OUR NEXT MEETING will be on Friday.

OCTOBER 21, 1983 at 7:30 pm

PLACE: KEY BANK BLDG.

SW corner of Rt. 20 and Rt. 155

THE NOVEMBER MEETING will be on Friday,

NOVEMBER 18, 1983 at 7:30 pm

PLACE: KEY BANK BLDG.

SW corner of Rt. 20 and Rt. 155

October's meeting will include an introduction to computers and the
handicapped, the report promised last month on possible charter changes,
and if time permits, de-bugging your BASIC program.

UPSTATE 99/4A USERS GROUP
P.O. BOX 13522
ALBANY, N.Y. 12212

ALBANY, NY
PM
17 OCT
1983

USA 20c

VOL I, NO. 8   OCTOBER, 1983

Edmonton Users Group
P.O. Box 11983
Edmonton, Alberta T5J 3L1

Most of us are still struggling with our MINI-MEMORY modules. As I promised
last month, let's take a crack at a small, useful assembly program. The line-
by-line assembler that you get on cassette tape with your MINI-MEMORY also
contains a sample program called LINES that shows the bit mode capability of
the 99/4A. When you use the assembler, you just type over the object code for
LINES. As a struggling beginner, I find it confusing to see the object code
for this program displayed while I am typing in a new program. Also when
debugging later, it can be tough to tell where my new code stops.   The
following is a simple program that will clear the MINI-MEMORY from >7D00 up.

First load the cassette tape with NEW, OLD and LINES into your MINI-MEMORY
using EASYBUG. Then enter MINI-MEMORY and the RUN option. When asked for the
PROGRAM NAME, select NEW. Type in the following program. The listing below
shows the addresses and the object code as they appear after you type in the
assembly language source code shown in the 3rd, 4th and 5th columns. You need
not type the COMMENTS column, that is just for the purposes of this write-up.

ADDRESS	OBJECT CODE	LABEL	OP CODE	OPERAND(S)	COMMENT(S)
7D00			AORG	>7FC0	Note 1
7FC0	0201		LI	R1,>7D00	Note 2
7FC2	7D00				
7FC4	04F1	ST	CLR	*R1+	Note 3
7FC6	0281		CI	R1,>7F80	Note 4
7FC8	7F80				Note 4
7FCA	16FC		JNE	ST	Note 4
7FCC	0460		B	@>71A6	Note 5
7FCE	71A6				
7FD0			AORG	>701E	Note 6
701E	7FE8		DATA	>7FE8	Note 6
7020			AORG	>7FE8	Note 6
7FE8	434C		TEXT	'CLEARS'	Note 6
7FEA	4541				Note 6
7FEC	5253				Note 6
7FEE	7FC0		DATA	>7FC0	Note 6
7FF0			END		Note 7

Note 1: Takes you to where we will start the program.
Note 2: Loads register 1 with the address where we want to start clearing.
Note 3: Clears the word at the address in register 1 to zero and increments
            the address in register 1 by two.
Note 4: Checks to see if we have reached address >7F80 and cycles back to
            the statement labeled "ST" if we have not.
Note 5: Branches to address >71A6, which is the beginning of NEW.
Note 6: This section names the program CLEARS and updates the REF/DEF table.
            See Jon Daggett's August Mini-Memory column or pages 18 and 20 of
            your Line-by-Line Assembler Manual.
Note 7: Exits the Line-by-Line assembler.

Now select the RUN option; the program CLEARS. This clears all the memory from
>7D00 to >7F80. CAUTION: This erases the LINES program, so use EASYBUG to save
this copy of the Line-by-Line Assembler with NEW, OLD and CLEARS on a separate
tape (I suggest saving from >7000 to >7FFF). Note that we did not ask CLEARS
to clear addresses >7F80 to >7FC0. Next month we will uses that space to load a
program called NAMES that will catalog our MINI-MEMORY module.

                                                    Mike Henry

It's October and this column is still alive and kicking. Still no input yet
from members of the Upstate 99/4 Users Group. I know that you're out there
and i would again like to encourage you to share any hints or tricks that
you have with your fellow club members. If you have something that you
think is worth sharing, send it to my home at 734 Wright Avenue,
Schenectady, N.Y. 12309, to the Users Group at P.O. Box 13522 in Albany,
or talk to me at our monthly meetings. I'm waiting for your input. Here are
some hints found in newsletters from an outfit called TIGER SOFTWARE.

Item 1:
Here's a real potential lifesaver that I got from Jim Peterson of Tiger
Software. I'ts 2 A.M. . . . . You've just gotten the last bug out of your
new program. You sleepily put a new cassette in the recorder, type "OLD
CS1", hit ENTER and . . . ooops! You meant to type "SAVE CS1"!! But all is
not lost - just type Shift E. You'll get the message "PRESS CASSETTE STOP
THEN PRESS ENTER" . Just hit ENTER, get an IO error message and start over.
You'll find that your program is still in memory and has not been wiped out
by the "OLD" command. You can do this after the "REWIND CASSETTE TAPE CS1
THEN PRESS ENTER" or even if you've gone as far as the "PRESS CASSETTE PLAY
CS1 THEN PRESS ENTER" message, but not after that. I sure could have used
this hint years ago. You only have to use this one once to appreciate it.

Item 2:
For beginning programmers and new TI 99 owners. here's another hint from
Jim peterson. If you do not yet own the EXTENDED BASIC module, but think
that you might someday make that purchase, you can program to make your
TI-BASIC upwards compatible to EXTENDED BASIC later. Don't use character
sets 15 and 16 (ASCII codes 144-159). If you use multiple colons as print
separators, put a space between them such as : : : :. Then when you get
your EXTENDED BASIC, your programs will run without modification and will
probably run faster.

                              Mike Henry

                  S W A P   C L U B   N E W S

It has been a busy month for the swap club between the September and
October meetings. We had several contributions from the Fairweather family
and from Keith Merrill. In addition we had a one-for-one swap of twenty
programs with another users group. I am currently (it's Oct. 8th as I am
writing this newsletter column) cataloging these programs and hope to have
most of them in the Swap Club by the time of our October meeting. I'm
currently trying to divide the catalog up into categories such as games,
education, etc. and hope to have it ready by the 21st.

We had one Swap club transaction on diskette this month -- what a pleasure
compared to cassette. At the October meeting, we'll again try to be open
for Swap Club business for at least 15 minutes before the start of the 7:30
PM meeting time. We will close at 7:30 so that everyone (myself included)
can pay attention to the meeting, and then re-open after the meeting.

This will most likely be my last month as Swap Club Chairman. I founded
the Swap Club in our Users Group in Octobgr of 1981 and have been it's
Chairman for 24 months. I plan to ask the President to appoint a new
Chairman after the elections. Many thanks to Paul Amodeo and Rich Lane for
their support as Presidents during that time span.

                              Mike Henry

To use your TI99-4(A) to contact an information utility like The Source,
you need an RS232 port (serial), a modem and the Terminal Emulator (PHM3035).
Except for a few bulletin boards, which anyone may call without a fee, you
will need to subscribe or open an account, and get a password for each utility
or mainframe you want to use.

You may want to call up an external information source just to impress
friends who want to know what your micro can do, but what else can you find out
or do? You can get information on a wide variety of subjects: today's news,
stock market information, the President's calendar for the day, airline
schedules, reviews of restaurants in NY City, a list of readings on almost any
subject, etc.

You can play games, alone, or participate in a national contest that
CompuServe runs. You may leave messages for anyone else who has a password
(electronic mail). You can read one of several newsletters published
electronically. You can hunt for a job, or list a position you have open.You
can chat with other subscribers who are on at the same time you are (electronic
CB). You can download programs. You can list programs, services or equipment
for sale. One service even offers a lonely hearts dating board!

You can use the mainframe's computer power in a number of ways. You can
store programs or data in the vast memory of the host computer. You can program
in a language not available on your micro, FORTRAN for example. You can upload
material to be printed on the high speed printer associated with the mainframe
or computer service.

Now a hint or two. Time charges on these services can run up pretty fast,
so I advise reading the manual carefully before getting on, so as to act as
expeditiously as possible. Playing games can use up a lot of time. Be sure
you know how to get off before you start. (You can always hang up but it may
be several minutes before the computer realizes you are not there and stops the
clock. Several of the services have different charges for different times of
th day and night, so try to use the service at off peak hours: response time is
better then too because fewer users are competing.

When you first power up the Terminal Emulator will give you two choices,
th first requiring you to select all the options (baud rate, parity, etc.), the
second is a default to the most commonly used values for these parameters.
Virtually all the information utilities will accept these default values, but
in contacting another mainframe (like the computer at SUNYA or RPI), you will
need to check with the computing center for the proper values.

While a printer cannot be connected up as a slave to print everything that
appears on the screen, you can "dump" from the screen to the printer. Since
several pages of text can be captured in the computer's memory, you can use the
arrow keys to move text onto the screen, and then dump it. This can be done
even after you have signed off. Text from the screen can also be output to the
speech synthesizer to be read aloud, or to a disk or cassette tape.

Next month I will list a number of the information utilities, and give
brief information on features and costs of each.

Robert S. Burgess

Help!!!!!! During several of the last meetings newsletters from other
user groups have disappeared off the back table. We would sure appreciate it
if they would be returned. We have been asked to reprint some articles but can't
because some one borrowed the only copy we have.

Wanted— Input from members on directions they feel the club should move
into or toward. Should classes be formed in the different languages? Should
the newsletter be expanded like International's? Should the group become more
informal? How should any increased expenses be paid? Much additional growth
will mean greatly increased expenses. These are all questions that should be
answered soon, because even not answering them provides answers whether or not
you want it to.