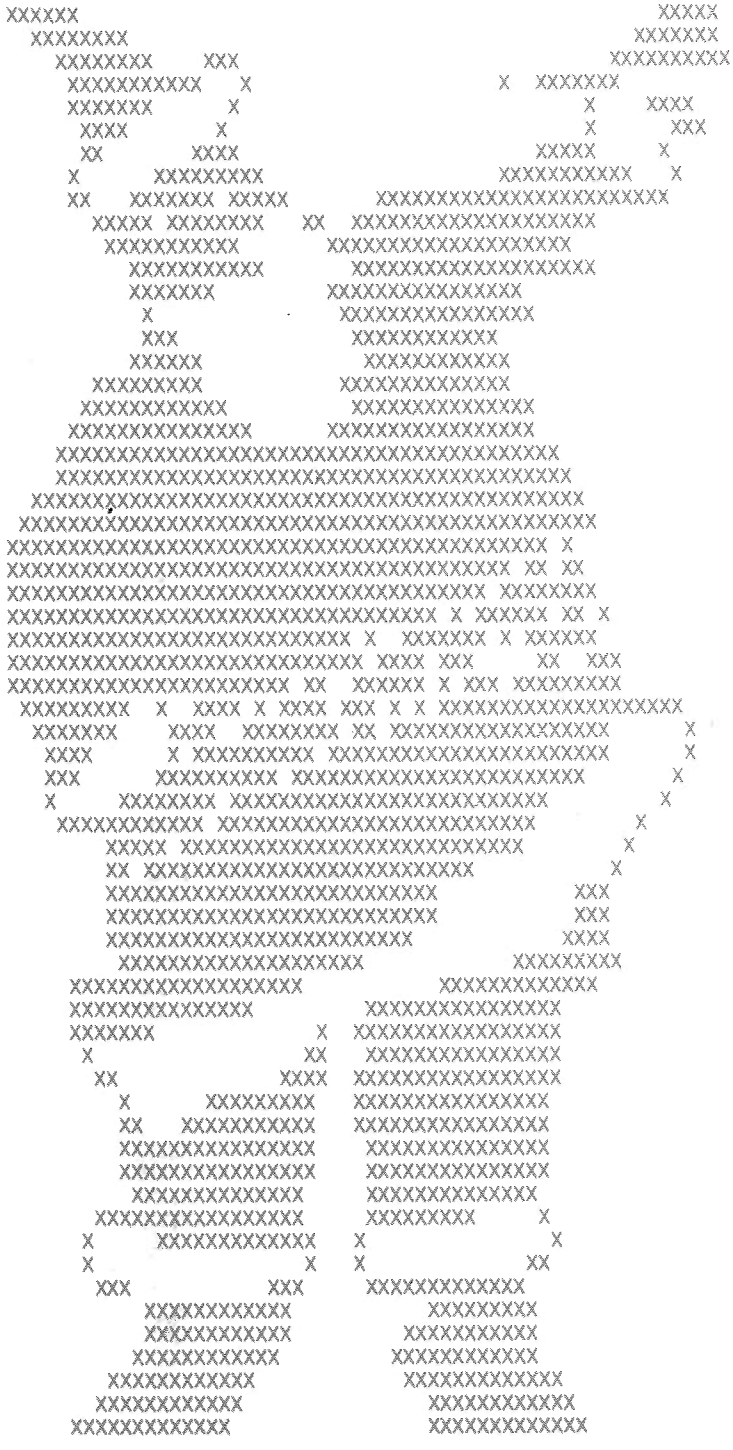
HO HO HO!



```
10  REM Santa Claus BY RICH GOUGH 10/27/83
20  LPRINT:;TAB(35);"HO HO HO!":LPRINT
30 LPRINT;TAB(10);
40 READ A;B:IF A=0 THEN Z=CALL(0)
50 FOR X=1 TO A:LPRINT;" ";:NEXT
60 FOR X=1 TO ABS(B):LPRINT;"X";:NEXT
70 IF B>0 THEN 40
80 LPRINT:GOTO 30
90 DATA 1,6,47,-5,3,8,41,-7,5,8,4,3
91 DATA 30,-10,6,11,3,1,20,1,2,-7
100 DATA 6,7,6,1,28,1,4,-4,7,4,7,1
101 DATA 29,1,6,-3,7,2,7,4,24,5,5,-1
110 DATA 6,1,6,9,19,11,3,-1,6,2,3,7
111 DATA 1,5,7,-24,8,5,1,8,3,2,2,-20
120 DATA 9,11,7,-20,11,11,7,-20,11,7
121 DATA 9,-16,12,1,15,-16,12,3,14,-12,11
122 DATA 6,13,-12,8,9,11,-14,7,12,10
123 DATA -15,6,15,6,-17,5,-41,5,-42,3,-45
140 DATA 2,-47,1,44,1,-1,1,41,1,2,1,-2,1
141 DATA 39,1,-8,1,35,1,1,1,6,1,2,1
150 DATA -1,1,28,1,1,2,7,1,1,1,-6,1,29
151 DATA 1,4,1,3,5,2,2,-3,1,23,1,2,2,6
160 DATA 1,1,1,3,1,-9,2,9,2,1,2,4,1,1,1
170 DATA 4,1,3,1,1,1,1,1,-20,3,7,4,4,2
171 DATA 8,1,2,1,18,6,-1,4,4,6,1,1,10
172 DATA 1,23,6,-1,4,3,6,10,1,24,7,-1
180 DATA 4,1,5,8,1,26,9,-1,5,12,1,26,8
190 DATA -1,9,5,1,28,8,-1,9,2,1,27,11,-1
191 DATA 9,27,11,-3,9,27,11,-3,9,25,12
200 DATA -4,10,20,12,-9,6,19,11,-13,6,15
210 DATA 9,-16,6,7,13,1,2,-17,7,1,17,2,3
211 DATA -16,8,2,13,4,2,-17,10,1,6,9,3,-16
220 DATA 10,2,3,11,3,-16,10,16,4,-15,10,16
221 DATA 4,-15,11,14,5,-14,8,17,5,9,5,-1,7
222 DATA 1,5,13,3,1,15,-1,7,1,17,1,3,1,13
223 DATA -2,8,3,11,3,5,-13,12,12,11,-9
250 DATA 12,12,9,-11,11,12,9,-12,9,12
251 DATA 12,-13,8,12,15,-12
260 DATA 6,13,16,-13,0,0
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PRESIDENT'S MESSAGE DECEMBER 1983

Thank you for allowing me the privilege of sitting as President for the past twenty four months. The experience was filled with both challenges and satisfactions. My inherently shy nature was overcome by our shared enthusiasms for computers and computing. I have striven above all to maintain the unique cohesive nature of LICA, and resisted attempts to fragment and to exclude. It is my sincere desire to leave this attitude as my legacy to the club.

COMDEX-Fall 83

Three days in Las Vegas can be either a very short time or a very long time. If you're there to gamble and to see shows, it's all too short. If you followed the advice of the signs all over town to "see it all", you walked for miles between the six separate exhibit halls, and up and down the seeming endless aisles, and your stay seemed much longer.

My conclusions, in a nutshell:

1) This premier trade show for microcomputer hardware, software, services, and publications is so large it approaches unmanageability. Because of this, and of anticipated vendor shakeouts, we may never see anything as large as COMDEX- Fall 83 again.

2) The war is over. IBM has won. The ration of PC's to vendor booths approached 1:1. All new software, most peripheral devices and integrated systems presented were based on, or compatible with the "grey brick". Apple was there and Apple compatibles and peripherals were there too, but the explosive growth years for the 6502 innovators are gone forever.

3) Spread sheet, data base, and "window" programs were all over the place. Personally, we tend to agree with an editorial in LIFELINES magazine which deflates the whole idea and suggests that these are "solutions in search of problems". But then, as we observe also that the majority of "personal computer" owners simply do not use their systems for any meaningful purpose, sales of these visually interesting packages could soar.

4) Technological innovation can come from anywhere, but only large, well-financed firms will survive into an ongoing profitable future.

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MONTHLY MEETINGS

All meetings, except IBM PC/UG are held at the New York Institute of Technology, Old Westbury Campus LICA meets each month on the third Friday evening at 8:00 in Room 508, Building 500

See the back cover of the Stack for map and directions Our next general meeting will be held on the 16TH of December.

Our guest speaker this month is Mr.John O'Neil. John will speak about TANDY's new product (released December 3 1983), the 2000 microcomputer.

The 2000 is a 16/16 machine. (Sixteen bit input/sixteen bit output.) It uses MS/DOS as its operating system.

Mr.O'Neil has promised to arrive early. The 2000 will be up and running. Those who arrive early will be able to view the machine demonstrating high resolution color graphics, "window" displays and much more.

SECRETARY'S REPORT ON LICA MEETING OF NOVEMBER 1983

The LICA meeting of November eighteen was highlighted by the excellent presentation on rotating media (disks) by Ron Richards. Ron spoke on some new developments in rotating media over the last year and speculated on the technology for the next four years.

Ron brings much content, organization and insight to this subject. Any effort to review the material is destined to be deficient. The writer is about to do this but a word to those who missed the talk: pity.

Ron spoke of trends in mass storage, the effect of developing technology on these trends, the position of various suppliers in the rotating media field and the bankruptcies that are likely to follow failure of many of these suppliers to meet the market requirements for performance and reliability. Caveat Emptor.

One problem in the current market is portability. There is a growing demand for this feature. Up to this time there hasn't been a disk drive sturdy enough to be useful after very many rigors of travel on public transportation. Ron defined a number of terms necessary to compare various systems, among them were rotational latency, seek latency, rate of rotation and areal density (density per unit area). He then used these units as critera for the evaluation of the various media systems.

His evaluation caused him to conclude that Eight Inch Disks, whose size was chosen because they could be stored in a loose leaf notebook were not likely to have much of a future.

Five Inch Disks constitute ninety seven percent of all current sales and likely to have a place in the future. The five inch standard was selected at a cocktail party because it approximated that of a cocktail napkin.

The 'Sony three inch disk format, chosen because it fit in a shirt pocket, looked like one of the better growth prospects for the future. The computer standards organizations should give some thought to the organization that standardizes notebooks, cocktail napkins and shirt pockets.

Ron put a lot of thought into presenting the advantages and disadvantages of Winchesters. There are plenty of both. Prices of this kind of hardware are dropping and there are people who are going to buy them who are not equipped to face the problems presented by the novelty. The rotational rates are higher. Alignment and cleanliness are more important. The failure of a sealed multi-megabyte system is not practically recoverable.

High density tape systems are possible options to backup Winchesters. To serve as a Winchester backup Tandon is about to supply a fifty megabyte tape system in a five inch disk space. There is a good deal of experimentation going on in media development itself. Chromium plated magnetic alloy and various layer structures are adding to the areal density possible in this hardware. None exceed the access speed of RAM disk systems, but some of the Winchesters approach it.

Optical disks are coming and they have advantages in many applications. The crystal ball has a fuzzy picture of the future of these things, but they pack an awful lot of information in a small space and promise to provide the lowest cost storage per megabyte,($6/megabyte). This compares well with floppies that provide a much higher cost storage. Optical disks promise storage of up to nine thousand megabytes on a disk.

Submitted by Angelo Tulumello for Frank Davidoff, Secretary

MACRO Thought - Al Levy

I find it curious that the same topic was brought up at three different encounters in the past month. Member Irwin Weitman started it off at the monthly LICA coffee clotch.

Before I get into this, my apoogies to the dealers amongst us. I am not the "little Dutch boy." In fact, if the combined weight of all of the members of all of the SIGs in the world were melded into one huge push, we could not stop the oncoming rush to purchase "home" or "personal" computers.

The topic to which I alluded is "what are the applications of a computer in the home?" We speak here of traditional Screen, Keyboard, Disk Drives, etc. not of a microprocessor to control devices. The two applications on which there was an almost universal agreement were 1) another amusement and 2) an educational tool. The feeling prevailed that other applications are business oriented, and altered for home use. Does a cook really need a thousand dollar computer on which to file recipes?

In terms of an educational tool, most of us were thinking of programming the computer as being the education, not the running of other people's software. The message is the medium.

As STACK editor I recieve more than my share of phone calls. The scope of these calls is wide ranging. Some are nonesense, some are interesting and one was down right important.

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PLEASE TAKE NOTE

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After receiving and responding to a phone call last week, I asked for a follow-up letter. Although I am keeping the persons involved anonymous, the letter will be available to the appropriate parties. I am quoting portions of this letter for the membership at large, and more particularly for the many wheelers and dealers amongst us who can appropriate equipment for little or no money.

Dear Mr. Levy,

In our family we have a son who has a form of cancer called "diffuse histiocytic lymphoma". Doctor Stubblefield of the M.D. Anderson Hospital And Tumor Institute, of the Texas System Cancer Center has created a floppy disk called " KILLER T-CELL" for use on an APPLE II or APPLE II PLUS computer. Doctor Stubblefield has demonstrated that this form of cancer can be combated through a process of visualization. By stimulating the patient's imagination, the "good" lymphocytic cells fight off the "bad" ones.

The money we have available goes for hospital and doctor bills. It was Doctor Stubblefield who suggested I contact a local computer club to see if we could perhaps borrow or share an APPLE II. We have a copy of the disk. (and it goes on..)

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USE FOR A HOME COMPUTER? I fervently wish that <u>you and yours do not</u> have a better use. Toss the following thoughts into your brain and let em cook a while.

If LICA received a donation of an APPLE II, (DOS 3.3), 48K memory, and disk drives, we could always have it available for those people in this stressful and unfortunate position.

If each member of LICA donated $ 5.00, we could start a LICA/CANCER/COMBAT TEAM. It may not work, but, wouldn't it be worth throwing away five bucks in the attempt to save a young man's life?

If an APPLE is not donated within 20 days of this publication, I will ask for donations from the readership. We put 5000 copies of the STACK into the hands of readers. When enough money is accumulated, we can purchase an APPLE and put it on loan.

POWER - The best CP/M manipulating program available.

As published in Lifelines, The Software Magazine

by Bob Kowitt 1727 N.Jerusalem Rd. E.Meadow, 11554

Power is a program that will do a great deal toward eliminating the errors and confusion arising when a novice uses CP/M. Actually, there is very little in POWER that has not been available to members of CPMUG, the CP/M user's group. However, one would have to dig for it. Then, after finding it, the program to perform the function would have to be loaded and run.

POWER combines many of the intrinsic functions within CP/M, the most useful of the functions within the transient programs provided with CPM and several enhancements that I have been looking for, some of which I found and others I didn't.

Pavel Breder, the author of POWER, has combined these functions into one program that calls sub-routines of a menu-driven package that, in my opinion, is well worth the $150 being charged by COMPUTING, the San Francisco distributor.

The general format of POWER permits menu-driven operations for most CP/M operations including copying, typing, renaming, erasing, and reclaiming erased files which helps to eliminate typing errors during these procedures and source / destination errors that have caused so many miscopied files when using PIP. In addition, there are enhanced direct disk accessing routines and enhancements to memory modification abilities that have been possible with DDT or SID.

I would like to go down the list of some of the commands to demonstrate the added strenth POWER gives the user of CP/M.

Most of the operations are driven by a screen directory. The command may be used with the CP/M asterisk format with one additional feature: the period may be left out. Therefore you can type ERA ** and all files will be handled.

COPY This command by itself yields a directory of the disk with a unique number for each entry. To copy to another disk, you have the option of entering the files temporary number, several numbers, or an including form such as 5-12, meaning all files numbered 5 thru 12.

ERA Erases files in the same manner as COPY copies but lets you know as each is being erased. This permits unerasing at once should you have made an error. The program can be modified (again, menu driven) to ask before each erasure, if you want to erase the particular file listed, just in case you had meant to type DIR or something else and type ERA by mistake.

REN Renames files, again with the directory format. After selecting your numbers, it will step through your list, one by one, allowing you to rename your selected files. The operation is made easier by allowing you to enter an asterisk to retain either the existing program name or type.

RUN Enter the file's temporary menu number and the appropriate .COM will be run. At present, this takes you out of POWER, but Clyde Steiner of Computing told me that they are working on a new version which will set up a submit file permitting POWER to reload upon completion of the COM file operation.

TYPE This runs just like CP/M's type function with the exception that a queue can be established in the preceding manner to display a series of files. At any time during the display, the space bar will halt the display and single step by line until any other key is used. Paging can be disabled or enabled using the LOG function.

DUMP comes in four flavors: ASCII, formatted ASCII, hex and combined hex/ASCII.

So far, minor stuff !! However, let's get away from the CP/M standard operations now.

CHECK Read a disk file and do a CHECKsum on it. Yes, CPMUG does have CRCK to do the job but it must be on the disk, loaded and run.

STAT This does only one function of the STAT we all know and love. It lists the free and used space on the drives. However, we have other functions within POWER to do most of the others.

SETDIR SETSYS, SETRO AND SETWR will set the attributes in the file called for to the directory, system, read only and read/write status as desired.

SPEED Ever want to slow up the display on your termimal to reading speed? Speed allows you to set the display rate from a level of 0 to 9. At level 9, you can go out for lunch while you screen displays.

SEARCH is a goodie I have been trying to find for several years. It permits searching thru memory for a group of bytes. Not only that but you can use a wild card, '?' to find a group and display the space to either side. Suppose you want all locations with POWER itself that have the characters "SET". Type: SEARCH 100 3200 "???SET???".

This will yield the locations in the POWER command table for SETDIR, SETSYS, SETRO and SETWR, and display them with the three bytes before and the three bytes after, should you want to modify the commands themselves.

DS This is a modification of the DDT command 'S' used to substitute memory bytes. DS, how ever, not only displays the hex values at the memory address, but also the value in ASCII and binary. To alter the value, you don't need to know the hex for the ASCII characters to modify memory in the former example. Just type '.A' and you can enter your changes in ASCII being certain to allow a space between each entry.

GO (address) will load a file to the address and run it at that address.

LOAD (file)(address) will load the file but not run it.

SAVE (file)(address)(sectors) will save a file at any memory address. First run SIZE (file name) to get the size in sectors. If the file is already on the disc and the size has not been altered, the sector size need not be entered. POWER will read the size from the existing file. Note that the file can be saved to disc from any memory location, not just 100H as with the CP/M intrinsic SAVE command.

Back in my days, BC, that is, before CP/M, I had a North Star system with the North Star DOS. I valued the ability to go to any physical sector of the disk and read or write directly to the disk. Admittedly, it is a dangerous procedure for the novice but, in the hands of a knowing technician, it is a valuable and powerful tool. Now thanks to POWER, I can do this again and, even better in CP/M.
I can now: READ / WRITE to and from any track and sector into memory location, the number of sectors I want to manipulate.

READGR WRITEGR any CP/M group to and from any memory location.

Ever want to transfer a group of files from one user area to another. First you must use DDT to move PIP to the new user area. Then invoke the user area and pip from the former area using the [Gn] parameter. Power has the command:

XUSER Now when you COPY, you will copy directly into the new area.

LOG Would you like to set POWER to display your directory in 2, 3, 4 or whatever columns;
set it to ask you for verification before every move, verify all transfers, create a backup file if a file exists during a copy procedure. Suppose you are copying a long list of files and during transfer of a long file, you run out of disk space. POWER can cancel that transfer and try to transfer the next smaller file. All of these can be done from a menu by invoking this command:

TEST does an extensive test of the disk read and write, saving any bad sectors found in a reserved SYSTEM file called ========.===.
After this is done, CP/M will not attempt to write to these sectors. The disk has effectively been reclaimed for further use.

POWER - by Bob Kowitt

This article does not attempt to cover all the facilities of power but enough to show that it is a powerful tool. During any procedure, hitting the ESCAPE key or Control-C will stop the procedure while a Control-K goes the next operation in the procedure.
So much for the good news. Now the bad news...I found none

Qualitative Factors	RATING
Documentation	
organization for learning	7
organization for reference	7
readability	7
includes all needed information	5
Ease of Use	
initial start-up	7
running other COM files	6
on board help	3
Error recovery	
ordinary mis-typed commands	7
catastrophic mistyped commands	7

Ratings in this table are 1 -- 7:
1 = clearly unacceptable for normal use
4 = good enough for most purposes
7 = excellent, powerful or very easy depending upon the catagory

POWER is available for about $150 from: COMPUTING - 2519 GREENWICH ST. - SAN FRANCISCO, CA 94123
They offer a money-back quarantee. If you don't like it, return it. While I have seen this offer associated with a demo disc, this is something unheard of with working programs alone.

MONTHLY MEETINGS

All meetings, except the Suffolk meeting of the IBM PC/UG and 6800/UG are held at the New York Institute of Technology, Old Westbury Campus.

The Long Island Computer Association,INC. is open to everyone, amateur or professional with an interest in computers, computer applications, programming, or related subjects. Dues are $12.00 per year which includes monthly issues of this publication.

LICA meets each month on the third Friday evening at 8:00 in Room 508, Building 500. Our next general meeting will be on the 16th of December.

Long Island Computer Association,Inc. Special Interest Groups

SUB-GROUP	CHAIRMEN	PHONE(516)	Meetings Each Month
6502	George Carlsen		3rd Friday 7:00
680X	Roger Kaucher	796-8746	
COMMODORE	Judy Schwartz		3rd Friday 7:00
FRAN/APPLE	Susan Helmlich	759-9716	3rd Friday 7:00
IBM - Suffolk	Marvin Freifeld	724-0574	2nd Friday 8:00
IBM - Nassau		724-0574	1st Friday 8:00
PolyMorphic	Al Levy	293-8368	3rd Friday 7:00
S/100 CP/M	Bob Sewall	541-4837	2nd Friday 8:00
TRS-80	Ed Zuilkowski	938-3320	2nd Friday 7:00

All 42 volumes (disks) of PC/Blue (public domain software) are now available at LICA for $3.00 each.

These disks may be ordered by giving either Aileen or Gerry Harrison the following information:

Volume number(s) , Your name and phone number

Orders will be taken at LICA's main meeting and both the Nassau and Suffolk PC group meetings. For phone orders or information call 516-938-6769.

We plan to build up our collection of public domain software.

Our immediate objective is to obtain the public domain volumes published by "NYPC", about 20. If you have any of these for the PC, please tell us. The following list the titles of the volumes we now have.

* 8080 processor support equivalent required for volumes 1 through 17

PC/Blue	volume 1	Miscellaneous Utilities -Super Directory -IBM Asynchronous Communications -Support Extensions -Display Utilities
PC/Blue	volume 2	MicroSoft Basic Programs
PC/Blue	volume 3	MicroSoft Basic Programs
PC/Blue	volume 4	MicroSoft Basic Programs
PC/Blue	volume 5	MicroSoft Trek Programs
PC/Blue	volume 6	General Ledger (MBasic) Monstrous Startrek
PC/Blue	volume 7	RatFor
PC/Blue	volume 8	Miscellaneous Fortran Programs Portraits
PC/Blue	volume 9	EBasic Compiler/Interpreter EBasic Programs
PC/Blue	volume 10	Monstrous EBasic Startreks
PC/Blue	volume 11	EBasic Programs
PC/Blue	volume 12	EBasic Programs
PC/Blue	volume 13	Original Adventure-350 Points
PC/Blue	volume 14	Bob Van Valzah's "Pascal Pascal Compiler"
PC/Blue	volume 15	ALGOL-M
PC/Blue	volume 16	Miscellaneous Utilities (programs extracted from Sig/M)
PC/Blue	volume 17	Miscellaneous Utilities (programs extracted from Sig/M)
PC/Blue	volume 18	Communications Package Graphics Game & PC Notes
PC/Blue	volume 19a	PC-File revision 9.0
PC/Blue	volume 19b	PC-File revision 9.0
PC/Blue	volume 20	Remote Bulletin Board System miscellaneous utilities
PC/Blue	volume 21	Cross Reference Utility Fron-End Interface Utility (Monitor)

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All 42 volumes (disks) of PC/Blue (public domain software)

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PC/Blue	volume 22	Expanding Lister Utility for BASIC Programs
PC/Blue	volume 23	Rational Basic-RATBAS Warm System Restarts Strip-Off WordStar High Bits Graphtrax Utilities
PC/Blue	volume 24	BASIC Games
PC/Blue	volume 25	BASIC Games
PC/Blue	volume 26	8087 Sampler Programs
PC/Blue	volume 27	Kermit
PC/Main Frame		Host Communications by Columbia University (1 of 2-reference PC/Blue volume 28)
PC/Blue	volume 28	Kermit
PC/Main Frame		Host Communications by Columbia University (2 of 2-reference PC/Blue volume 27)
PC/Blue	volume 29	Miscellaneous Basic Programs
PC/Blue	volume 30	Miscellaneous Application Systems
PC/Blue	volume 31	PC-Talk III (supercedes vol 18)
PC/Blue	volume 32	PC-Talk III Documentation Miscellaneous Comm Systems
PC/Blue	volume 33	Miscellaneous Applications
PC/Blue	volume 34	dBASE (TM) and SuperCalc (TM) templates
PC/Blue	volume 35	miscellaneous BASIC utilities
PC/Blue	volume 36	IBM Keyboard Drill System
PC/Blue	volume 37	Modem7 Program for IBM PC Program Control System WordStar modifications miscellaneous utilities
PC/Blue	volume 38	disk directory utilities Squish REMarks Lotus 1-2-3 modifications
PC/Blue	volume 39	Screen Editor Primitive Word Processor Memo Minder "Things" History Drill Multiplication Drill
PC/Blue	volume 40	EPISTAT-Statistical Package Miscellaneous Communications
PC/Blue	volume 41	Galaxy Trek w/graphics from the Washington Capitol PC group
PC/Blue	volume 42	"Cheap" Assembler RAM Disk WordStar Utilities "NUM"/"CAPS" Switch Sort Directory

FRAN-APPLE / User's Group

This group meets regularly from 7 P.M.- 8 P.M. at the New York Institute of Technology. Meetings are on the same night as the general meeting. In November, 17 members were present.

We were joined by Al DiBlasi who presented the ProDos, a new operating system. According to Al APPLE expects to realease the new system in January. ProDos features system software which will allow the end user to network APPLE II, APPLE III and LISA. It has complete file handling compatibility with APPLE III SOS. It will allow multiple interrupts (unlike DOS 3.3) We heard that it will great speed to the system. ProDos has hierarchical directory structuring. When ProDos is released, it will include programs to convert DOS 3.3 files into ProDos format. There will be no new hardware required. It will require an APPLE II or APPLE IIE with 84K or 128K.

We were quite impressed with Al's presentation. We all look forward to his future visits.

Submitted by Susan Heimlich, Chairperson.

REPORT FROM S/100

At the November meeting, Mark Zeiger gave members of the S-100 subgroup a preview of the new Sanyo MBC 555. Although it is not an S-100 system and does not run CP/M, members of this group turned out in force to see Mark Zeiger and the new hardware.

The first attraction of the MBC 550 (the single drive version of the MBC 555) is the price: $999. This includes keyboard and computer. It has the 16 bit 8088 microprocessor, 128K of ram (which can be expanded on board to 256K), one single sided double density drive (160K/disk), one Centronics parallel port, color graphics and software: WordStar, CalcStar, Easy Writer I and Sanyo Basic. The computer comes with the MS-DOS 1.5 operating system.

The Sanyo Basic is a large Basic which incorporates many graphics commands. It comes in the interpreter version only and makes use of the entire 128K memory. If Mark Zeiger is programming in Sanyo Basic, it must be good.

For an additional investment there are other goodies available: $100 gives you an optional serial port and $395 will buy a second disk drive with more software thrown in.

The disk format is completely compatible with IBM. The Sanyo and IBM software are compatible except when it makes use of the video ROM. That is to say, most graphics software will not run in the other machine.

Since the Sanyo MBC 550 and 555 will not be appearing on the market for several weeks, it will give us plenty of time to compare them to the other new low priced entries and some existing old ones. It is a very interesting machine.

report submitted by Jackie T.

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P o l y M o r p h i c U s e r ' s G r o u p
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This month was spent discussing the new hardware upgrade, the **SEA hard disk** which Al Levy installed for one of his cutomers. The 18 megabyte disk comes in an S/100 frame and comes with its own power supply. There is a crystal controlled DC spindle motor which assures accuracies of 0.01%, allowing 33 sector formats for more accurate data recovery.

There are center mounted read/write heads for precise alignment and optimized access rate.. The power saving mode reduces power dissipation to 14 watts during idle periods. An internal microprocessor eliminates more costly ICs for general decision making and performs constant drive checks during operation.

There is a 5.0 Megabit per second data transfer rate. This is a 4 platter drive using 5 1/4 inch Winchester technology. It uses full step positioning to assure accurate location of all tracks. The step mode is buffered to increase access times for faster throughput. One nice feature is the Start/Stop landing and shipping zone which protects data, heads and disks when the disk drive needs to be moved.

The Hard Disk has a 5 Megabyte SYQUEST (hard disk) backup as a sub-system. A 5 meg backup takes about 16 seconds.

As for the software. Poly supplies a software **Volume Manager** which acts as an interface between the system and the system software drivers. To install the hard disk, one has to run a program called **CONFIGURE.** The CONFIGURE program allows the SYSTEM Programmer to FORMAT the hard disk. CONFIGURE the asks how many volumes you need and the size and name of each. Volumes may be set up at any size within the parameters of the disk.

The volumes are then "connected" by running a Poly program called **V-SETUP.** V-SETUP writes over Volume Manager (actualy called Vmgr.OV) and the system is re-booted.

Al told us how he set up seven volumes, each the size of an 8" DS/DD disk. The CONFIGURE programs defaults the remainder of the disk to another volume.

When "LIST 8" is typed Volume 1 of the hard disk is listed. "LIST 9" will list Volume 2 of the hard disk etc.

For a temporary "connect" the **CONNECT** program allows the user to connect Logical Device xx to Physical device xx until the system is re-booted or the operater has changed his/her mind.

VLIST lists all of the devices and their assignments. The hard disk is assigned numbers and names.

Examples: Drive 1 = <1> (floppy)
Drive (15) = <8<PROGRAMS

When asked how he liked the HD Al's reaction was "I like the speed, the quiet operation and the ease of file access. You hardly know that a drive is being accessed. As most of you know, I was openly opposed to hard disks up till now. Having had my first experience I've become a convert."

Submitted by Lillian Weisberg, recording secretary

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A N N O U N C E M E N T

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LICA is proud to announce that **Robert Zito, C.D.P.** was awarded the certificate in Data Processing (C.D.P.) from the Institute For Certification of Computer Professionals (I.C.C.P.) for successfully completing the 1983 examination.

The I.C.C.P. annually administers the examination in more than 150 controlled testing centers at colleges and universities across the United States, Canada, and throughout the world.

Robert E. Zito, C.D.P. was one of the 1272 successful candidates out of 4117 who took this year's examination.

A total of 24,258 C.D.P.'s have been awarded since the first examination was given in 1962. I.C.C.P. is a nonprofit organization comprised of eight computer societies for the purpose of testing and certifying knowledge and skills of computer personel.

The examination established a method for recognizing a corps of individuals who have the knowledge considered important to data processing and information management. The C.D.P. helps lay a foundation for the continued growth of the data processing profession and for the personnel within the field seeking to attain a position of leadership. Robert E. Zito, C.D.P. also holds a Bachelor of Arts degree in Computer Science from Chaminade University in Honolulu, Hawaii.

****

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Doug McGarrett needs a SIGNETICS 8T16-IC Immediately if not sooner. If you can help to locate this chip call: (212) 464-4487

Murray Gilbert needs the manual for the North Star Ram-16KA2. Call 486-0367

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The entire CP/M SIG/M users' library is available on 5" northstar disks. We will copy onto any format disk provided time is allowed for the copying and a (copy to) machine is available. Dues will help pay for the library costs only. If interested, call me at (516) 293-8368. Disks will supplied for the cost of the media.

Ed Dowdell is maintaining the 8" disks while I will baby-sit the little guys. Ed's suggestion: Let's start reviewing the software. Do I see any hands? Al

****
THE DIF PROGRAM AS MENTIONED IN THE NOVEMBER ISSUE
****

This is the program to compare two AppleSoft BASIC files by character and line. It will identify lines containing different characters.

1) Append 8 line AppleSoft to Text File conversion routine to both old and new versions of program to be analyzed. Outputs are called OLDFILE and NEWFILE. Make sure that the line numbers on the conversion routine are not already in use.

2) RUN 60000 (CR)

3) LOAD DIF (CR)

4) RUN (CR) with NEWFILE in D1 and OLDFILE in D2.

AppleSoft to Text conversion Routine.

```
60000 D$=CHR$(4)
60005 PRINT D$;"MON,I,O,C"
60010 PRINT D$;"OPEN xxxFILE"
60020 PRINT D$;"WRITE xxxFILE"
60030 POKE 33,30
60040 LIST
60050 PRINT D$;"CLOSE xxxFILE"
60060 TEXT:END
```

****

Sig/M volume 23

MBasic disassembler
Date Routines
miscellaneous utilities
****

(original materials from Pascal Z User Group volume 5)

	-CATALOG.023	contents of Sig/M volume 23
	ABSTRACT.023	comments
	CRCKFILE.023	CRC of Sig/M volume 23
23.1	EXPO.PAS	demo on the use of exponents
23.2	EXPO.COM	/
23.3	COMPARE.DOC	UCSD program Compare documentation
23.4	DISASMB.DOC	disassembler in MICROSOFT Basic

related modules

8085	LST	8085	TAB	XREF	BAS
ZILOG	LST	ZILOG	TAB	XREF	SUB
INTEL	LST	INTEL	TAB	TDL	LST
TDL	TAB	LST8085	BAS	LSTINTEL	BAS
LSTTDL	BAS	LSTZILOG	BAS	TAB8085	BAS
TABINTEL	BAS	TABTDL	BAS	TABZILOG	BAS
DISASMB	BAS				

23.5. DATE.DOC — dates routines

related modules

PROMT	LIB	MAKEDATE	LIB	RMAKEDA	LIB
BRKDATE	LIB	DASTRLON	LIB	DASTRSH	LIB
DASTRFIX	LIB	DATE	PAS	DATEFUNC	LIB

23.6 MISC.DOC — miscellaneous routines

related modules

GETINT	LIB	CAPCHAR	LIB	PADSTR	LIB
CAPSTR	LIB	DEPAD	LIB	STRVAL	LIB

23.7	HANOI COM/PAS	
23.8	DIS.ASM/DOC	
23.9	CONFER.PAS/COM	conference scheduling

****

Sig/M volume 24

miscellaneous Pascal Z utilities
****

(original material from Pascal Z UG volume 6)

	-CATALOG.024		catalog of Sig/M volume 24
	-CATALOG.ACK		acknowledgement file
	ABSTRACT.024		descriptive contents of volume 24
	CRCKFILE.024		CRC of volume 24
24.1	COMPLEX.LIB	5K	complex number utility
24.2	CURSOR.LIB	2K	cursor control for SD Sales video
24.3	CURSOR.PAS	3K	/
24.4	CURSOR.COM	7K	/
24.5	FINDBAD.MAC	7K	locate bad sectors under CP/M 2.X
24.6	FINDBAD.COM	2K	/
24.7	LONGLINE.PAS	2K	concatenation demo
24.8	LONGLINE.COM	7K	/
24.9	NAD4.PAS	9K	name address data entry
24.10	NAD4.COM	9K	/
24.11	OTHELLO.PAS	6K	Othello - UCSD version
24.12	OTHELL1.PAS	8K	/
24.13	OTHELL2.PAS	8K	/
24.14	OTHELLIN.PAS	8K	/
24.15	PTABLE.PAS	1K	table generating demo
24.16	PTABLE.COM	8K	/
24.17	PTRS2.PAS	4K	pointer demo program
24.18	PTRS2.COM	5K	/
24.19	QQSORT.PAS	4K	Pascal - Quicker Sort
24.20	QQSORT.LIB	3K	/
24.21	QQSORT.COM	8K	/
24.22	QSORT.COM	7K	Pascal - Sort
24.23	QSORT.PAS	3K	/
24.24	QSORT.LIB	1K	/
24.25	RCPDAT.XXX	2K	recipe program
24.26	RCPDAT.YYY	1K	/
24.27	RCPDAT.MST	1K	/
24.28	RECIPE.COM	15K	/
24.29	RECIPE.PAS	20K	/
24.30	SHELL.PAS	3K	Pascal Shell sort
24.31	SHELL.COM	7K	/
24.32	SHELL.LIB	1K	/
24.33	SNOOPY81.CAL	5K	1981 calendar
24.34	XREF.PAS	10K	cross reference program
24.35	XREF.COM	14K	/
24.36	ZCOMPAR.PAS	2K	Pascal file compare utility
24.37	ZCOMPAR.COM	7K	/
24.38	F1.DAT	1K	/
24.39	F2.DAT	1K	/

Sig/M volume 25 database seed system
multi-track system BIOS
fixed length disk sort system
print format program

(original materials from Pascal Z User Group volume 7)

	-CATALOG.025		contents of Sig/M volume 25
	-CATALOG.ACK		acknowledgement file
	ABSTRACT.025		comments on Sig/M volume 25
	CRCKFILE.025		CRC of Sig/M volume 25
25.1	DATABASE.DOC	32K	database seed program by Dr. Bowles
25.2	DBBUILDE.CPM	22K	/
25.3	DBDEMO.CPM	1K	/
25.4	DBUNIT.1	8K	/
25.5	DBUNIT.2	19K	/
25.6	DBUNIT.3	22K	/
25.7	DBUNIT.4	17K	/
25.8	DBUNIT.CPM	1K	/
25.9	SGEN.COM	2K	BIOS for greater than 2 system tracks
25.10	SGEN.MAC	10K	/
25.11	MACROZ.MAC	18K	/
25.12	CLIB.MAC	9K	/
25.13	SGEN.DOC	5K	/
25.14	BSORT.ASM	40K	fixed length disk sort program
25.15	BSORT.COM	4K	/
25.16	BSORT.NOT	4K	/
25.17	PGLST.PAS	3K	print format program
25.18	PGLST.COM	8K	/
25.19	PGLST.NOT	1K	/
25.20	W3UA.LIB	6K	/

Sig/M volume 026 games
a simple mail label system
electrical engineering package
ham notebook
front panel emulator
VersaFloppy II double density BIOS

	-CATALOG.026		contents of Sig/M.026
	-CATA026.ACK		acknowledgement file
	CRCKLIST.026		checksum file
index	name	size	notes
26.01	CHEAT.ADV	3K	unofficial ADVENTURE cheat sheet
26.02	CHEAT.DOC	1K	/
26.03	VEGAS.ASM	26K	super slot machine
26.04	EL-E.BAS	18K	electrical engineering/design system
26.05	EL-E.INT	16K	/
26.06	EL-E.DOC	2K	/
26.07	QSO.BAS	1K	ham notebook - CBASIC
26.08	QSOEDIT.BAS	4K	/
26.09	QSOMERGE.BAS	2K	/
26.10	QSOFIND.BAS	1K	/
26.11	QSOSCAN.BAS	4K	/
26.12	QSOLIST.BAS	1K	/
26.13	QSO.DOC	2K	/
26.14	SYSMON.ASM	36K	front panel emulator
26.15	SYSMON.COM	5K	/
26.16	SYSMON.DOC	6K	/
26.17	SVC.LIB	1K	/
26.18	MYDDBIOS.Z80	13K	VersaFloppy II double density BIOS
26.19	MYDDBIOS.DOC	4K	/
26.20	DDSKBIOS.ASM	2K	/
26.21	MYBOOT.Z80	2K	/
26.22	FORMAT.Z80	10K	/
26.23	SYSGEN.Z80	4K	/
26.24	XEDIT.BAS	3K	simple mail label system - data entry
26.25	XEDIT.INT	2K	/
26.26	XMERGE.BAS	2K	file merge
26.27	XMERGE.INT	1K	/
26.28	XSCAN.BAS	2K	delete items from master
26.29	XSCAN.INT	1K	/
26.30	XEXTRACT.BAS	2K	extract items from master
26.31	XEXTRACT.INT	1K	/
26.32	XLIST.BAS	1K	list items from master
26.33	XLIST.INT	1K	/
26.34	XLABELS.BAS	2K	mail label print
26.35	XLABELS.INT	1K	/
26.36	XFIND.BAS	1K	/query of master
26.37	XFIND.INT	1K	/
26.38	XTEL.BAS	1K	/ query by telephone number
26.39	XTEL.INT	1K	/
26.40	XMAIL.DOC	3K	simple mail label system - documentation

BASIC-E(EBASIC.COM and RUN.COM), SCRAMBLE and CRCK have been included in the distribution to facilitate access.

Sig/M.027 Advanced Terminal Systems-Confidence Tests

-CATALOG.027	contents of Sig/m.027
-CATA027.ACK	acknowledgement file
CRCKLIST.027	checksum file

index	size	name	notes
27.01	2K	AND.SRC	
27.02	16K	APUT.SRC	
27.03	1K	ATSLIB.REL	
27.04	2K	BITTER.SRC	
27.05	51K	CONSRC.DOC	documentation manual
27.06	27K	CONTESTS.COM	
27.07	30K	CONTESTS.PAS	
27.08	11K	CPUTST.SRC	
27.09	7K	CRCGEN.ASM	
27.10	1K	DTST.PAS	
27.11	1K	GETCHAR.SRC	
27.12	8K	GOCRCGEN.ASM	
27.13	1K	LIB.REL	
27.14	1K	LOGIAND.SRC	
27.15	1K	LOGIOR.SRC	
27.16	17K	MEMTST.SRC	
27.17	9K	SERT.SRC	
27.18	7K	TESTSAVE.ASM	

Sig/M.028 A Small Library for Pascal/Z
Life/Wumpus Update
NAD Accounts Receivable System
Simple Doctor Billing Programs
Home Remote Control Programs

compiled by Charlie Foster

-CATALOG.028	contents of Sig/M.028
-CATA028.ACK	acknowledgement file
CRCKLIST.028	checksum file

index	size	names	notes
28.01	4K	LIBRARY.DOC	A Small Library
28.02	2K	ASL.REL	
28.03	1K	CHAIN.REL	
28.04	1K	CHAIN.SUB	
28.05	1K	COMPILE.SUB	
28.06	1K	HALT.REL	
28.07	1K	HALT.SRC	
28.08	10K	LIFE.COM	variations of LIFE
28.09	9K	LIFE.PAS	
28.10	10K	LIFE-C.COM	
28.11	7K	LIFE-C.C	
28.12	1K	CAVE0	CAVE update
28.13	1K	CAVE1	
28.14	1K	CAVE2	
28.15	1K	CAVE3	
28.16	1K	CAVE4	
28.17	1K	CAVE5	
28.18	6K	WADUZIT.COM	waduzit do?
28.19	4K	WADUZIT.DOC	
28.20	7K	WADUZIT.PAS	
28.21	18K	NAD.COM	NAD Accounts Receivable System
28.22	12K	NAD.PAS	
28.23	6K	NAME&ADD.DOC	
28.24	25K	RECEIVAB.COM	
28.25	17K	RECEIVAB.PAS	
28.26	12K	ACTTREC.DOC	
28.27	20K	DISKBILL.PAS	simple doctor billing programs
28.28	9K	RECMAKE.PAS	
28.29	1K	ANDMSK.SRC	home remote control programs
28.30	2K	EXORG.SRC	
28.31	3K	COMPARE.PAS	
28.32	1K	ORMSK.SRC	
28.33	2K	REMOTE.SRC	
28.34	2K	PROG.DOC	

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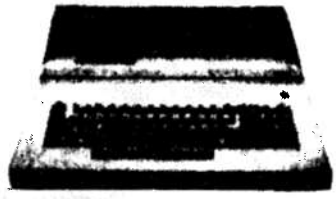

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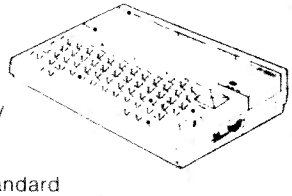

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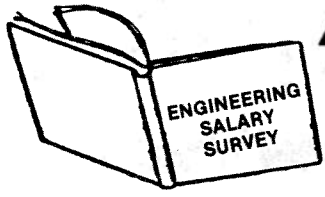

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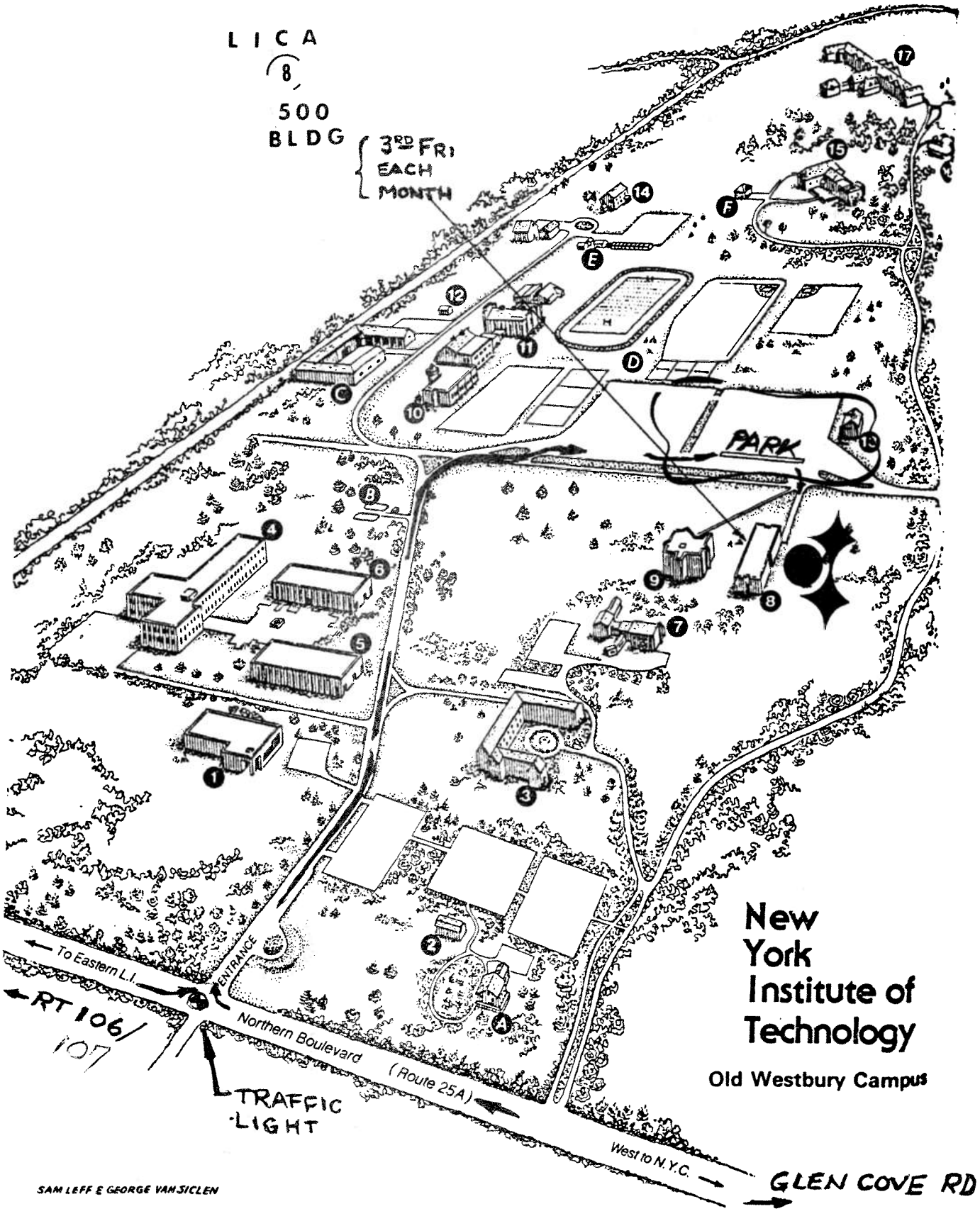
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LIGHT
West to N.Y.C.
GLEN COVE RD
New
York
Institute of
Technology
Old Westbury Campus
SAM LEFF & GEORGE VANSICLEN

The Stack LONG ISLAND COMPUTER ASSOCIATION
PO BOX 71 - HICKSVILLE, NY 11802

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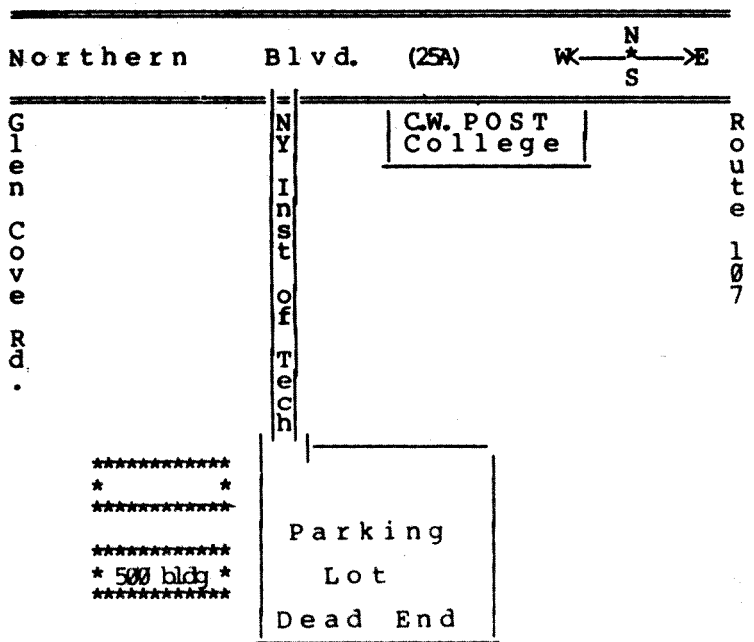
PAID
PERMIT 44
JERICHO,N.Y.

ADDRESS CORRECTION REQUESTED



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