HESTERIAL STREETS

Volume 4 Number (

Established 2016

June 2019

30 Years Ago...

Historical Information taken from Bill Gaskills TIMELINE

June 1989:

Barry Boone of Sand Springs, Oklahoma announces the release of a new bug-free EPROM for Mechatronics 80-column display cards that supports any CRU base, and that includes an 80-column version of the John Johnson Menu 7.3 for a Horizon Ram Disk and more.

Gene Hitz, dba Arcade Action Software, releases Touchdown, a professional football (game outcome) prediction program.

The Users Group of Orange County, CA (UGOC) elects Barry A. Traver to their Hall of Fame.

The II Community receives word that Impact 99/New Age 99 author Jack Sughrue as been involved in a serious auto accident, which will keep him from contributing his popular articles to User Group newsletters until his recovery.

TEXAMENTS, Patchogue, NY, announces a software compatibility certification program for TI-Artist and TI-Base. It goes no where.

John Guion releases Console Debugging Help, a 16-page document designed to help with troubleshooting hardware problems that occur within the TI-99/4A console.

Coleco (Connecticut Leather Company), maker of the Colecovision video game console (1982), and the ADAM Home Computer (Jun 1983–Jan 1985) goes out of business after failing to win acceptance of its bankruptcy reorganization plan. It's assets are gobbled up by creditors such as Hasbro.

Great Lakes Software announces a 50% off sale on its software line.

Chris Bobbitt reports on the FIDO network that "very good" progress has been made on redoing the Press word

INSIDE

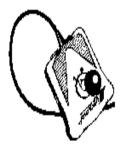


INFORMATION

ELEMENTS OF BASIC #20Page 1	
THE OTHER GUYS VS TI-99/4APage 1	,
SPV'S DEMISEPage 2	
ADVANCED DIAGNOSTICSPage 3	
INSULTSPage 5	
INTERNATIONAL FUN & GAMES	
THIEKNALIONAL LON & OUNES	,

processor.

Wesley R. Richardson, of the Northcoast 99ers in Cleveland, OH, releases Instance-X, an assembly language utility to convert II-Artist Instances to a file suitable for use with II-BASE 2.01 or higher.



-prostice_

MICADPENDIUM Vol. 4, No. 7 – August 1987 By Bob Carmany

How many sets of II joysticks have you gone through in the past year or so? Have you tried some of the \$6 specials as well? If, like most of us, you are tired of flimsy, non-responsive joysticks, here is some good news for you!

I bought my first Prostick II a couple of years ago, largely enticed by the advertisements in the Tex-Comp material that I saw from time to time. I have had two of them for two years now and they are truly "oldies but goodies."

Performance: The Prostick II was one of the very first joysticks to come with a switchable gameplate. What that means is that there is a collar on the top of the joystick that allows you to select either four-way or eight-way response. The four-way response locks out the diagonals and gives you horizontal and vertical movement. that is a big plus when you are playing a maze-type game like Munchman. The joystick is designed for either right-or left hand use there are dual fire buttons on the front of

See "Prostick", Page 3

The last few installments of this column presented the various functions in TI BASIC. Noticeably lacking were programs illustrating these functions. programs listed below shall, hopefully, help fill that void. Editors Note: These listings are on this months DOM.



Little do most us Know just what we have in this TI–99/4A. So it made sense to write about it. First off just what do these other guys have? Well, more memory and a faster processor. They also have fantastically huge program packages to do their work. They have hundreds of companies with support lines and so many different versions of the same machines, and software too, that it quite boggles the mind to count them. The other guys have years of major research invested into every software package and so many different operating systems for disk and processing data that it would take several books just to list the names.

OK, what does the TI-99/4A have to compete with that? Well hold on to your hat. The 99 does have several things, and none of these is by any means minor.

First off, let's get into a little history. When one of other guys stores data onto a disk like say "STORETHIS" what you will find on the disk is "STORE THIS" <crlf>" now the <crlf> means it's universal among the other guys for Carriage Return and Line Feed. So every line of data on the disk has to have this at the end: <crlf> to tell the computer that this is the end of the string of data. The 99 has a simpler approach,"<@a>STORE THIS" is how the 99 does the same thing. The <0a> stands for 10 in hexadecimal – and as you can see, being at the front instead of the rear of the string means you don't have to read the whole line to see how long it is. The other guys have to load the whole line and make the computer count how long it is, while the 99 just looks at the first one and knows how long it is. If you are searching a disk you can see why it takes so long for the other guys.

The history of why that is comes from the concept the other guys' system uses which was conceived in 1953. The

99 uses a concept from 1975. And, yes, the other guys have not changed because if they did, all the software written would have to be totally re-written. Also forget them doing it any time soon. I shouldalso mention that this system of ours is already being used on newer mainframes.

Today I was asked if the 99 was compatible with the other guys and, as usual, was quite insulted. Let me show you why. Go ahead and ask another guy when was the last time he got out his soldering iron and added something unique to his system. First off, he will look at you like you are truly crazy. Then he will ask, "What do you mean unique?!"

Say unique like an interrupt switch to halt everything and do something else previously loaded. Or just stop what you are doing and not do anything. Or do a total reset and start over. He will reply, "Oh yea, I can do that last one." And he is right. He can only do the last one. His software has to do the others. The 99 is already built for those and doesn't care if hardware or software causes it to happen. Or ask the other guy to load and run his very best telecommunications, word processor, disk manager, and assembly compiler from one disk without changing Hones tly he will say, "You can't get all that on one disk! "Your reply would be: "Really! I can do it on mine. And I still have room for almost a third more."

Also mention that most of the other guys you've shown your 99 to really love your telecommunications program (Telco).

How about operating systems? The other guy on most of them has to load one before he can do anything. First off, what are the advantages of this? One is for a particular application this will allow you to have the fastest program loaded possible. The second is it will be as small as possible for the application. Disadvantages? History should be explained now as the advantages are distorted. Back in 1950 the concept of loading a new operating system to speed things up was the best solution to lack of memory. Also it had the other advantages mentioned and it made sure the system was running at peak ability. But that is also where all the trouble started. You see, if you want to run something else you'll load it someplace that is already being used. This means you will have to load a program that moves it out of the way, so you can load something else, then you can load this other program.

Does it require much thought to see it is similar to digging a hole and filling it with the dirt from another hole so you can re-dig the original hole? That is not even without mentioning the fact that the other guy may on some systems have as many as three types of operating systems, and they are not compatible with each other, even though they are all written for the same computer.

So the 99 doesn't have a problem of crashing while loading

Yesterday's News

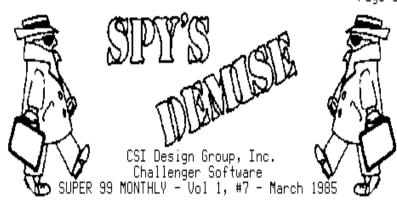
the third program because it is too large. It Knows the second program used up all the space. The 99 uses what's called relocatable code, which means it just loads where there is space left, and Knows how much memory is left. This is artificial intelligence. The 99 does not have to ruin everything in memory to see there is a problem. The other guy has to reboot from scratch.

Expansion of the system over time on the other guy also requires a history lesson. For lack of a better term we will say the other guy has a "hard-coded" system. I got that term from a computer science professor as he coined it on the air. Hard-coded means that you can't run any programs from the area dedicated to the disks or the RS232 or other peripherals. You can't load anything there or even move anything there without special hardware and software. The 99 only has one hard-coded area, the operating system. The other guy has several, and can't move them to another location. Remember, they are hard-coded (physically located by hardware).

Let us say we want to add 1 MB of memory to a fully expanded system the guy has. Sorry, No can do. Hard-coded. For the 99 that is no problem as it can, without any modifications at all, talk to 128 devices. So, just make it a device and add it on. An example is the 192K Video Display Processor (9958) added to the 99. It can be upgraded and increased in size also. And the GRAM/GROM port for cartridges can talk to 640K of RAM/GROM, but turned into a device could be expanded to a unbelievable 4095 MB or 4 Gigabytes. This is without even mentioning the Rave card, which is an other guys approach to expansion, but that is only 3.5 MB maximum for the 99.

Five years from now I'll have my II-99/4A and will still be adding devices and cards to it. The other guy will have gone through two systems by then just to stay current with expansions. I mentioned one thing the professor said. He also said that current mini and micro computers are similar to shoot-and-throw-away cameras. The Tamira, 990/10, TI-99/4A, and NXT are the only memory to memory transfer, memory mapped memory, and memory to memory architecture computers yet built. So I don't think he knew about the TI-99/4A or its relatives. All the rest are all like the "hard coded" machines he mentioned. Why do you suppose they have to replace the motherboard for the simplest upgrade? 1950's concepts in the 1990s! Does the other guy really have that much on the TI-99/4A? We shall see, we shall see.





Spy's Demise is an excellent game. As there are many games on the market, we place a rigid set of standards in reviewing games. The score of 96 we have assigned Spy's Demise indicates the game is among the best available.

While Spy's Demise is for the most part an action game, it also includes a cryptogram to solve. This combination of action and intellectual aspects of the game impressed us as the type of game that likely will set the trend for future game software.

Although the documentation is a little sparse, we had no problems in understanding the rules of the game after only a few minutes of play. The lack of instructions does not affect play, but may initially hamper your score. Loading the program is covered thoroughly so that there is no problem in getting started.

Spy's Demise is based on maneuvering yourself, as a spy, through the eleven floors of nine buildings to obtain parts of a secret encoded message. The buildings are protected by several guards who patrol the floors vertically while you attempt to cross horizontally. Each guard moves independently, bouncing between top and bottom, so that each floor represents a new challenge. At times, you can cross a floor without stopping. On other occasions, you may find it necessary to back up or turn around repeatedly. You remain in constant motion until you make it across a floor. Upon reaching a floor, a timer starts. The faster you cross the floor, the more points you get. Waiting to spot a temporary pattern among the quards is sometimes wise, but always results in a lower score for that floor. The game pauses when you reach the top of the building so you can copy the clues uncovered by completing each of the floors. You are allowed to be captured by guards several times before the game ends.

CSI offers a bonus by giving free or discounted software to persons who solve the puzzle. The free software qoes to the first two people in a state or country to send in correct answers. This may sound very easy, but we never got past the second building of the game, so figure on sharpening your skills to break the code.

Yesterday's News

joysticK response to be excellent. The sound-effects integrate into the game very well, but may seem slightly monotonous after long sessions (just turn off the sound for awhile).

Give Spy's Demise a try and see if you have the patience, reflexes and reasoning ability to break the code.

ProsticK continues...

the housing. The response of both the fire buttons and the control lever are excellent. The first time that I played Munchman using the Prostick II, I tripled my previous best score. The joysticks take some getting used to, however, because they are so much more responsive than the <code>II</code> joysticks that you may be using.

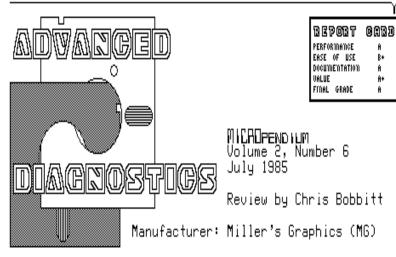
Ease of use: This category is similar to performance. However, in considering it, I came to the conclusion that there are some qualities of the joystick that really did not fit in that category but could better be addressed here. Have you ever had joystick hand? You Know, when your fingers refuse to uncurl after gripping a joystick for an hour or so in a Parsec session. The Prostick II is conveniently shaped to reduce fatigue from a death grip on the joystick for an extended period of time. The fire buttons are also located to take advantage of the superior dexterity of your forefinger rather than trying to use your thumb as you must with the II joysticks. It makes for a much less tiring effort when playing games.

The switchable gameplate is easy to use. Just pull up on the collar and turn it and push it back in place. It is efficient and improves responsiveness, especially when you use it in the four-way mode for playing maze games.

Service/Warranty: The Prostick II comes with a five-year warranty! This is one of the longest warranties around. During the warranty period, the manufacturer will repair a broken or defective joystick for \$5 per unit to cover shipping and handling. After many hours of Munchman, Parsec and the like, my two joysticks had lost some of their responsiveness so I shipped them off to the factory to be overhauled. No problem! A proof of purchase and a \$10 check took care of the whole thing. The service was truly excellent! It took just over a week from the time I mailed the package off until the UPS truck pulled up with my refurbished joysticks. My contact with the people at Newport Controls has always been cordial and they are a very helpful and pleasant bunch.

Value: The ProsticK II is a durable and responsive joystick. It will outperform the TI joystick and will also outlast several pairs of them. There are other joysticks that cost less than the Prostick II but their performance is not as good. If you are looking for a responsive, durable joystick, the Prostick II is an outstanding value.

We found the graphics action, sprite coincidence and does not appear in many of the catalogs any more and they can be hard to find. However, Newport Controls still makes the Prostick II and if your II dealer does not have them, you can buy directly from the manufacturer. Simply write to them and request Stock No. 2002 (TI model) and you are all set. Incidentally, the adapter that comes with the joystick will allow you to use any Atari-compatible joysticK with your TI as well an added benefit!



The staggering growth in disk utility software over the last two years is one of the greatest success stories of the 99/4A community.

When the 4A was alive (as if this is death), there were practically no disk tools for the serious user. After October 1983, this software field seemed to bloom overnight, as a barren desert does after a rainstorm.

The results of this software renaissance are evident. Now available are numerous disk copying programs such as Floppy Copy, Copy Cat and Nibbler; disk cataloging programs such as MDI, Master Disk File and Super Cataloger, a new disk manager from CorComp; and even a few new disk sector editors such as Disk Fixer, Disk Surgeon 99 and the public domain DISKO. However, until recently, the 99/4A community was only playing catch-up to the rest of the computer industry. Such tools are readily available even the lowly Vic-20, although the level of sophistication found in the 4A programs is a quantum leap above the rest. It wasn't until Miller's Graphics wrote Advanced Diagnostics that the 99/4A led the way into the second generation of disk utilities.

Advanced Diagnostics is almost a logical step above the first generation disk utility. It combines the features of a disk copier and disk manager, along with those of a very sophisticated disk editor. Advanced Diagnostics represents the cutting edge in disk utility technology, and provides tools only dreamed of by most of the computer industry. By itself it's an excellent reason for owning a 99/4A.

The only problem is, where to find the Prostick II? It Performance: Advanced Diagnostics features more than 20

major functions and numerous minor ones. It performs a lot of tasks found on disk copiers, editors and managers, and a number unique to this program.

As a disk editor, this program is undoubtably the most comprehensive available. As with the DISKO program and others, single sectors (256 byte segments of the disk) may be read or written to or from a disk. With this function, and some basic Knowledge of how data is stored on the disk (all explained in depth in the manual), the user can repair damaged files or disks quickly and relatively easily. Single bytes of data within a sector may be changed, and the new sector rewritten to the disk. Advanced Diagnostics provides a full screen editor with auto-repeating cursor Keys for this purpose, and useful Keys for moving to the sector before or after the one being edited, displaying all the data as ASCII characters (the regular character set) or as hexadecimal values, erasing all the data in a sector, deleting or inserting individual bytes in a sector, and dumping to a printer any screen. Like DISKO, the program will also search to see if and where a file exists on a disk.

As a disk editor, Advanced Diagnostics (hereafter AD) doesn't just stop there, even though the best of the rest do. AD allows you to read or write whole tracks, which consist of 9 or 18 sectors each depending upon whether the disk has been formatted single-density or double-density. This allows you to explore the information the disk drive stores BETWEEN sectors vital stuff for the programmers who want to create new copy protection schemes, or try to squeeze more out of their disk drive. Additionally, the program allows you to confine all your operations to a single disk drive.

As a disk manager AD is pretty fair. As far as I can tell, however, it wasn't designed to function as a disk manager at all. It incorporates disk manager functions only in order to make the program more comprehensive and easier to use! Using the disk editor, you can duplicate most of the functions of a disk manager. Files can be copied sector by sector, be renamed or be deleted. However, unless you are in a hurry and don't want to load another program, other programs do this much easier. The program does incorporate a number of built-in functions that operate as easily as a disk manager does.

If you need a blank disk, for instance, AD will let you initialize and check a disk in any format from single-sided, single-density to double-sided, double-density with a single command. Also available are functions for checking a disk for bad sectors and generating a catalog of the files on the disk. Using the Command Files function you can load mini-programs to copy disks, reformat them, or perform any number of specific tasks. More on this function later, though. All in all, AD will do almost anything the Disk Manager II cartridge will do, usually faster, but in some cases perhaps not as easy.

AD has a number of commands never seen before in any disk utility. One of the most unusual commands is the one that lets the user set the head/step time of the disk drives. The head/step time is the time it takes in millionths of a second for a disk drive's read/write head to move along the disk. The longer the head/step time, the slower the disk drive operates. With the CorComp Disk Controller, which allows you to set the head/step time of each disk drive independently of the others with a dip switch, this is useful in finding the optimum time for each disk drive. With all disk controllers, this allows you to speed up some operations to the limit of the drives.

A number of functions that are purely diagnostic in nature are also included. A particularly interesting one tests each byte of RAM in the computer to see if it's perfectly functional. This check entails up to 963,072 separate memory tests, yet takes only a minute at most! It may be useful to know whether a newly purchased console works as it should. Another function tests the motor speed of disk drives. The program provides a nice graphic display of the tested rotations per minute of the specified drive. If the graph's pointer consistently jumps out of the safe zone, the disk drive may need repair. This is also very useful for testing new or old disk drives, if the test is accurate at all (not to cast aspersions). No matter how interesting these routines may be, they are only useful if the user understands what he or she is testing.

AD has a number of commands that allow you to customize the program to your own system and preferences. By altering a Command File called DIACONFIG, you can set screen colors to your taste, select a single disk drive for operations, specify the output device name and even display a friendly welcome message on the screen.

Any and all of AD's commands can be placed in Command Files which, with the exception of DIACONFIG which is executed at program startup, can be selectively loaded and executed at any time. Command files are, in fact, mini-programs, and AD is, in fact, a complete programming language as well as a utility. Command Files can be written with II-Writer or any other compatible word processor. They have a definite syntax, and can contain special commands to display text, cause the program to beep, pause for a Key press or pause for a specific duration. They can incorporate ANV of the advanced commands found in the program. Codes representing certain Key presses can also be included in Command Files. The ability to program a program is common on many second generation products; DBASE II, the second-generation database program for the IBM computers, is a well-Known example.

You don't have to learn how to write programs for AD to utilize it fully. As a matter of fact, a number of Command Files (read programs) that perform several very useful and semi-obvious tasks are packaged with AD. BOXFORMAT, for

of disks, and assign them successive names, in about the same time it takes a disk manager program to do five or

The list of packaged Command Files include the disk tests R+WTEST, READTEST and SEEKTEST, the last of which is useful in determining the optimum head/step time for your disk drives. Also included are DSKCOPV1-2, which initializes the disk in drive two and copies the contents of the disk in drive one onto the new disk as fast as any of the disk copying programs; INSTALLMGR, which allows you to place the CorComp Disk Manager on the program disk if you have the CorComp Disk Controller; and DJSKHEADER, which makes a disk look freshly initialized to the computer. The fact that you can write your own useful routines just makes AD even more exciting.

The program executes flawlessly, loads relatively quickly and is so useful that it is one of my nominees for all-time best T199/4A program.

Ease of Use: The program, while exceptionally powerful, is not as easy to use as some. The commands have to be TYPED in, not selected at some menu. While this facilitates those wonderful Command Files, and is demonstrably more flexible, it does make the program somewhat harder to use for non-typists or those people who can't readily memorize 30 or so commands.

Fortunately, commands can be entered as either whole words lengthy) or as simple mnemonics abbreviations. For example, the command to test the computer's memory can be entered either as CHECK MEMORY or CM ; the result is the same either way. This speeds command entry somewhat for the advanced user, and yet it is still easy enough for beginners to get the feel of the program quickly. Quite nice.

The only other difficulty I have with the program, after using it for nearly a month, is that I still find myself periodically looking at the command list in the instruction manual. Ideally, Miller's Graphics should have included a quick reference chart, perhaps like the one for that other great program that requires commands to be typed in, TI-Writer. Actually, this program is only a minor inconvenience, and is easily solved if you want to take the time to create your own list.

Despite the rough command entry system, the Kind people at Miller's Graphics did mercifully make the function Keys of AD similar to the well–established TI pattern (FCTN 1 for delete, etc.). If you have used any Tİ- written software for any length of time, this program should seem very familiar right away, unlike the CorComp Disk Manager which requires you to press FCTN 5 or 6 at various intervals to between screens highly irregular and slightly move unnerving.

instance, allows you to initialize and check a whole box. Over all, this program is very easy to use for those who are familiar with computers in general and the 4A in particular. However, for everyone else it may be only somewhat easy to use, and at first moderately difficult.

> Documentation: The manual that comes with AD is nothing short of excellent. A complete list of commands and special Keys is provided (a necessity with no reference card), and the explanations of the functions are well written and to the point. Numerous well-labeled diagrams the features that may be hard to grasp. Additionally, the manual provides background information on disk drives and how they store data, all of which may not be too useful unless you are technically oriented, but still it is quite interesting reading. Also included are complete descriptions of the sectors on the disk where files and the disk itself are described. This information is essential for repairing damaged disks, and the Miller's Graphics explanation is by far more extensive than the information published with other disk editors. All in all, this manual is very informative and very well done.

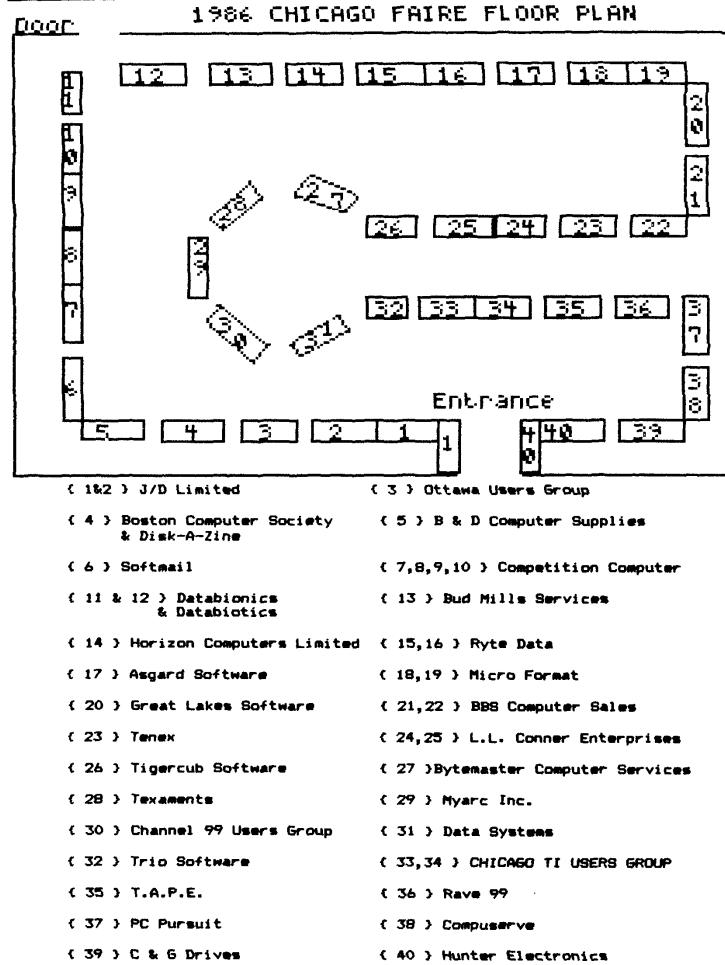
> Value: AD is undoubtably one of the most valuable programs you could ever purchase. Not only is it the most complete editor available, it's also an excellent disk manager, a workable disk copier and a fine tool for diagnosing your computer skills. Purchasing all these utilities separately could well run into the hundreds of dollars! AD is a state-of-the-art program, and it is at least as good as the best on any other computer. It is programmable and simple to use once mastered and includes excellent and complete documentation.

> If you have an interest in fixing damaged disks, if you want to Know more about your disks or if you have need of any of the fantastic utilities included to make using your computer so much less complicated, then this program is recommended highly. There is no better program for this

100 CALL CLEAR :: CALL SCREE N(13):: A=1 :: FOR B=1 TO 13 :: A=A+A/4 :: PRINT TAB(B+6);SEG\$("I-N-S-U-L-T-S",B,1): : CALL SOUND(100,A×110,0,A×2 20,0,A*880,0):: NEXT B :: FO R I=1 TO 1000 :: NEXT I 200 CALL CLEAR :: CALL SCREE N(7):: DIM M\$(10):: DIM N\$(1 0):: RANDOMIZE :: M\$(1)="FAT " :: M\$(2)="BAD" :: M\$(3)="D IRTY" :: M\$(4)="SAD" :: M\$(5))="GREEN" :: M\$(6)="UGLY" :: M\$(7)="DULL" 320 M\$(8)="TACKY" :: M\$(9)=" WEAK" :: M\$(10)="DUMB" :: N\$

(1)="A TREE" :: N\$(2)="A PIG

" :: N\$(3)="A TURKEY" :: N\$(4)="A DOG" :: N\$(5)="A ROOKI E" :: N\$(6)="SIN" 410 N\$(7)="A FIRE PLUG" :: N \$(8)="A BULL" :: N\$(9)="A WO RM" :: N\$(10)="AN OX" :: INP UT "WHOM ARE WE DESCRIBING ? ":B\$:: CALL CLEAR :: RANDOM 480 T=INT(11*RND):: IF T<1 T HEN 480 500 Q=INT(11*RND):: IF Q<1 T HEN 500 520 PRINT B\$;" IS ";M\$(T);" AS ";N\$(T):: FOR TM=1 TO 300 :: NEXT TM :: PRINT :: GOTO 480





Yesterday's News Information



Yesterday's News is a labor of love offered as a source of pleasure & information for users of the TI-99/4A and Myarc 9640 computers.

TI-99/4A HARDWARE
TI99/4A COMPUTER
MODIFIED PEB
WHT SCSI AND SCSI2SD
MYARC DSQD FDC
MYARC 512K MEMORY
HORIZON 1.5 MEG HRD
TI RS232 **RS232** TRIPLE TECH 5.25 DRIVE 3.50 DRIVE 5.25 DRIVE 3.50 DRIVE CORCOMP 360K 360K 720K

TI-99/4A SOFTWARE
PAGEPRO 99
PAGEPRO COMPOSER
PAGEPRO FX PAGEPRO HEADLINER PAGEPRO GOFER Pagepro flipper PAGEPRO ROTATION PIXPRO PICASSO PUBLISHER BIG TYPE TI ARTIST GIF MANIA PLUS

PC HARDWARE COMPAG ARMADA 7800 COMPAG ARMADASTED SAMSUNG SYNCMASTER

PC SOFTWARE
DEAD WINDOWS 98SE PRN2PBNS IRFAN VIEW ADOBE DISTILLER ADOBE ACROBAT

Yesterday's News is composed entirely using a TI-99/4A computer system. It consists of 11 PagePro pages which are "printed" via RS232 to PC to be published as a PDF file.

