

# CPUUG NEWSLETTER



VOLUME 8 NUMBER 2

99er

FEBRUARY, 1989

## MINUTES

January 16, 1989

The meeting opened with Barry passing out our newsletter since it was delayed in arriving. Thank you Kurt for picking it up and delivering it.

Next, Dave requested that we form a nominating committee for the purpose of selecting candidates for the various offices up for election in April. The following members agreed to research and make the nominations:

Marty Gutekunst 652-3702  
Harry Long 737-1979  
Rich Lindway 232-5697

They will be meeting sometime in the near future and be contacting members for the various posts. If you feel that you want to be involved, please contact one of them either at the meeting or at one of their home numbers.

It was announced that Darry Boone is working on a new version of Archiver. More information as we get it. He is also working on MBX Utilities, this will be copywrited material, not freeware.

The 1989 Computer Exposition is set for the 3rd Sunday in October. (October 15th). It will be held at the same location as last years'

successful show. (Carlisle Fairgrounds). Dave and Barry will be meeting with CCARS in the very near future to lay out the plans.

Our club's disc controller card went down and it was decided to purchase a replacement. A motion was made, voted and passed for Barry to buy one from Pete Baney for the sum of \$50. Barry wrote out the check and the new card was installed during our break. Thanks Pete for having the card when we needed it.

Barry was asked to send a letter to the Chicago Users Group about their Hardware manual. A motion was made to purchase it, voted and passed.

With no further business on the floor, the meeting adjourned and the club's Library was made available for the members to copy.

Nick set up a demo of TI-ARTIST so that we could see the proper way to print out our graphics.

Barry took over the system at 9pm and gave a walk-thru of TI-BASE ver 2.0 for the members. This included a menu-driven command file. All of our updated versions were picked up and payed for. (note...Ver 2.01 is now available to all those members who purchased ver 2.0. I will make the copy free of charge if you will bring your ver 2.0 disc to the meeting., or contact me at home)

Till next time,  
Barry Long, Secretary

NEXT MEETING: MONDAY MARCH 20th



The Executive Washroom

by

Dave Ratcliffe  
President and Chief Nut Case,  
C.P.U.G. Harrisburg Pa.

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My goodness, here it is February already. Before you know it, it'll be October and time for another Computer Expo. That means it's time to start planning. At the January meeting, I asked for any comments or suggestions from the membership as to what we should do this year. The silence was deafening. We NEED your input to insure everyone is satisfied. Given no input, we expect no complaints after the fact. Also, we will start pushing soon for commitments from the membership for work details at the Expo. There were some complaints from CCARS about last year regarding shared duties. Some were valid and we will be addressing these at future meetings. Others were just people who make noise just to hear themselves. Brian Greenway and I have already met about the '89 EXPO and it has been made plain that if we don't satisfy CCARS this year, next year we're on our own. I hesitate to say this but this is YOUR User Group and it lives

or dies on YOUR actions.

It's almost Election Time! if you have a desire to serve your fellow TI'ers in a specific office, contact Harry Long, Marty Gutekunst or Rich Lindway. These fine gentlemen are serving as the Nominating Committee and will be taking care of setting up candidates for the coming festivities.

In the 'what's happening in the TI world' department.... Jim Reiss is working on a GIF reader program for the TI. He's in the process of debugging it at this writing (1/27) and I can honestly say that when it's done, I'LL send him \$\$\$ for it! Elsewhere, TI is still repairing consoles if you have any broken ones laying around. As of 1/1/89, the price is \$45 plus \$6 S&H. Send to:

Texas Instruments  
ATTN: Repair Center  
2305 North University  
Lubbock Tx 79415  
(806)741-2265 or 2268

I know of a TI owner who had a repaired unit back in his hands within 2 weeks.



## TI-BASE

A Tutorial on creating command files

by Barry Long, CPUG

Starting this month, and continuing as long as I can and you want me too, I will attempt to write a column on the hottest, newest software package to hit the TI market.

This month we will begin with designing a Command file called MENU. This will (hopefully) help you learn how easy it is to use TI-BASE, and, make the program work FOR you, not against you.

MENU will allow you, with one keypress, to do many of the standard features used on a regular basis.

We will Create the various Command files using the Editor mode of TI-WRITER (EA side). Since some of these Command files will be longer than the standard buffer space in TI-BASE, we cannot use it. If you feel you would rather use the TI-BASE buffer, then adjust your Command files into smaller segments.

Duplicate the following lines exactly as they are shown. All commands MUST be in Capital letters. Do NOT include the numbers, they are for reference only!

```
1 * Command file MENU
2 CLEAR
3 CLOSE ALL
4 SET TALK=OFF
5 CLEAR LOCAL
6 LOCAL CHOICE N 2 0
7 REPLACE CHOICE WITH 0
8 WRITE 2 8 "CENTRAL PA 99/4A USERS;
  GROUP"
9 WRITE 4 15 "MASTER MENU"
10 WRITE 7 10 "1) ADD RECORDS"
11 WRITE 9 10 "2) EDIT RECORDS"
12 WRITE 11 10 "3) SORT RECORDS"
13 WRITE 13 10 "4) PRINT DATABASE"
14 WRITE 15 10 "5) RETURN TO PROMPT"
15 WRITE 16 10 "TO EXIT FROM DATABASE"
16 WRITE 20 10 "ENTER CHOICE"
17 READ 20 24 CHOICE
18 DO MENU1
19 RETURN
```

### Breakdown

Line 1: Any line that begins with an asterisk is ignored by TI-BASE. This is a "comment" line. Good place to describe your file.

Line 2: Just telling the system to clear the screen.

Line 3: Automatically closes all files that you might have left open.

Line 4: Sets the command Talk Off. If you want to follow the line-by-line process of your Command file, set this to ON. Works fine as a trouble-shooter.

Line 5: Clears all available Local Space. Allows you to reassign your Local Variables.

Line 6: Defines a Local Variable with a name of Choice, Numerical, and a length of 2 places and zero decimal.

Line 7: Replaces the Local Variable Choice with a zero. Allows a new number to be inserted in its place.

Line 8: Just a title screen display for your Command file. Nice touch, can be eliminated if you desire.

Line 9 to 16: The various choices on our menu.

Line 17: System will wait until you make a keypress. Similar to "Accept At" in EX Basic.

Line 18: Tells TI-BASE to DO another Command file.

Line 19: Returns to main system prompt.

This is the extent of my little tutorial for this month. Next month we will create the second menu file. You can see how easy it is to create a Master Menu screen and a keypress command. If you like, start up TI-BASE and DO MENU. It will error out because we haven't created the next Command file (MENU1) yet, but, you will be able to see how it works. If you leave the TALK ON, each line will be displayed as it is operating. (Makes for a messy screen though)

You may customize the above file to suit your own needs. But, try to follow the structure as much as possible. Think about the Data-file you want to create, and how you will use it. In future lessons, we will design a simple Data-base and learn (I hope) to manipulate it to do everything but sing and dance!

GETTING THE MOST FROM YOUR CASSETTE SYSTEM  
BY MICKEY SCHMITT  
NUMBER 3  
KEEPING YOUR CASSETTE TAPES AND PROGRAMS ORGANIZED  
PART I

HOW MANY TIMES HAVE YOU WANTED TO FIND A SPECIFIC PROGRAM THAT YOU HAD BUT...

1. YOU CAN'T REMEMBER WHICH CASSETTE YOU PUT IT ON.
2. OR... YOU CAN REMEMBER WHICH CASSETTE YOU PUT IN ON... BUT NOW YOU CAN'T REMEMBER WHETHER YOU PUT IT ON SIDE A OR B.
3. OR... YOU CAN REMEMBER WHETHER YOU PUT IT ON SIDE A OR B... BUT NOW YOU CAN'T REMEMBER WHAT THE COUNTER READING WAS FOR THE BEGINNING OF THE PROGRAM.
4. OR... YOU CAN REMEMBER WHAT THE COUNTER READING WAS FOR THE BEGINNING OF THE PROGRAM... BUT NOW YOU CAN'T REMEMBER IF THE PROGRAM WAS WRITTEN IN BASIC OR EXTENDED BASIC... OR MAYBE IT WAS THAT YOU NEEDED TELI... OR WAS IT MINI-MEMORY?

IF ALL OF THIS SOUNDS WAY TOO FAMILIAR TO YOU... DON'T PANIC. YOU ARE NOT ALONE! THE SAME SITUATIONS HAVE HAPPENED TO ALL OF US WHO USE A CASSETTE RECORDER - AT LEAST AT ONE POINT OF TIME OR ANOTHER.

THE SOLUTION - GET ORGANIZED!  
STOP WASTING ALL OF YOUR VALUABLE COMPUTER TIME HUNTING FOR PROGRAMS!

NOW THAT YOU SEE THE NEED FOR SOME "ORGANIZATION" - LET ME BE ONE OF THE

FIRST TO TELL YOU THAT THERE ARE A LOT OF DIFFERENT WAYS IN WHICH TO GO ABOUT ORGANIZING YOUR PROGRAMS. KEEP IN MIND THAT WHILE ONE METHOD MAY SEEM TO WORK THE BEST FOR YOU - IT MAY NOT BE THE BEST METHOD FOR SOMEONE ELSE. ONLY YOU KNOW WHAT METHOD WILL BEST MEET YOUR OWN NEEDS!

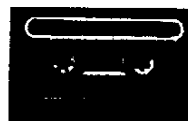
IF YOU ARE NOT USING ANY SYSTEM RIGHT NOW... I WOULD SUGGEST ORGANIZING YOUR PROGRAMS WITH THE USE OF 3 X 5 INDEX CARDS... USING THE FOLLOWING INFORMATION AS A GUIDELINE:

1. CASSETTE TITLE AND/OR CASSETTE NUMBER
2. CASSETTE SIDE
3. PROGRAM NAME
4. COUNTER READING
5. LANGUAGE USED
6. PERIPHERALS NEEDED
7. PROGRAM DESCRIPTION

THAT SHOULD BE ENOUGH TO GET YOU STARTED AND KEEP YOU QUITE BUSY FOR AWHILE. I KNOW THAT IT ALL SOUNDS LIKE A LOT OF WORK... BUT IT WILL BE APPRECIATED IN THE LONG RUN... WHEN YOU NEED TO FIND A SPECIFIC PROGRAM AND YOU DON'T HAVE ALL DAY TO HUNT FOR IT!!!

NEXT MONTH I WILL CONTINUE WITH THE TOPIC OF KEEPING YOUR CASSETTE TAPES AND PROGRAMS ORGANIZED... USING THE INFORMATION GENERATED BY THE 3 X 5 INDEX CARDS AS A FOUNDATION FOR A PROGRAM WHICH CAN BE SAVED ONTO THE BEGINNING OF YOUR CASSETTES.

IF YOU NEED ANY HELP IN STARTING TO GET YOUR CASSETTE TAPES AND PROGRAMS ORGANIZED - JUST GIVE ME A CALL (412-335-0163) AND I'LL TRY TO HELP.



## Delay routines in REAL TIME

Paul E. Scheidemantle

Well folks, it's back to programing subroutines this month. We are going to setup a delay routine for basic and extended basic, which can be used in real time... as we know it. Making it easier to use rather than having to guess everytime if the loop will be as long or to long a wait, and then ofcourse having to fiddle with the numbers to get the delay just right.

First I'd better explain what I'm talking about when I mention a loop. A for next loop is setup as such: FOR A=1 TO 100 :: NEXT A . What is accomplished here is that the value of "A" will be incremented by 1 each time the program sees the NEXT A statement until it has reached the value in the second part of the statement. Such as 1,2,3,4,5 and right on up to 100 (or whatever figure you choose). This particular loop is refered to as a delay routine.

Most delay routines as above are set up just as you see them with numbers ranging from 1 to 100 (or whatever you choose). Here the idea is to make the computer wait (delay) before doing anything else. Like a timer for a title screen, between notes in music, and or whatever you might want to stay on the screen for a certain length of time.

So the idea here will be to design a special loop that works in REAL TIME instead of those cryptic numbers that we have to continually guess at. The first thing we will need to do is find out how long it takes the computer to count through a loop, so that we can find out how far we have to count to get increments of seconds. Shown below is a small program that was run to find out this information. The call sound statements were used to give an audible sound at the beginning and end of the routine making it easy to time. I used a stop watch in hundreths of seconds to do this. If you are using your watch and have only even seconds to work with you might want to increase the length of the loop (make it 100000 instead of 10000) to get a more accurate figure.

FOR BASIC:

```
100 CALL SOUND(-10,880,0)
```

```
110 FOR A=1 TO 10000
120 NEXT A
130 CALL SOUND(-10,880,0)
```

This routine required 28.28 seconds to run. Now by dividing 10,000 by 28.28 we get a value of 353.6067893. Be sure to do this the easy way and use the computer. Type in "PRINT 10000/28.28" (without the quotes), and the number will just pop up like magic.

FOR EXTENDED BASIC:

```
100 CALL SOUND(-10,880,0)::
FOR A=1 TO 10000 :: NEXT A :
: CALL SOUND(-10,880,0)
```

We do the same thing for extended basic, except in a multiple statement line. The result is 33.76 seconds, giving us a value of 296.2085308. (For Myarc XBII users the seconds are 38.10 and a value of 262.4671916).

See now what do we do with these great figures now that we have them. Well I'm certain most of you are way ahead of me and have already gone on to the next article. But for those of you who were kind enough to stay with me and listen to my ramblings... here comes the answer.

If we multiple the value we got in the above example and by any number we get values for our soon-to-be loop that come out in seconds (not cryptic numbers). Below are two example of subroutines to show you how they are used.

First we will look at the basic routine, and here is how it works. We will use two variables; SECONDS and A. In line 140 we give the variable SECONDS the value of 30 (30 seconds or any positive number you may wish to use here). In line 150 we GOSUB to line 500 (the delay subroutine). Line 160 here just separates the main program from the subroutines. Now to line 500. We set up a loop called "A" in which we count from one (1) to 35.61 (number required to complete one second in basic) times the value given to the variable SECONDS. Line 510 sends the program back to line 500 to increment "A" by one (1) until it equals the high number (second part of the parameters (1 was the first part)). Finally line 520 returns control to the main program at the point right after where the GOSUB command was used.

```

140 SECONDS=30
150 GOSUB 500
160 END
500 FOR A=1 TO (353.61*SECONDS)
510 NEXT A
520 RETURN

```

Now to the extended basic routine, and here is how it works. We will use two variables; SECONDS and A. In line 110 we call our subprogram DELAY and pass the value of the number of SECONDS we want (in this case 30 (30 seconds or any positive number you may wish to use here). Line 120 just separates the main program from the subprogram(s). Now to line 500, our subprogram. We set up a loop called "A" in which we count from one (1) to 296.21 (number required to complete one second in extended basic) times the value given to the variable SECONDS. The NEXT A tells the program to go back and increment "A" by one (1) until it equals the high number (second part of the parameters (1 was the first part)). Finally the SUBEND returns control to the main program at the point right after where the CALL command was used. Now you have a delay routine that works in REAL TIME! If you were using Myarc's XBII then replace the value 296.21 with 262.47, and you should be all set to run.

```

110 CALL DELAY(60)
120 END
500 SUB DELAY(SECONDS):: FOR
A=1 TO (296.21*SECONDS):: NE
XT A :: SUBEND

```

I hope that these routines help you with your programming and that this article will help you understand where all those cryptic numbers come from in programs. Another thing you should keep in mind is that the extended basic subprogram in line 500 can be saved in a merge format, for future use with other programs. There is hardly any reason to have to do this more than once. This can be done by saving the program thus SAVE DSK1.FILENAME, MERGE (the result is a DV/163 file on disk). Then in the future you can merge it into a program by first loading the program and then typing in MERGE "DSK1.FILENAME" and it will now be part of the program. It should be noted that when a file is merged to a program that it will overwrite any existing lines with the same number, so be sure to give your routine a high enough line number that this does not happen.

I guess I've said this many times but here we go again.... With a blank (or backup) disk and a little imagination you can do no wrong! So have fun and enjoy your computer!



MacFlix, a FULL review.  
by R. Coffey

The review of MacFlix last month was a quicky, and we will look into it much further with this review!

What is MacFlix? It is a program that will let us TIers manipulate MacPaint files. MacPaint files have a resolution of 576 pixels across by 720 down. (Yes, that picture of vehicles on the back of October Interface and the picture titled "Clip #7" this month is 576 by 720!) MacFlix let's you view the MacPaint files by windowing over them, much like Picasso and JoyPaint window over their own work area.

You can change the number of pixels your window moves over the MacPaint file, which makes it very easy to quickly get to the portion you are most interested in! You may then save that portion on the screen as a TI-Artist picture. (Or as a My-Art picture, if you have a Myarc 9640). Essentially, we are just saving a portion of the MacPaint file so we can use it on our own drawing programs (which is the main objective of this program, and the reason why I bought it!)

MacFlix will let you do much more than just that, though! It will print out the ENTIRE MacPaint file to your printer (Epson or Prowriter compatible). Epson compatibles have 3 options for printout, where Prowriter gets only one. Option #1 (for Epson), also called Low Resolution, will produce a squat picture just like the single density output from Artist or Graphx. This option will let the far right 10% of the picture fall off the page. Option #3, High Resolution, spits out a very squished (horizontally) picture, but gives you the entire picture. The older printers, like Star Gemini 10-X, the original TI printer, etc., will ONLY be able to use option #1 and #3. For those with a newer printer, like the Star NX-10, Star NX-1000, etc., you can use Option #2, Medium Resolution, which will give you the entire picture on the page, and is nearly perfectly proportional. (At the end, I'll tell you how to get PERFECTLY PROPORTIONAL print-outs!) Epson developed an additional set of new graphics after their early printers, and Medium Resolution uses this newer set.

So where can you get MacPaint files? Three files come on the Mac Flix disk, plus I got a bonus disk of 5 files (since I ordered it before October '88). I was able to download a few MacPaint files locally, but I will be going to the networks of Delphi and GEnie as a major resource of pictures. If you happen to have a friend with an IBM who has MacPaint files, they have included a conversion routine (for use with PC Transfer), so you can directly copy them from the IBM disk to your own. (PC Transfer requires CorComp or Myarc disk controller and double sided drives, also from Genial Computerware.) At the end of the manual, they list that the Boston Computer Society has many MacPaint files, but I have yet to explore that avenue. If demand (and supply) dictate, our club MAY start a MACPACK series (to complement our PICPACK series, but don't count on it just yet!).

MacFlix has a couple of other convenient features, like being able to Catalog a disk, which is very handy when you're not sure of the exact name of your file. You can also Delete files on a disk to clear room for an Artist picture you may be ready to save. Lastly, MacFlix will let you Invert the entire file that is currently loaded. I haven't used that last feature yet, but it could come in very handy!

Not all MacPaint files (or so I thought they were) are standard in size or format. MacPaint files normally have a few bytes at the beginning of the file that has a title of the picture, and is necessary to load a MacPaint file in. Some files converted from the IBM may be lacking this title, and you can only load it into MacFlix after you have disabled MacFlix so it will not automatically look for this title. To do this, you need to press the function and (P) key together (in other words, the quote). Once you have pressed it, the title is disabled for your entire session (until you reload the program again). Don't expect a flag on the screen to tell you have pressed it, because you get no video or audio feedback. If you can't load a file, you use this as your last resort!! And it can cause havoc if you're not loading a MacPaint file of some kind. A screen full of garbage comes to mind!

(CONTINUED ON NEXT PAGE)

Many of you will be familiar with Archiver III by Barry Boone for our TI, and other computers have their own compression programs. So you may find MacPaint files both on the Macintosh and IBM that are compressed in some way. These files will usually have a suffix to tell you this. These files are to be avoided, as you can't de-arc them with anything we have right now! When selecting files to download, keep your eyes open and you should be alright.

All MacPaint files are a fixed size (576 x 720) but MacPaint does a simple compression on them, so that the pictures that have any empty space in them will be smaller in size, depending on how much empty space there is. That is why you will see MacPaint files use different amounts of disk space, according to how sophisticated the graphics are in the picture.

With just an Extended Basic or Editor Assembler cartridge, MacFlix will handle a MacPaint file up to 24k in size. (They can theoretically be up to 51k, but 24k is enough space for most of them!) With a Myarc 9640, SuperCart, or GRAM Kracker (with the Write Protect switch off!) you can load a MacPaint file up to 32k in size.

If you have a file larger than available memory, then MacFlix will load in as much of the file as it can, and you will get garbage for the bottom portion of the file it was unable to load.

So, who can really use this program? Before even considering this program, you should check out all possible sources where you may be able to get MacPaint files from! Without a source to get more MacPaint files from, it

to pay for a nice program with only a handful of files to work with!

MacFlix offers to greatly expand our ability to get GREAT looking artwork from the biggest collection of artwork available. Genial Computerware has a winner here! For those who are interested in getting their hands on terrific artwork and are willing to hunt for the MacPaint files, it's well worth the price! The price is \$15, and can be had from Genial Computerware, P.O. Box 183, Grafton, MA 01519.

MACFLIX : A TECHIE TIP : The key to getting a perfectly proportional picture is to have the density of pixels the same both horizontally and vertically. A ratio of 1:1 to what you'd like, but not all printers offer it! In the vertical direction, printers (9-pin) have a density of 72 dots per inch. (So what you would like ideally is 72 per inch horizontally!) In Medium Resolution, Mac Flix selects the graphics mode of #4, which is 90 dots per inch horizontally. That is pretty good, but we can do better than that! Graphics mode #5 offers 72 dots per inch horizontally (exactly what we want!). In order to get MacFlix to choose #5 instead, you will need to go into a sector editor (Disk Utilities is one of the better ones) and search for the hex string "182A04". After you have found it, you'll want to change that "04" to a "05". Save that sector back out and you're all set! Now when you select Medium Resolution the MacPaint pictures will go across the full 8 inches of the page, like they were suppose to! Why J.P. Hoddie didn't do this in the first place is beyond me! Remember, only the newer printers have this capability!

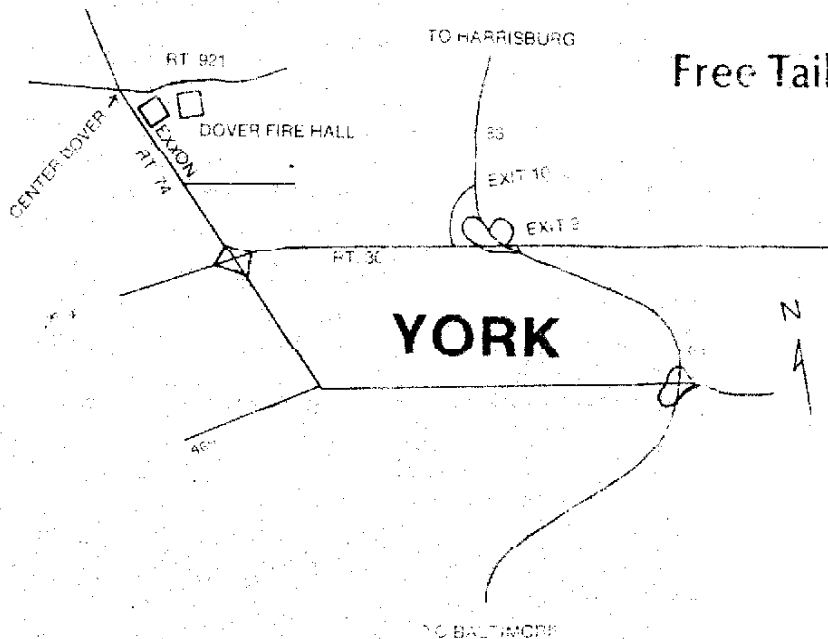
RJC-11/88



# 2nd Annual YORK WINTERFEST HAM & COMPUTER

March 5th 1989  
DOVER FIREHALL, DOVER, PA

Local Repeaters  
146.37/97, 147.93/33



Free Tailgating with Admission Ticket  
Two Floors Indoor  
Food & Refreshments  
Prizes  
Limited Blacktop Parking  
Inside Tables \$10.00 ea.  
8:00 AM General Admission  
VE Exams

**Registration \$4.00**  
**Unlicensed Spouse FREE**  
**Children Under 12 FREE**

*For Advance Registration or Information:*

MAIL TO: YORK WINTERFEST  
P.O. Box 50  
Shrewsbury, PA 17361-0050  
Info Call (301) 239-3878

WE'LL LOOK FOR

YOU

AT THESE MEETINGS

Circle your Calendar with these meeting dates

JANUARY 16  
FEBRUARY 13  
MARCH [20]  
APRIL 17  
MAY 22  
JUNE 19

All meetings begin at 7PM but the Group equipment will be up and ready for use at approximately 6PM.

All meetings are held at the CAMP HILL SHOPPING MALL COMMUNITY ROOM.

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WIZ/TIB BBS # 717-657-4992 or 717-657-4997 24hrs 7 Days-- SVSOP Dave Ratcliffe

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NEXT MEETING: MARCH 20th 1989 at 7pm.