

ISSUE **\*9** SEPT 1989

Rob once again has put more McFlix pictures into the library (10-15 disks full). Lynn in taking over Jan's duties did an extra special job on the goodies, and if you had a sample of the fruitie, goodooie, cheeeesie cake with crisp flakeeee crust, well no wonder no one volunteered to bring goodies next time. No Weigh could you compete.

Sheepishly, new classes being formed, or at least in the discussion phase including: TI Base- Mickey, Lynn: Printers, Postmen and Ewe; John Willforth and Assembly, so ewes really want to try, Gene Kelly.

General discussions centered around upcoming shows including Harrisburg (Carlisle) in October and the Washington D.C. (Alexandria, Va.) on Sept 16,1986. Chris Pratt visited to inform us of that show sponsored by MANNERS (MidAtlanticNinetyNiERS). Under new business the club overwhelmingly supported a motion to donate \$150 to the Church for use of the facility for a year.

Submitted Fortunately, Scoops Bittner

WEST	PENN	99 'ERS	CLUB	INFORMATION
		**		22.5

TREASURER'S REPORT FOR AUG. 15.189

#### FROM LYNN GARDNER

NEXT	MEET	TING	DATE:	SEPTI	EMBEI	R 19 1	989
MEETI	NG	LOC	ATION:		TINE	EPHEN' CATH	
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JUST OFF ROUTE 30 BETHEL ROAD, NORWIN

TIME OF MEETING: 7:00 P.M.

### LIST OF WEST PENN OFFICERS FOR 1989

		· ·
PRESIDENT:	MICKEY	335-0163
VICE PRESIDENT:	SCOTT	523-3754
TREASURER:	LYNN	835-4304
RECORDING SEC:	ED	864-4924
CORRESPONDING SEC:	GENE	829-0469
LIBRARIAN:	ROB	864-1233
NEWSLETTER EDITOR:	JOHN	527-6656

### GENERAL ITINERARY OF THE CLUB'S MEETING

6:45	P.M.	DOORS OPEN
7:00	P. M.	GENERAL MEETING
7:45	P. M.	DEMOS AND NEW INFO
8:45	P.M.	HARDWARE & PRINTERS
8:45	P. M.	INTRO TO ASSEMBLY
8:45	P.M.	INTRO TO TI-BASE
8:45	P.M.	USING YOUR CASSETTE
11:00	P.M.	DOORS CLOSE

### MEETING HIGHLIGHTS FOR THIS MONTH

THE LATEST T.I. NEWS FROM THE D.C. SHOW

ASGARD'S PAGE PRO 99 DEMO BY MIKE SEALY

JOYPAINT 99 BY JACK SKINNER & JIM CONN

LIBRARY "DEMO OF THE MONTH" BY ROB EKL

LATEST SOFTWARE DEMOS BY JOHN WILLFORTH

## RENEW YOUR MEMBERSHIP DUES!

\$15.00 PER YEAR FOR INDIVIDUAL / FAMILY \$10.00 PER YEAR FOR JUST THE NEWSLETTER

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8/15	CASH DN HAND	\$ 50.00 s
	LIBRARY SALES	10.00
	MICROFENDIUMS	
	DISKS & CASES	
	DUES	7.50
5.4	RAFFLE	4 <b>6.</b> 00 +
8/1£	TOTAL DEPOSIT	\$168.25
	CASH ON HAND	- 118.25 * 
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8/11	BANK BALANCE	\$1228.38 ·
8/15	POSTAGE (JOHN)	- 65,00 *
8/15	MICROPENDIUM	1163.38 *
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8/15	ST.STEPHEN'S	-150,00 ×
8/16	DEPOSIT	983.38 * +118.25 *
	BALANCE	
TOTAL D	* * * * * * * * Cash Balance	\$1151.63 *
* * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * EDITORRev2

In this adventure, you are in your .
bathing suit at the water park. Want .
fun and excitement? Try the fast and .
slippery track of the Super Slide, a .
5-story-high water slide. Speed down .
a twisting course on the Zoom Flume, .
a water-filled gully plunging you to .
the bottom. See if you can hang onto .
the Tarzan Trolley, a rope strung on .
a pulley between platforms. Ride the .
bumper boats in the lake or ride the .
waves in the wave pool. It's a cool .
day, but surf's up. Enjoy!

99%

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.........PRESS ANY KEY TO BEGIN......

THE MYARC GENEVE 9460
BY GARY TAYLOR
NUMBER ONE
WHY I BOUGHT ONE.

I PURCHASED MY GENEVE AT THE CHICAGO FAIRE IN THE FALL OF 1987 AND SINCE THAT TIME I HAVE GROWN TO ENJOY IT MORE AND MORE. BUT BEFORE I GO INTO THE DETAILS OF MY CONFIGURATION AND HOW I USE IT, I THOUGHT I WOULD TELL YOU THE REASONS THAT I BOUGHT IT IN THE FIRST PLACE.

IN 1986 I MOVED TO PITTSBURGH FROM DALLAS. I WAS A MEMBER OF THE DALLAS TI HOME COMPUTER USER GROUP WHERE THE USE OF RAM DISKS WAS BECOMING POPULAR. I HAD A FULL BLOWN SYSTEM AND A RAM DISK WAS CERTAINLY GOING TO BE THE NEXT ADDITION TO MY SYSTEM. UNFORTUNATELY, DURING MY RELOCATION TO PITTSBURGH MY TI COMPUTER WAS STOLEN, REPLACING THE COMPUTER DELAYED MY ABILITY TO PURCHASE A RAM DISK FOR THE NEXT YEAR OR SO. DURING THIS TIME I BECAME ACTIVE IN THE PUG AS LIBRARIAN AND FOUND MYSELF USING TI-WRITER TO PRODUCE THESE WONDERFUL NEWLETTER ARTICLES. AT NEARLY THE SAME TIME I WAS GIVEN AN IBM XT TO USE ON MY ASSIGNMENT AT WORK. IT DIDN'T TAKE LONG BEFORE I WANTED A FULL 80 COLUMN SCREEN AND A KEYBOARD AT HOME SIMILAR TO THE ONE I WAS USING AT WORK. I HAD ALREADY SET MY TI-WRITER SCREEN TABS TO 39 TO AVOID THE 40 COLUMN WINDOWING AND I WAS USING THE LATEST VERSION OF FUNNELWEB, SO I WAS TAKING ADVANTAGE OF THE LATEST SOFTWARE AND TECHNIQUES AVAILABLE, BUT I WANTED MORE.

SO WHY DIDN'T I GO OUT AND BUY A CLONE? WELL, I GUESS THE TI REPRESENTED FUN TO ME! IT CERTAINLY DID ALL THAT I NEEDED A HOME COMPUTER TO DO. IT PROVIDED ME WITH ENDLESS HOURS OF ENTERTAINMENT, ALLOWED ME FOR THE FIRST TIME TO TYPE LETTERS WITHOUT SNO-PAK, AND I COULD COMMUNICATE WITH THE WORLD THROUGH MY MODEM. THE THEIVES THAT STOLE MY EQUIPMENT DID NOT TAKE ANY OF THE BOOKS OR SOFTWARE AND I HAD OVER 250 DISKETTES OF PROGRAMS. I ADMIT THAT THE TI-99/4A IS NOT AS FAST AS THE COMPUTER I HAVE AT WORK BUT THEN I CAN ONLY TYPE AT 45 WORDS A MINUTE AND MY MODEM IS ONLY 2400 BPS, SO WHAT DO I NEED A FASTER COMPUTER FOR? MY MAIN USE OF THE COMPUTER WAS AND STILL IS WORD PROCESSING AND TELE-COMMUNICATION. BESIDES, THE COST OF BUYING A CLONE WAS GOING TO TO EXPENSIVE, EVEN THOUGH I COULD PROBABLY PIRATE ALL THE BUSINESS SOFTWARE I COULD EVER USE. WHAT WAS I GOING TO DO WITH R-BASE 5000 AT HOME? OR LOTUS 123? I HAD NEVER EVEN LOADED MULTIPLAN ON MY TI EVEN THOUGH I HAD TWO COPIES OF IT.

SO THERE I WAS WITH A WISH LIST THAT INCLUDED A RAM DISK, AN EXPANDED KEYBOARD, AND AN 80 COLUMN DISPLAY. THE THIRD PARTY EQUIPMENT MANUFACTURERS HAD ALL THE PIECES I NEEDED. ALL I HAD TO DO WAS COME UP WITH THE MONEY AND PUT IT TOGETHER. I COULD BUY AN EXPANDED KEYBOARD FOR \$200, A HORIZON RAM DISK FOR \$200 (AH REMEMBER 1987?), AND A MECHATRONICS 80 COLUMN CARD FOR \$200 AND I WOULD BE ALL SET.

BUT WAIT, THIS IS 1987 AND THAT MYSTERIOUS GENEVE WAS JUST RELEASE EARLIER IN THE YEAR. I HAD READ ABOUT IT IN MICROPENDIUM. IT CAME WITH AN EXPANDED KEYBOARD; IT CAME WITH A BUILT IN RAM DISK; IT CAME WITH 80 COLUMN DISPLAY CAPABILITY; AND IT ONLY COST \$425! PLUS I GET ALL THAT OTHER STUFF EVERYONE WAS TALKING ABOUT LIKE MDOS, AND CLOCKS, AND A FASTER PROCESSOR, AND RGB GRAPHICS, AND 80 COLUMN MULTIPLAN (WHATEVER THAT WAS), AND 80 COLUMN MYWORD, AND PASCAL, AND ADVANCED BASIC, AND MULTITASKING ?? AND ALL KINDS OF OTHER STUFF THAT I DID NOT UNDERSTAND, ALL FOR ONLY \$425. WELL I COULD HARDLY WAIT TO GET TO CHICAGO AND TALK TO THIS GUY NAMED JACK RILEY ABOUT THIS NEW COMPUTER. THE DOORS OPENED AT 9:00AM AND I WAS STANDING IN FRONT OF HIS BOOTH AT 9:01. HE RAN THE GENEVE THROUGH ITS

PACES SHOWING ME THE DOS LIKE COMMANDS THAT I HAD BECOME FAMILIAR WITH AT WORK AND DEMONSTRATED A GRAPHIC PROGRAM CALLED MYART. HE EVEN HAD A MOUSE TO DRAW WITH! I WAS SOLD! OFF I WENT TO MAKE MY BEST DEAL AT THE VENDOR TABLES.

WHEN I GOT HOME AND OPENED THE BOX, I FOUND A P-BOX CARD WITH A BUNCH OF CONNECTORS STICKING OUT THE BACK, AN EXPANDED KEYBOARD (HOO-RAY), A LARGE BINDER FULL OF INSTRUCTION, A BUNCH OF DISKS AND A WARRANTEE CARD. INSTALLATION WAS A SNAP. I OPENED THE P-BOX AND PULLED OUT THE 32K CARD AND REPLACED THE FLEX CABLE WITH THE GENEVE 9640. THEN I CONNECTED THE KEYBOARD TO THE GENEVE AND PLUGGED IN MY COMPOSITE MONITOR AND TURNED IT ON. WOW! THERE WAS THE BEAUTIFUL WHITE SWAN THAT I HAD SEEN IN CHICAGO. SUDDENLY DISK DRIVE ONE CAME ON, THE SWAN DISAPPEARED, THE SCREEN HONKED, AND WAS STARING AT AN ERROR MESSAGE — "NO BOOT PROGRAM FOUND ON DISK—PRESS ANY KEY TO RETRY". THUS I WAS WELCOMED TO THE WONDERFUL WORLD OF M-DOS. WHICH IS THE TOPIC FOR NEXT MONTHS ARTICLE.

BYTE . JULY 1989

# What if literature were published the way software is?

s a fan of great literature, I found myself wondering the other day, "What if novels were published the way software is?" If they were, the process might go something like this:

Herman Melville would announce the publication of Moby Dick a year before you could actually buy it. Reviewers would praise it, and several literary magazines would select it as "Editor's Choice" for best novel of the year—all before it ever appeared on bookstore shelves.

Eventually, the publisher would send out a press release to announce that copies of *Moby Dick* were actually shipping. The public, tantalized by the prepublication hype, would rush out to buy the book like sharks at a feeding frenzy. The novel would become an overnight bestseller, thereby confirming the media's amazing prophetic abilities.

The book would come wrapped in oilcloth, with a long parchment notice explaining when and where you could read it, that you couldn't loan the book to anyone, and that the publisher wasn't responsible if anything in the book were to cause damage to your life, liberty, or kidneys. If you violated the rules of the reader agreement, you would forfeit your firstborn child.

After struggling through the first few chapters of the book, two-thirds of Moby Dick's readers would realize that they had no idea what it was about. Most of them would put the book away, haul it out now and then, and one day find a registration card that they had never bothered to send in. On sending in the card, they would receive the following letter:

# MOBY DICK 2.1

Dear Registered Moby Dick Reader,

Enclosed you will find Moby Dick version 2.1, which replaces earlier versions.

- 1. Version 2.1 restores several key characters that readers reported were missing in version 2.0, which was subsequently recalled. We have also added several new characters to version 2.1. In particular, several readers reported that the character of Harold the bookkeeper, who was intended to act as a foil for Ishmael, simply did not work. This character has been replaced by Queequeg, a South Seas savage. Further modifications should not be necessary.
- 2. Version 2.1 contains corrections to errors reported by readers of earlier versions, most of whom were being too picky. However, one misprint on page 127 could make it difficult for you to follow the remainder of the story. Note that it is a "gold piece" that Ahab nails to the main mast, not a "cod piece." (Also note: If, beginning in this section, your version of Moby Dick refers consistently to "the Great White Tuna," you have the original version, 1.0.)
- 3. Early readers of Moby Dick commented that the hardcover modification (intended to discourage unauthorized copying of the book) made it impossible to install the book into their libraries. Version 2.1 contains a modified "key-type" protection. In the enclosed envelope, you will find a key that will open your copy (and only your copy) of the book. Attempting to open the book without using your key will invalidate your readership license.
- 4. With this version of Moby Dick, we are inaugurating our telephone support service, available free of charge to all registered readers. If you have a problem while reading the novel, please refer to the Moby Dick Technical Reference Manual (MMD-1024), which contains answers to the most commonly asked questions and includes a complete table of literary symbols used in the book. If you still cannot resolve the difficulty, call (800) BIG-FISH. The customer service representative will ask for the serial number of your book before assisting you.
- 5. Finally, it has come to our attention that certain unscrupulous publishers have pirated portions of the *Moby Dick* reader interface or are producing complete *Moby Dick* "clones." The most flagrant example involves a pirate captain whose hand has been swallowed (along with an alarm clock) by a large crocodile. We are suing the publisher of this work. If you buy it, you could become a codefendant in the lawsuit. You'll also receive a visit from large men with blunt instruments.

Please complete the enclosed registration card so that we can send you information on new versions of *Moby Dick*. We will also inform you of forthcoming products, such as our state-of-the-art novel, *Ambergris*, an integrated tale of daring and intrigue in the perfume and whaling industries, to be released in the fourth quarter of 1889.

Melville Press Seattle, Washington

#### PRINTERS #1 by John F. Willforth (SEPT. 1989 WP99er)

-(ML=MoreLater)

I will not say how far I'll go with this series on printers, only that when NO ONE finds strategically placed ERRORS, I'll assume that either no one cares, or I've lost you all.

I must start out at the beginning. The printer is probably the most common and useful device for a computer. You can do without a disk ( you could store all in memory), and you could do without modems ( some of you could never imagine how), you can even do without a monitor, I've seen people do it. But to take away the printer would be akin to taking away the brush, paint, and canvass from Picasso. Almost nothing that is input to a computer from keyboard, modem, disk, or even a cassette serves a useful purpose unless a "HARDCOPY" of the redesigned, sorted, aligned, deleted, added to, or otherwise corrupted data is created. Even the act of writing the initial program that does all of the above is made easy by making a listing of that program as it develops ( a frequently used aid in debugging ). I know that initially, even more than a disk, I desired a PRINTER.

A printer generally is like me. It takes orders, but can only let you know if it is getting behind in it's work, is hungry, or has died (so maybe this is the only way for both of us to be missed. A printer is generally a RO, (Read Only) device. There are those with keyboards, but those are generally used as hardcopy master consoles on commercial computers so that the business will have a paper trail of all actions taken by the system manager and operators on the system. I would have a very hard time identifying system problems, if a CRT Terminal was used as a master console. The printer is generally interfaced to the CPU through either a SERIAL (RS232) or PARALLEL interface and cable. The T.I. 99/4 and /4A using a P.E.B. RS232/PIO card can drive either interface. The old T.I. interface was first the TP (we won't discuss here), and then the dual-RS232 Stand-alone. I know that a limited number of them were produced, and that some companies like CORCOMP, MYARC, BOXCAR, and others produced a variety of cards for this purpose.

The printer receives the data to print if it is READY:

- \* ON-LINE and POWERed up.
- \* The printer buffer (if it has one) is NOT FULL. The printer will usually print slower than data will be sent. Today's printers generally have 1K, 2K, 4K, 6K, 8K or even larger BUFFERS within themselves to allow data to flow at a faster rate to the printer than it can actually be printed. ML
- \* NOT OUT OF PAPER!

The printer can only let the CPU know when it is behind in it's work, or out of paper in a serial printer hooked to the RS232 port, this is accomplished with a HARDWARE BUSY signal from the printer CTS (Clear to Send) pin 5 to DTS (Data Set Ready) pin 20 on the RS232/PIO card. In otherwords when the printer can not accept any more control or data from the CPU logic in the printer changes CTS to NOT CTS, this in turn is INPUT to the RS232/PIO card as NOT DTR, and the flow of data stops until the printer catches up (just by printing one line), having the new paper installed, or the OFF/ON LINE status changed to ON LINE (Ready). These three conditions are NORMAL and occur often even when you don't think about it.

If the printer is PIO (the most common) all of the above conditions apply, but the method is slightly different. When the printer is BUSY it OUTPUTS a signal on pin 11 (BUSY) [High at +5v.] more directly NOT GROUND to the PIO port on the RS232/PIO card pin 10 called HANDSHAKE IN. The flow of data will be stopped.

If you do not have the cable for the SERIAL or PARALLEL (PIO), printer made as it should be to control data flow, you may print a page or two but eventually characters of data or control will be lost.

Since TI didn't like convention, they made TRANSMIT on the SERIAL port, pin 3. RECEIVE must therefore be pin 2. When you hook up RS232 ports on other types of equipment, you usually have to cross pins i.e.: 2 to 3 and 3 to 2 so the mouth of one speaks to the ear of the other and visa versa. Not TI! No! pin 2 goes to pin 2 and pin 3 goes to pin 3. On the PARALLEL port to the RS232/PIO card, they did even more dirt. They chose a 16-pin connector that is so rare that God threw away the pattern. But the signals that do arrive there are acceptable to the PIO convention. The only real problem here is with STROBE (the signal that tells the printer when to look at the eight data lines for a good character), and polarity appears to be the major problem, the problem lying with a few printers, not TI. In case you didn't know it, the PARALLEL (PIO) interface sends to the printer much faster than SERIAL (RS232) because the entire 8-bit byte of data appears at the printer in one time frame, while it is spelled out one bit at at time to the printer.

As you can tell, I'm dealing with the interface cables for your printer this month. If you can't get the printer to run on your TI, then you won't be able to keep up. Below are two cable configurations that should work, and cause the flow of data between your TI and the Printer to be smooth, and complete. (Remember, there are printers that will give you trouble because of "NON-STANDARD", I whatever that is protocol, strobe or data polarity, timing, etc.)

The SERIAL (RS232/1) cable:	The PARALLEL (PIO) cable:
TI end Printer end	TI end The Printer end
GROUND 7 7 GROUND REC. DATA 2 2 TRANS. DATA TRANS. DATA 3 3 REC. DATA DTR 20 5 CTS  The SERIAL (RS232/2) cable:	STROBE         1          1         STROBE           DATA         0         2          2         DATA         0           DATA         1         3          3         DATA         1           DATA         2         4          4         DATA         2           DATA         3         5          5         DATA         3           DATA         4         6          6         DATA         4
TI end Printer end	DATA 5 7 7 DATA 5 DATA 6 8 8 DATA 6
IKANS. DATA 16 3 REC. DATA	DATA 7 9 9 DATA 7 READY 10 11 BUSY GROUND 16 16 GROUND  optional) ground 19 thru 30

If you can't get your printer to run with one of the cables indicated above, I can give you some suggestions, but I won't be reprinting these special cables in this series.

In PRINTERS #2 we'll start with the commands that are sent to printers to make them do what they do. This is one of the most interesting things that we'll get into in this series. This therefore will not be a hardware only series. I wanted to get into printers because this is the one peripheral that everyone of you can really make perform, and to do it takes some understanding of hardware, but even more understanding of printer commands.

PS: The Parallel interface on the TI RS232/PIO card is BI-DIRECTIONAL. This is significant for those of you who are looking for a high speed INPUT/OUTPUT port for the TI. You just have to control the reading of this PIO port. Maybe you can find something in the Editor Assembler manual on this. Why not look into it? ML



August 21, 1989

Dear User Group Member:

We are updating our list of TI-99/4A user groups. Please verify your mailing address (and include a daytime telephone number for my information only) by October 16. If I do not hear from you by that date, your group will be deleted from our list.

Please advise your members that Texas Instruments has not sold home computer products since April 1, 1984. Referrals for sales should be made to third-party suppliers such as Triton (800/227-6900) and Tenex (800/348-2778) and the companies on the enclosed list.

We will continue to offer service on TI-99/4A equipment. TI-99/4A owners can contact us for flat-rate service charges or assistance by writing to the letterhead address or by calling a consumer representative at 806/747-1882.

I will look forward to hearing from you concerning your group's mailing address.

Yours truly,

/bjw Enclosure

FF-06-HC-230/09

Lois Brock

Consumer Services

MANUFACTURERS OF THE FOLLOWING ITEMS HAVE REPRESENTED THAT THEIR PRODUCTS ARE COMPATIBLE WITH THE TI-99/4A. HOWEVER, TEXAS INSTRUMENTS ASSUMES NO RESPONSIBILITY FOR THE QUALITY OR COMPATIBILITY OF ANY OF THESE PRODUCTS.

Alboes Computer/Supplies 6298 Hamilton Rd. 3G Main Street Village Columbus, GA 31909 404/327-4900 (Does not ship internationally)

Hunter Electronics
4 N. 370 Pine Grove
Elmhurst, IL 60126
312/832-6558
(System Check-By appointment only)
(Does ship internationally)

Learn-A-Bit About Computers East Wind Mall 129 Phelps Avenue Rockford, IL 61108 815/229-9200 (Does ship internationally) Pilgrim's Pride 5 Williams Lane Hatboro, PA 19040 215/441-4262 (Does ship internationally

Joy Electronics
P.O. Box 542526
Dallas, TX 75354
(US) 800/527-7438
(TX) 800/442-3892
214/243-5371
(Does ship internation-ally)

# ILE WULLEN

he the incredible. The ability to sort an unlimited amount of data, stored in virtually any type of like, in record time imagination just became reality, the incredible is Ti Son.

Based on the "Culck Son" method developed by C.A.R. Hoere, TI Son is the only universal sorting utility available for the TI-99/4s. Til Base files, desirated files, fixed length files, and Basic or Extended Basic files — Til Sort does them all!

#### Sample Time Trial

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			Classer	BAMBE	Hard Dies
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Sert Type: 2 field resided cort. (TI Sert can sort up to 8 fields) Plus Type: Standard TI Base file.
Plus Type: Standard TI Base file.
Plus State: 843 records; 50 characters per record in live fields.
Squipment Used: Standard TI-69/46 screecie attached to a peripheral supervision bus containing a Myerc hardway board deletionate found files IS-CNI films strates. periphera expenseon cos consening a sejerc resumopey com-troles, two 8ms DS/DD Roppy drives, 20 megabyte hard disk, and a blyerc 512X memory expension card.

The table appeals for lead - no hype, no mineculous old There is no feater. Period.

### TI Sort - The incredible SORTwere - Only \$14.95

coystem, 32K mannery expension, and other on Enterded Basic, Edher/Assembler Til Berr is kelly composition with all atomops disvision and the Gameus Bild's (in 12th, is



With its overwhelming the handling capabilities, extensive command peopranning larguage, and unmatched information processing facilities. It Base is the most accuracied and flexible database management system available for the TI-68/46.

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Order both Volumes I and it for only \$22.85!

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Please add \$2 80 for demands first class and Consider delivery, 30 00 for larger, insured at mail delivery. Sorry, no dreds card create will be accepted C.O.D orders are accepted, and must be placed by phane. Orders are usually shapped within 48 hours.

#### SUPER EXTENDED BASIC OWNERS! Have four modules in one with:

# MULTI-MO

The MULTI-MOD is a plug-in upgrade for owners of Triton's Super Extended BASIC module that gives you SER, Editor/Assembler, Disk Manager III and TI-Writer ALL IN THE SAME MODULE! It may be the only module you'll ever need!

The price of the upgrade kit is \$22.95 and includes a manual and disk with the Editor/Assembler and TI-Writer support files. A free brochure is available on request from:

> John P. Guion P.O. Box 4628 Lubbock, Texas

Also ask about TI RS232 and Disk Controller upgrade kits.

(Super Extended BASIC is a trademark of Triton Products Company)

## Memory expansion created for Geneve

Bud Mills Services is offering a new memory expansion for the Myarc Geneve 9640. The memory expansion has been designed and developed by Ron Walters of Dynamic Systems Research Inc. and will be produced by Horizon Computer.

The memory expansion "MEMEX" uses the more economical I meg dynamic memory chips. The MEMEX uses a new refresh circuit design and automatic detection of other cards that may cause bus conflicts, according to the manufacturer. The card will support "zero wait state" operation and is fully socketed for expansion up to 1.5 meg (greater than 504K requires a minor modification on the Geneve).

The fully constructed tested and warranted 504K MEMEX is priced at \$245. No kits are available because of a timing adjustment that is required.

For information or to order, write Bud Mills Services, 166 Dartmouth Dr., Toledo, OH 43614.

## *Luuuuuunniinii* Ahoy Maties!

Yo ho ho and a Bottle of Rumi The Captain warts it known, maries, that Dask of Dinosaurs was just a taste of Mi. Gillitand's fertile imagination. He has now made available a package that gives you a fittle but of an idea of the fee and imped of the printes of old. Dask of Pyrates is indeed a masterpace. It is four disks full of pyrates among pyrate honts, pyrate history, pyrate games, pyrate amaster and even a pyrate amy admit if you aways wanted to know more the exploit of Black Bar. Blacchaestd, and the others that sailed the Spanish Main for booty and blood, then this dris is do you, it can't rightly be called just a graphics-package because you will sear much should the buckanees that tempirated the Spanish and isso waste to Merchaniman and Neval shop alse if can't be called a game aven though it is more fur then the lare hould also. Even a sourcy dog will reakize that is a like nothing else for the Ti-PgAAI Dask of Pyrates requires a Ti-PgAAA with 32%, a disk system and Exisanded BASIC. Ti-Artist is recommanded but not required a Ti-or Corcomp disk controller is required to view the pyrate sinnation. At \$1.68, the great value of this package, will warm the heart of even the hardest east.

Ascard Software

Box 10306, Rockville, MD 20850 

# ISIC Pro



Successed Retail: \$17.95 U.S./Canada Piezse add \$1.00 S&H \$4.00 Airmail

Music Pro is an amazing MUSIC PROcessor for the TI-99/4A that makes creating music on the 99/4A as simple as typing in sheet music! By David Caron and Lucie Dorais of the Ottawa TI-99/4A Users Group, Music Pro allows you to type music directly on a staff - one voice at a time. While editing you can delete, insert, move, copy and even transform and transpose single or whole blocks of notes at a time. Enter up to 400 notes for a single voice. Later, after entering all the voices you can compile them into an assembly language file. Music Pro automatically takes care of time differences between the voices—you just concentrate on entering the music and Music. Pro takes care of the rest! Compiled music can be run from the program or used by itself for games or. can be run from the program or used by itself for games or music programs. Even print out sheet music on an Epson or compatible printer! Requires 32K, Extended BASIC. Disk. For the T1-99/4A only.

> Asgard Software P.O. Box 10306 Rockville, MD 20850 (703)255-3085

marme d'uration bassa

Epson or compatible primer. © Transpose octaves. © Easily seve/load music © Compiled music can be run

independent of program in Extended BASIC!

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Today I recieved word from Gary Taylor that JOHN GUION had passed away. He was involved in a headon auto accident on his way home from college Friday evening. I know that many of you knew him personally and others, like myself, knew him only from some brief telephone conversations. I know that all of us will miss him as family, friend, as casual acquaintance, and certainly within the TI com-

munity.

John was a youngster, but one of the brightest young people in the computer orld. He designed and perfected the P-GRAM card, the MULTI-MOD, and other hardware items that have become well known and widely used. His untimely death, will leave a void in all our lives.

To his family I wish to express our sympathy here in Western Pennsylvania, and I know that this feeling will be expressed by the rest of us who know or know of John through his work with TI. He will be remembered by many everytime they use one of his creations.

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DEMONSTRATION of the AVPC Card
RAY WALLACE of the Pittsburgh Users Group will be demonstrating the AVPC Card on
Sunday September 17, 1989 at the regular P.U.G. meeting. The meetings are held
at the South Campus of the Allegheny Community College at 6:00 P.M. behind the
Century III Mall. This card is one that many have wanted to know more about, but
were afraid to spend the money to get. If you've wanted 80-columns, mouse, and
digitizing capabilities, then maybe you better set aside this Sunday evening,
com to the P.U.G. meeting for a demonstration of this great card!

ZENO BOARD (Internal Board) IS HERE......

I've assembled one, the hard way, with no instructions! The board will a great addition to anyone who gets one from Eric Zeno. Rough guesses on assembling this board relating to a feature are as follows:

\* Extended Basic using chips from old XB cart. w/selecting switch...5.0 Hours

\* Extended Basic using new chips from TI, w/selecting switch......3.5 Hours \* Speech Synthesizer using old speech chips, w/deselect switch.....4.0 Hours

\* Up to 3-sets of socketed GROMS (E/A, PLATO, etc)w/selecting sw...0.2 Hours Works Great and lasts a long time! I checked T.I. stock on the XBASIC ROMs and GROMS, and was told that they are all still available for \$31.50 + S/H. and the Editor Assembler chip is still \$3.60, so for about \$25. for the 32K chip, \$32. for XBASIC chips, and \$4. for E/A and \$20. for Eric's board, your set to get rid of console lock-ups, have a reliable 32K, and have a carrier for your speech.

#### WEST PENN 99'ERS

See August newsletter for ordering instructions.

% JOHN F. WILLFORTH R.D. #1 BOX 73A JEANNETTE, PA 15644





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> MICKEY SCHMITT 196 BROADWAY AVE. LOWER BURRELL PA 15068

WE WILL MISS JOHN GUION!