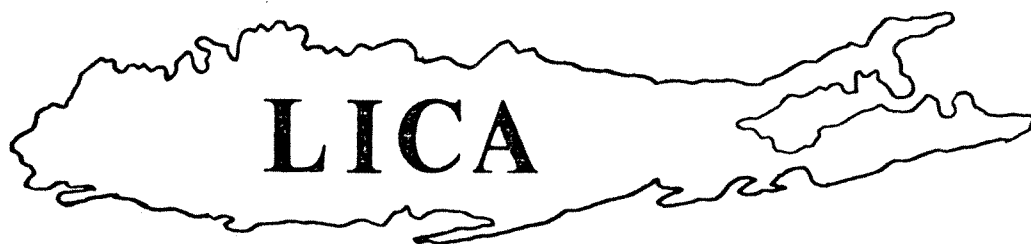


LONG ISLAND COMPUTER ASSOCIATION



Volume 4 Number 3

THE STACK

March, 1980

Officers:

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Vice-President	Ed Robles
Secretary	Alan McRae
Treasurer	Aileen Harrison

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Al Stone

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Bethpage, NY 11714

MONTHLY MEETING

Each month, since January 1976, the Long Island Computer Association has held a general membership meeting on the third Friday at 8:00 p.m. The current venue is Room 508, Building 500 at the Old Westbury Campus of the New York Institute of Technology. Dick Grabosky of Hudson Digital Electronics (HDE), who was the featured speaker at last month's 6502 Users' Group meeting will discuss the pros and cons of turning our fascinating hobby of computers and computing into a business activity. The date this month will be the 21st.

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SPECIAL INTEREST GROUPS

8080 Users' Group - A generally-expressed view at recent meetings has been a desire to "return to the old days". Originally the members of this assemblage were the experimentors, the innovators, and the pioneers. The early meetings were filled with "round table" style discussions on fine points of both hardware and software construction, development, and implementation. Most of the present members of this sub-group are S-100 afficiandos and many possess quite sophisticated and complete systems. Thus, no particular speaker has been scheduled for the March 8080 meeting, which will be held one week prior to our general meeting, Friday the 14th, -same time and room as the larger group. Come on down for a "round table" on S-100 interests.

Augie Schwab, Jr. (516) 374-4168

TRS-80 Users' Group - This sub-group is rapidly expanding, with 34 members at last count!! Last month's lecture provided us with an introduction to assembly language programming. This month we will continue with this topic and actually work with some small assembly language programs. I've also found a very good ginning book called "Z-80 AND 8080 ASSEMBLY LANGUAGE PROGRAMMING" by Kathe Spracklen. The publisher is Hayden, and it lists for \$7.95. Now that the group is expanding so rapidly, it is becoming very hard to select topics that will hold everyone's interest. We now have a wide variety of of persons, both

experienced and novice. It occurs to me that we might consider meeting twice each month. Our second meeting could be restricted to more advanced topics, such as teaching an assembly language programming course which could be videotaped for multiple future uses. In this manner, the group members who can't make these lectures, or aren't ready to take full advantage of them now can catch up later. We've also been kicking around the idea of starting our own program library. I propose that we each contribute \$5.00 to create a lending library of mini-disks to be owned by the club, and which will contain software donated by TRS-80 sub-group members. A club librarian will maintain the diskettes, and will periodically distribute an index to interested parties. The period of sign-out would be one month. The same concept may be feasible for cassettes, but I need your feedback to ascertain the level of interest that is present.

Bob Zito (516) 822-4031

6502 Users' Group - Dick Grabosky's talk last month was so well-received that, as noted above, he has been invited to be the featured speaker at LICA's general membership meeting.

Chris McCormick has obtained an inexpensive 8080 emulator which functions on an unexpanded KIM or an APPLE computer. An review of this item will be submitted for inclusion in the next STACK.

Steve Perry (516) 744-6462

The LONG ISLAND COMPUTER ASSOCIATION is open to anyone, amateur or professional, with an interest in computers, computer applications, programming, or related subjects. Dues are \$10 per year, which includes monthly issues of this publication, The STACK.

LOOKING BACKWARD

Dr. Heller, Chairman of the Computer Science Department at Stony Brook University had been scheduled to speak at last month's general meeting. He was unable to attend. President Bob Weidemann and 1978's past President Jeff Kravitz delivered an inpromptu lecture on structured programming.

The Executive Board has been authorized to allocate up to \$300 from the treasury to cover the costs of incorporating LICA as a non-profit educational organization.

Alan McRae (516) 499-5308

YOU CANT KEEP A GOOD MAN DOWN DEPT.

Stan Veit and David Levine are back in business, with an organization called VEIT'S DIVERSIFIED OPERATING SYSTEMS LTD., 19 W. 34th St. NYC, NY 10001 (212) 695-5108. These long-time friends of L.I.C.A. are factory representatives for A.C.I. (Associated Computer Industries, Irvine, Ca.) who make a PASCAL MICROENGINE-powered system with full business software. An eight bit, S-100 machine, with software is also available.

COMMERCIAL ADVERTISING POLICY

The STACK offers free classified listings to hobbyists for their offerings and solicitations. Commercial enterprises seeking employees, consultants, or looking for hardware and software may also submit short classified notices for publication without charge. We do however accept full-tone, camera-ready copy for 1/4, 1/2, and full page displays. Rates are based upon a minimum three month participation, although an advertiser's copy need not be the same in all three months. Write The STACK, or contact your Editor Fridays through Sunday at (516) 731-1649. All submissions must be received no later than the last

calendar day of the month prior to publication.

CBBS/LICA

Our "Bulletin Board" system has been up and running since Thursday, February 1. We trust L.I.C.A. associates with 110-600 baud modems will call at our number which is (516) 938-9043.

Just to help you out, the following is a description of how to use the system. After connection has been established, hit your 'RETURN' key a few times (to let the system know what baud rate your terminal is using). The system will then print the WELCOME message and the BULLETIN. Either of these messages can be stopped by hitting 'CONTROL-C'. Then just answer the questions. If you find that you are losing characters at the beginning of a line when the WELCOME message is being printed, hit 'N' once (or twice if no effect is observed the first time). This will cause the CBBS/LICA to send nulls after each carriage return.

The functions supported by our version of CBBS are as follows:

- A = alter baud rate
- B = reprint bulletin
- C = case switch (upper/lower)
- D = duplex switch (echo/no echo)
- E = enter message into system
- G = goodbye (leave system)
- H = help with functions
- K = kill message from system
- N = nulls: set as many as required
- P = prompt switch (BEL on/off)
- Q = quick summary (message number, subject)
- R = retrieve messages by number
- S = summarize messages
- V = video backspace
- W = reprint WELCOME
- X = expert user mode
- # = print caller #, high message number, # of messages
- ? = print this list

A few footnotes on the above functions:

Don't alter the baud rate unless you can alter that of your terminal's also.

The video mode toggle allows your video screen to backspace over deletions. Do not use if you are using hardcopy.

There are a few time-saving features on the K, Q, R, and S functions. When killing or retrieving a message, you must specify a message number. You will be asked for this number, or you may give the number while giving the function. For example, 'K;4' means 'kill message # 4'; 'R;17' means 'retrieve message # 17'. When getting a (S)ummary or (Q)uick summary, you can also give the number with the command. For example, 'S;54' means 'summarize the messages, starting with # 54'.

The (S)ummarize function is very powerful. To observe all it can do, type

'H' when asked for a function and then 'S' or 'SUMMARY' when asked for the keyword.

Have fun with, and make use of the system. We plan to add a program downloading feature shortly, whereby the CBBS/LICA will send programs and files stored on the disk. Program uploading will take a little longer. Should the user have any suggestions, or experience trouble, call me or the Harrisons, at whose home the CBBS is physically located ((516) 938-6769).

Mark Zeiger (212) 454-6985

CBBS HARDWARE REPORT

LICA has purchased a Potomac Micro-Magic MM-103 modem. All other hardware is on short term loan from the following members:

- 1) disk drive: Dave Yulke
- 2) 16 k memory: Bob Kowitt
- 3) 8 k memory: Dave Metal
- 4) 8 k memory, I/O board, IMSAI mainframe, disk cabinet/power supply: Gerald Harrison
- 5) disk controller: Harry Phillips

Donations and/or long-term loans are being solicited so that we at LICA can replace/augment the above devices.

Our sincere thanks to Hazeltine Corporation for their generous promise of a model 2000 Video Terminal. We expect to have delivery in six to eight weeks.

We at CBBS/LICA need a second Shugart 800/810, more ram memory, as well as replacements for the currently loaned hardware.

Any person, natural or corporate, wishing to donate hardware, please contact me.
Gerald Harrison (516) 938-6769

CLASSIFIED NOTICES

Stony Brook Univ. computer science major, well-versed in structured programming and PASCAL proposes to chair a new sub-group. Call this LSI-11 owner weekends.
George A. Caccioppo, Jr. (516) 286-8475

SERVICES: SHUGART disk drive alignment & repair: Steve Metal (516) 499-1135

INCOME TAX PREPARATION SERVICE

Club members and their families can avail themselves of especially low rates for tax return preparation, available throughout Nassau and Suffolk counties.
Aileen Harrison (516) 938-6769
B. Sczerba (516) 731-1756

JOB OPPORTUNITIES

Project Engineer - to be responsible for hard- and software development of microprocessor-based instrumentation and control systems for leading L.I. manufacturer. Degree required. Salary \$32K.
Call Don Valentine days: (212) 947-6027 or after 8:00 p.m.: (516) 883-6336

Part-time programming, systems analysis, systems engineering, operations, persons desiring to start or to staff a retail computer store.
Contact Alan McRae (516) 499-5300

S-100 MICROSYSTEMS MAGAZINE: A REVIEW

Sol Libes, who has been the man most responsible for the Amateur Computer Group of New Jersey, who has written many articles of value to the computer hobbyist community, and who has a regular column in BYTE magazine has come out with the first issue of the six-times per year S-100 MICROSYSTEMS. We hope that the quality of this publication will improve, because we cannot conceive of the successful continuance of something as poorly printed, sparsely assembled, amateurishly written, and apparently totally unedited surviving. I am reminded most strongly of the story of the emperor's new clothes. Despite the ballyhoo and word-of-mouth hype, we feel that those associated with this new publication should despair in the nakedness and lack of substance in their premiere emission.

PROGRAMMING TECHNIQUES

Many printers, such as the TI 810, on which The STACK is printed, do not recognize the ASCII backspace character. Yet, for many types of printed output, it is often desirable to overstrike previously-printed areas, such as in computer generated pictures, or as a means of emphasis by simulating bold face type. The routine below illustrates the use of the ASCII carriage return code, without the usually accompanying line feed instruction. Here, two of the seven words in the test phrase will be overstruck three times, producing the desired effect.

```
10 LPRINT "This is a TEST of the PRINTER";
20 FOR I%=1 TO 3:
    LPRINT CHR$(13);:
    LPRINT TAB(11) "TEST"; TAB(23) "PRINTER";:
NEXT
```

Al Stone (516) 731-1649

IMPROVING BASIC SORTS

Most of the time spent in a BASIC sort involves moving data items around, and BASIC is not one of the better memory managers. If, instead of moving the data items you were to move their addresses around, significant decreases in sort times can be realized.

Most typical BASIC sorts probably have the following line in them to manipulate the data items (or one very similar to this):

```
T$=A$(I):A$(I)=A$(J):A$(J)=T$
```

If the BASIC that you are using has a function [VARPTR] which will return the length and address of the data item addressed, try substituting the following lines for the one above:

```
T1=PEEK(VARPTR(A$(I))):
T2=PEEK(VARPTR(A$(I))+1):
T3=PEEK(VARPTR(A$(I))+2)

POKE(VARPTR(A$(I)),PEEK(VARPTR(A$(J))):
POKE(VARPTR(A$(I))+1),PEEK(VARPTR(A$(J))+1):
POKE(VARPTR(A$(J))+2),PEEK(VARPTR(A$(J))+2)

POKE(VARPTR(A$(J)),T1:
POKE(VARPTR(A$(J))+1),T2:
POKE(VARPTR(A$(J))+2),T3
```

This substitution of code causes only the pointers to be manipulated instead of the actual data items. If you can afford the extra bytes of memory for the added code you will observe a very dramatic reduction in sorting time.

Abstracted from an article in 80-US JOURNAL

Albert Flapan (WA2FBQ) (516) 796-2965

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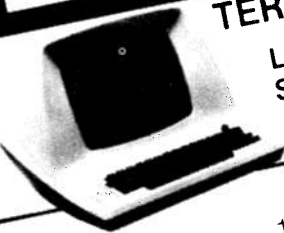
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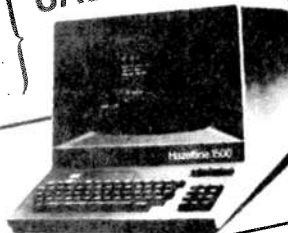
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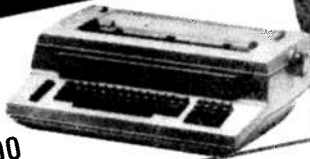
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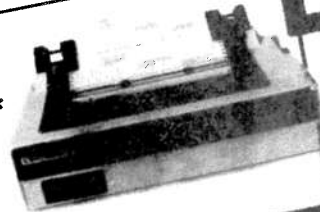
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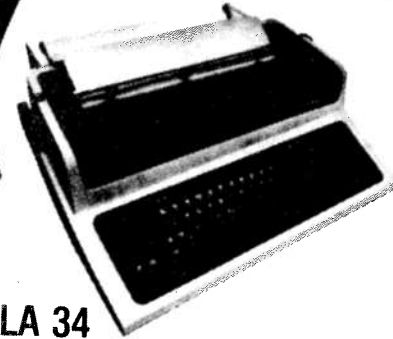
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