

M. J. Smart  
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MID-ILLINOIS  
COMPUTER RESOURCE ORGANIZATION  
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MICRO/99 Newsletter  
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MICRO/99 is a not-for-profit group dedicated to the sharing of information and public domain software for the Texas Instruments 99/4A home computer. Members have free access to our library of several hundred programs on cassette and diskette. Meetings are held at 7:00 p.m. on the third Thursday of each month at the Illinois Agriculture Association building, 1701 Towanda Avenue, Bloomington. Attendees sign in with the guard at employee entrance number 4 at the rear of the building. Turn left at the sign for the main reception area and go down the stairs on the far side of it. Visitors are especially welcome, and may attend one meeting free of charge. Annual dues are \$15 per family.

\*\*\* MEETINGS: JULY 17 & AUGUST 21 \*\*\*

The July 17, 1986 meeting program will be rather informal. A few members have promised to have some programs to demo, and you are encouraged to bring one (or more) too. Discussion will certainly include GENEVE, the new 99-compatible computer that Myarc now has actually demonstrated, made available to selected users for testing, and announced with a double page ad in MICROpendium. The specs on it are very impressive. But does anybody besides me wonder how to pronounce GENEVE? (gen-eev? gen-uh-vay? gen-ee-vuh?)

There will be no newsletter in August, so mark this on your calendar now: The AUGUST 21, 1986 meeting will have a SPECIAL PROGRAM. Garth Bock, the sysop of the local Prairie Bulletin Board System will tell us how a computer bulletin board runs. He will demo a running system at the meeting. I don't have a modem myself, but I'm told that the Prairie BBS is one of the better ones in this area. Bring your questions and be prepared to learn some things about telecommunications!

At all meetings members are encouraged to share any information gleaned from magazines, catalogs, bulletin boards, newsletters from other clubs, personal experience with products, etc. If you have a computer related question or problem, someone at the meeting may have an answer or suggestion for you. And, you are encouraged to bring and show any interesting program you found or wrote recently.

\*\*\*\* SMART REMARKS \*\*\*\*

Guess who's still interested in us! We received an inquiry from TI Consumer Relations asking if we were still active, how many members, etc. They didn't say why. I replied that we were alive but struggling and could use any help we could get. (Perhaps they want to give each of us a TI Professional as partial amends for the way they blew it with the 99/4A!)

I hope you noticed that you didn't get a newsletter last month. To save the club from bankruptcy, and Editor/VP Brian McFeeters and I from burnout, it was decided at the May meeting not to publish this newsletter in June and August. We are still meeting every month, and something new is happening with our orphan computer every month.

Sid Smart, President

\*\*\* MISCELLANEOUS NEWSBITS \*\*\*

Myarc's new GENEVE computer comes in a card that fits into the TI expansion box, replacing the current interface card. A flexible cable connects it to the IBM-type keyboard that comes with it. Myarc's announcement in MICROpendium includes the following: 640K CPU RAM and 128K VDP RAM are standard. Maximum addressable memory is 2 megabytes. Output is composite or RGB in 40 or 80 column mode. TI Writer and Multiplan will be available in 80 column versions. Mouse and joystick ports are included. Speech and sound are included. 95% compatible with 99/4A, but at least 2 to 3 times faster. Compatible with TI, Corcomp and Myarc disk controllers and RS232 cards. This announcement did not quote a price, but other sources put it at \$499.

\* \* \*

A public domain program is available to print Run Length Encoded (RLE) graphics from the TI99. RLE is a standard method of storing graphics images. I've seen some of these images in other newsletters. They are very nice, and many are available. I assume that we'll have the program and some of the image files in our library before long.

\* \* \*

An ad in one of our exchange newsletters claims to install 32K RAM directly on the fast 16-bit data bus in the 99/4A console for \$49. It says this can run assembly language programs in 60% of normal time. The same source will turn your Munchman module into a battery-backed 8K super-cartridge for \$26, and supply several other services as well.

\* \* \*

Another source has a 32K stand alone box for \$39, and it is supposed to be faster than TI memory too. They also have a kit for making a 3-slot mini expansion box, but a price was not included in the article.

\* \* \*

Tom Freeman of the LA 99'ers has written a program to transfer assembly language programs from disk to cassette. Only memory expansion and the Editor Assembler are then needed to run such programs on a basic system.

\* \* \*

A new MAXIMEM cartridge, reviewed in MICROpendium, allows modules to be dumped to disk. It also includes an improved, resident version of the Editor Assembler and Disk Manager II, selectable with a switch. It runs all Super-Cart software, and has some other sophisticated options as well. The price is \$142.

Appeared in the A9CUG newsletter by their editor MARSHAL.  
Article was rewritten and added to by John Willworth, WPUG.

### DISK DRIVE POWER

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MANUFACTURER	MODEL	HEIGHT	SIDES	POWER REQ.
-----	-----	-----	-----	-----
MPI	51	FULL	SINGLE	FULL
MPI	52	FULL	DOUBLE	FULL
SHUGART	SA-400L	FULL	SINLGE	FULL
SHUGART	SA-405L	FULL	DOUBLE	FULL
SHUGART	SA455-2	HALF	DOUBLE	HALF
TEAC	FD-FFA	HALF	SINGLE	HALF
TEAC	FD-55B	HALF	DOUBLE	HALF
TANDON	TM100-1	FULL	SINGLE	FULL
TANDON	TM55-1	HALF	SINGLE	FULL
TANDON	TM100-2	FULL	DOUBLE	FULL
TANDON	TM55-2	HALF	DOUBLE	FULL
Control Data Corp.	9409	FULL	DOUBLE	FULL
Control Data Corp.	9428	HALF	DOUBLE	FULL
QUME	142	HALF	DOUBLE	FULL
PANASONIC/MATZUSHITA	JA551-2N	HALF	DOUBLE	FULL
MITSHUBISHI	4851	HALF	DOUBLE	FULL
TOSHIBA	ND04D	HALF	DOUBLE	HALF

NOTE: Where the drive is half height and the power is also half, two drives can "generally" be used in place of one of the full height drives.

There are more, than these of course, but in general those that are compatible with Apple, Commodore and Atari will not work on the TI-99/4A. Those that will work on the IBM P.C.'s are good (exception are those that are 96 T.P.I. or 80 track drives).

### GRAM KRACKER UPDATE

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I've had my Gram Kracker for 6 months now and I still think it's the greatest!! Probably the best thing about it is I don't have Extended Basic lock-ups like I had with the cartridge. In fact, I have had absolutely no problems with it.

The Gram Kracker allows you the ability to modify downloaded cartridges and the basic operating system. Normally, I have E/A, TI-WRITER and EXTENDED BASIC loaded with the last two being modified versions. The modified TI-WRITER has had the foreign language options removed from the main menu. EXTENDED BASIC has several changes. When entering XB from the menu, the load search can be skipped by holding down the space bar. Also, extra commands such as "CALL CAT" and "CALL CLOCK" have been added.

Recently, I have received versions of DM-1000 and Fast Term that can be loaded into Grams 1 and 2 although this limits available module space.

If you like the features mentioned above, come to the July meeting and see the Gram Kracker demonstrated.



# TI 99/4A ERROR CODE REFERENCE CHART

The following error code listings were printed in the February, 1986 issue of HOCUS, Newsletter of the Milwaukee Area 99/4 User Group of Wauwatosa, Wisconsin.

## EXTENDED BASIC

10 Numeric Overflow  
 14 Syntax Error  
 16 Illegal after Sbrtn  
 19 Name too long  
 28 Unrecognized Char  
 24 \$/# Mismatch  
 28 Improperly used name  
 36 Image error  
 39 Memory Full  
 40 Stack Overflow  
 43 NEXT without FOR  
 44 FOR-NEXT nesting  
 47 Must be in Sbrtn  
 48 Recursive Sbrtn CALL  
 49 Missing SUBEND  
 51 RETURN without GOSUB  
 54 String Truncated  
 56 Speech \$ too long  
 57 Bad Subscript  
 60 Line not found  
 61 Bad Line #  
 62 Line too long  
 67 Can't CONTINUE  
 69 Command illegal in prgrm  
 70 Only legal in prgrm  
 74 Bad Argument  
 78 No program present  
 79 Bad value  
 80 Nil  
 81 Incorrect argument list  
 82 Nil  
 83 Input Error  
 84 Data Error  
 97 Protection Violation  
 109 File Error  
 130 I/O Error  
 135 Sbrtn not found

## DISK MANAGER ERROR CODES

#:	First #	Second #
1:	OTHER	Rec not found
2:	SEEK/STEP	Cyclic Redundancy
3:	INPUT	Lost Data
4:	PRINT	Write protect
5:	NIL	Write fault
6:	NIL	No Disk Drive
7:	NIL	Invalid input
8:	NIL	
9:	Special Error Code for	Comprehensive Test

## I/O ERRORS

#:	FIRST #	SECOND #
0:	SEEK	Device not found
1:	CLOSE	Write Protected
2:	INPUT	Bad Open Attribute
3:	PRINT	Invalid I/O Command
4:	RESTORE	Out of Space
5:	OLD	EOF
6:	SAVE	Device Error
7:	DELETE	File/Data Mismatch

## TI BASIC ERROR CODES PERTAINING TO DISK SYSTEM

#:	FIRST #	SECOND #
0:	OPEN	Can't find specified Disk Drive
1:	CLOSE	Disk or program is Write Protected
2:	INPUT	Bad Open Attribute
3:	PRINT	Illegal Operation
4:	RESTORE	Disk full or too many files opened
5:	DELETE	Attempt to read past EOF
6:	OLD	Device Error
7:	DELETE	File Error

## EDITOR/ASSEMBLER ERROR CODES

EDITOR/ASSEMBLER	ERROR CODES	DESCRIPTION
X.B. EQUATES		
ERRNO	>0200	2 Numeric Overflow
ERRSYN	>0300	3 Syntax Error
ERRIBS	>0400	4 Ill. after Sbrprn
ERRQSS	>0500	5 Unmatched Quotes
ERRTL	>0600	6 Name too long
ERRM	>0700	7 \$/# Mismatch
ERRBSE	>0800	8 Option Base Error
ERRUW	>0900	9 Improperly used name
ERRIM	>0A00	10 Image Error
ERRMEM	>0B00	11 Memory Full
ERRSO	>0C00	12 Stack Overflow
ERRNXT	>0D00	13 NEXT without FOR
ERRFNN	>0E00	14 FOR-NEXT nesting
ERRSNS	>0F00	15 Must be in Sbrprn
ERRRCS	>1000	16 Recursive Sbrprn
ERRSUE	>1100	17 Missing SUEE.
ERRGOS	>1200	18 RETURN without GOSUB
ERRSTR	>1300	19 String truncated
ERRSUB	>1400	20 Bad subscript
ERRSL	>1500	21 Speech \$ too long
ERRLN	>1600	22 Line not found
ERRLN	>1700	23 Bad line number
ERRTL	>1800	24 Line too long
ERRC	>1900	25 Can't Continue
ERRIP	>1A00	26 Illegal in program
ERRLP	>1B00	27 Only legal in program
ERRA	>1C00	28 Bad argument
ERRPP	>1D00	29 No program present
ERRV	>1E00	30 Bad value
ERRAL	>1F00	31 Incorrect argument list
ERRINP	>2000	32 Input error
ERRDAT	>2100	33 Data error
ERRFE	>2200	34 File error
ERRI	>2400	36 I/O error
ERRSNF	>2500	37 Subprogram not found
ERRPV	>2700	39 Protection violation
ERRM	>2800	40 Unrecognized character
ERRNO	>2900	41 Numeric overflow
ERRST	>2A00	42 String truncated
ERRNPP	>2B00	43 No program present
ERRINP	>2C00	44 Input error
ERRNO	>2D00	45 I/O error

## LOADER ERROR CODES

0-7 Standard I/O  
 8 Memory overflow  
 9 Not used  
 10 Illegal tag  
 11 Checksum error  
 12 Unresolved ref.

## EXECUTION ERRORS

0-7 Standard I/O  
 08 Memory Full  
 09 Incorrect Statement  
 0A Illegal Tag  
 0B Checksum Error  
 0C Dup. Definition  
 0D Unresolved Ref.  
 0E Incorrect Statement  
 0F Program not found  
 10 Incorrect Statement  
 11 Bad Name  
 12 Can't CONTINUE  
 13 Bad Value  
 14 Number too big  
 15 String-Number  
 16 Bad Argument  
 17 Bad Subscript  
 18 Name Conflict  
 19 Can't do that  
 1A Bad Line Number  
 1B FOR NEXT Error  
 1C I/O Error  
 1D File Error  
 1E Input Error  
 1F Data Error  
 20 Line too long  
 21 Memory Full  
 22- Unknown Error Code

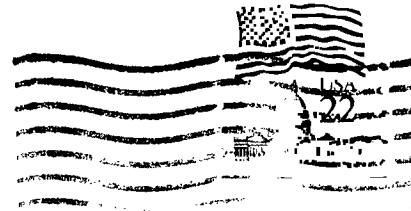
## RS232c ERRORS

OPEN: 00 Device cannot be opened  
 02 Software Switch Error  
 06 Hardware Error  
 INPUT: 24 Internal Data too large for buffer  
 26 'CLEAR' pressed or Hardware Error  
 PRINT: 36 'CLEAR' pressed or Hardware Error  
 OLD: 50 Can't load from specified device  
 52 Can't use software switch with 'OLD'  
 54 Program too large to load  
 56 'CLEAR' pressed or Hardware Error  
 SAVE: 60 Can't save to specified device  
 62 See 02, Can't use with SAVE  
 66 'CLEAR' pressed or Hardware Error  
 MISC: 43,73,83,93, Executing Illegal Command

## TI WRITER ERROR CODES

0 - Indicates Disk Controller not on;  
 OR: Diskette not Initialized  
 6 - No Disk in Drive; OR: Is upside down;  
 OR: Drive is not turned on  
 7 - No Disk in Drive  
 00 - Illegal use of LoadF, PrintF; OR:  
 Error in using those commands  
 02 - No file in Diskette with Filename used  
 04 - Disk is full  
 06 - PrintF Command in progress was  
 interrupted; OR: Disk Door was opened  
 while Red Light was on.  
 07 - Invalid Filename (I.E. Name too long  
 or using invalid characters)  
 15 - Invalid Disk Drive Number, or Device

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EDMONTON 99'ERS USER SOCIETY  
P.O. BOX 11983, EDMONTON  
ALBERTA, CANADA T5J-3L1

```
*****  
*      MMM   MMM   IIIIII   CCCCCC   RRRRRRRR   00000000   *  
*      MM M M MM   II      CC      RR      RR      00      00   *  
*      MM M M MM   II      CC      RRRRRRRR   00      00   *  
*      MM  M  MM   II      CC      RR      RR      00      00   *  
*      MM      MM   II      CC      RR      RR      00      00   *  
*      MM      MM   IIIIII   CCCCCC   RR      RR   00000000   *  
*                                          *  
*                                          *  
*      The MID ILLINOIS COMPUTER RESOURCE ORGANIZATION   *  
*****
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