HAPPY BIRTHDAY, D U U G !

Delaware Feb 86

THE DELAWARE VALLEY USERS GROUP
P.O. BOX 6248 STANTON BRANCH, WILMINGTON DE 19804
DEDICATED TO THE TI AND COMPATIBLE HOME COMPUTER FAMILY

MEETS 4TH THURS. EACH MONTH/6:30-9:30 P.M./CHRISTIANA MALL COMMUNITY ROOM

DOVER BLUE HEN MALL RM.203	\<CHAPTER\>	DEPTFORD, NJ MUNICIPAL BLDG.
2ND THURS. 7:00-9:00 P.M.	\<MEETING\>	3RD MONDAYS 6:45-9:00 P.M.

!!

WELCOME TO DVUG:

From DELAWARE: Kenneth and Nancy Ayers; Andrew, Brian, Laura and Ronald G. Mehan

From NEW JERSEY: Herbert & Polly Danner; The Rev. William Johnson; John Tomchick, Jr.

From PENNSYLVANIA: Leslie, Richard and Theresa Sweeney

RENEWALS: DEL - 7 NJ - 2 PA - 1

##

CALENDAR NOTES

Sunday, Feb. 23 - Lancaster, PA
COMPUTER/HAMFEST, 9 a.m.- 4 p.m.
Gurnsey Pavilion, U.S.30 & Rte.896

Thursday, February 27, at Christiana
DVUG BEGINS OUR 4th YEAR (PARTY!)
- CAKE, etc.! BE THERE!

Author Chris Faherty demonstrates
(and sells) his TI-ARTIST, Ver. 2.0,
rated best software at Chicago's TI
Faire. Only $19.95, a graphic gem!
Jim Davis describes the RS-232 and
MODEM interfaces and operations.

DELMARVA CHAPTER - Dover, Mar. 13
TI FEST - Roselle Park, NJ, Mar.15
SO.JERSEY CHAPTER - Deptford, Mar.17
CHRISTIANA - March 27th

##

Welcome to another year with the DVUG and one brimming with changes in the old TI world. The most exciting development yet in 99/4 technology is Craig Miller's GRAM KRACKER, which you can win for just a $2 contribution (for members - $5 from non-members) plus mastery of the gods of RND. Selection will occur at our Feb.27 birthday meeting.

The GRAM KRACKER was demonstrated by Steve Lawless at our January meeting and allows transfer of TI module contents to disk, thus avoiding potential mechanical malfunction. Better yet, those contents can be modified for user pleasure - the Terminal Emulator II cartridge reset for 1200 Baud, for instance, or TI XB error messages redefined for friendlier use or more respect for their master (sic). An extended description of possibilities in that realm is found in Super 99 Monthly, written by Louisiana's Richard Mitchell, who frequently appears on our TIBBS. See the December, 1985, issue at Christiana DVUG meetings.

A growing number of User Groups not previously in contact with DVUG have now asked for newsletter exchanges. We are getting greater national circulation. On pages 4-5, you'll see some effect.

We'll be changing THE DATA BUS format by varying programming issues with those dealing with new product news instead of a mix, to provide more coherent coverage. Some change in size or mailing method is also likely to save on newsletter costs. 1986 definitely is a year of change ...

=======================================

TELEPHONE NUMBERS OF NEW DVUG EXECUTIVE OFFICERS FOR 1986 INADVERTENTLY WERE NOT INCLUDED INSIDE; SEE NEXT MONTH'S ISSUE.

DVUG EXECUTIVE COMMITTEE MEMBERS IN 1986

PRESIDENT ....TOM AUGUST
VICE PRESIDENT ....JIM DAVIS
SECRETARY ....LYNN ACQUARD
TREASURER ....TOM KLEIN
SGT. AT ARMS ....JIM FOLZ
DELMARVA CHAPTER CHR.......CHARLES BOWER
SO.JERSEY CHAPTER CHR....ERROL LANSBERRY
===
DVUG BBS: (302)322-3999 or (609)435-7301
For general information, you may contact
TOM KLEIN   Pa.   (215)494-1372
GIL or KAY QUILLEN Del.   (302)492-8189
JACK SHATTUCK   Del.   (302)764-8619
CAROL ROSOWSKI   N.J.   (609)228-2445

A Delaware Valley Users Group membership
includes monthly newsletter, library and
software privileges, plus other special
benefits. Annual membership rates are:
Family or Individual $15;   Students $5;
Newsletter only (beyond 75 miles) - $10
~~~~~~
PLEASE TRANSMIT YOUR NEWSLETTER COPY TO:
The Data Bus Editor -- Jack E. Shattuck,
2 Colony Boulevard,Apt. 101, Wilmington,
DElaware 19802 Telephone:(302)764-8619
NEWSLETTER COPY WILL NOT BE ACCEPTED FOR
AN ISSUE AFTER THE 2ND THURS. EACH MONTH

An article appearing in The Data Bus may
be reproduced for publication by another
TI User Group as long as acknowledgement
is given to the sources as indicated. We
encourage exchange newsletters; mail to
DVUG business address shown on Page One.
~~~~~~
DVUG ADVERTISING RATES FOR THE DATA BUS:
1/4 page = $ 5/issue, or $ 45/12 issues
1/2 page = $ 8/issue, or $ 75/12 issues
Full page = $15/issue, or $125/12 issues
===
DELAWARE VALLEY USERS GROUP MEETINGS
Plenary meetings: Delaware's Christiana
Mall on Rte. 7, at I-95 Exit 4-S, in the
Community Room. Enter between J.C.Penney
and Liberty Travel inside the Mall.
    DELMARVA CHAPTER: Dover Blue Hen Mall
on Northbound U.S. 113, Rm.#203 upstairs
in center of Mall. Elevator available.
    SO.JERSEY CHAPTER: Deptford Municipal
Building, Cooper Ave. and Delsea Drive,
(Rtes. 534 & 47), in Gloucester County.
Enter and park in rear of the building.
    All meetings are open to the public.

DVUG DOINGS

Congratulations to the newly elected
DVUG Officers for 1986, listed here and
all ready to receive suggestions as well
as offers of assistance. All members are
reminded to check their DATA BUS mailing
labels to ensure timely renewals, which
will avoid cutoff from mailings.

Also as you renew, please complete an
updated questionnaire as to equipment or
whether or not you wish your name given
for vendor mailing list. Annual updates
in this regard are extremely helpful.

The TIBBS Committee continues to give
members additional benefits, with access
level 15 giving multiple download option
and assurance of continued access by use
of a "safe" sign-on number to avoid the
need to register anew after any extended
absence from use of the board. The (302)
322-3999 TIBBS continues up 24 hrs./day,
at 300/1200 Baud, increased capacity and
more upgrades still planned. After you
sign in, leave the SYSOP a message about
your ability to use XModem transfers.

Our Education, Equipment, Library and
Recruitment Committees are open to help;
in some cases, seeking new chairpersons.
Program ideas should be referred to Jim
Davis, our Program Chr. and "Veep".

THE DATA BUS wants contributors able
to meet schedules and write articles or
reviews of new software/hardware, or use
of Assembly Language routines. Members
accessing interesting notes from nation-
wide BBS's (CompuServe, Source, Delphi,
etc.) are invited to contact this Editor
for including them in this newsletter as
appropriate. Letters to the Editor, in
the form of questions here or in inquiry
on TIBBS, provide important exchanges of
information to other members who aren't
"where you're at" (yecch!) yet, and help
keep our more advanced members humble.
We get MANY newsletters from other Users
Groups - these can be signed out at DVUG
Christiana meetings monthly for info.

Reportage from the Delmarva and South
Jersey Chapters would be helpful for our
members unable to attend all meetings -
Deptford and Dover are 1 1/2 hrs. apart.
Volunteers willing to undertake the task
can contact this Editor; use of a D/V 80
file exchange via telephone is okay.

Texas Instrument Computer Owner Fun Festival, Roselle Park High School, Roselle Park, N.J. - Saturday, March 15, 1986, FEATURING:

New MYARC Computer -- Educational Program -- Hardware and Software Demos -- Flea Market -- 20,000 Sq.Ft. Vendor Area -- Lectures, Classes & Workshops -- Cafeteria with Seating -- User Group Meetings & Exchanges -- Comfortable Auditorium -- Special Interest Groups -- Sound System -- Fairware, Freeware, Public Domain Libraries -- Ample Parking -- 1 Block from R.R. Station

I hope everyone has their calendars marked on March 15th for TICOFF. I'm excited, and I hope everyone else is, too. If there is anyone out there who would like to go to TICOFF, but does not relish the idea of driving, I have the answer! We are in the process of organizing a bus. We will be leaving from Clemente's Travel Center on Rte. 13 at 6:30 am. I realize that this sounds VERY early, but we want to be there early enough to set up. We will also be stopping in New Jersey to pick up some members there, at Turnpike Exit 3.

The cost will be $11.00 per person. If you are interested in riding the bus, please bring your money to the Feb.27 Meeting. This is VERY important. Since the majority of the club will not be able to take advantage of the ride, NO money will be coming from the treasury. The catch is this: the bus company will not hold the bus for us without at least a deposit. And although enough seats have been paid for to GIVE a deposit, I feel I cannot do so unless I KNOW that there are enough people interested in going to fill the bus. I do not want to end up with a half-filled bus the day of the trip, leaving the club stuck for the difference. If you pay, and for some reason we don't get the bus, we will return your money.

But, enough of the dreary side of things. I did not make any arrangements for a meal stop somewhere, so plan on eating at TICOFF, or bringing a cooler with you. (Please, no alcoholic beverages.) There will be plenty of storage space, so don't be concerned about room for your trusty computer. As of now, I do not know the size of the room we will be in, but the more equipment, the better. Through this marvelous newsletter, and the abilities of various members of our club, we have quite a reputation to live up to. I'm sure we all want to put in a good showing. Remember, we are interested in all member-written software,including programs on tape. Also, if anyone has had experience with any of the popular software packages, ie. TI-Writer, Multi-Plan, etc., please let us know. There will probably be someone at the fair who would LOVE to ask you a few questions. Remember, you can "team up" with a couple of people and each bring a part of your system. that way you don't have to haul it all by yourself, and you all can take turns at our booth. Then no one will feel tied there all day, and EVERYONE can enjoy the fair. TI LIVES!!! ~~~~~~~~~ Lynn Acquard, DVUG Secretary (302) 368-0609

IF YOU HAVE TO DRIVE YOUR CAR:

Use Garden State Pkway. Exit #137, onto Westfield Ave. (Rte. 28) east-bound. At third light, turn left (north) onto Locust St. Turn off Locust immediately after railroad underpass, left onto Webster Ave. Roselle Park H.S. is 2 blocks in, 185 W. Webster Ave. Telephone is (201) 241 - 4550. Allow 2 hours from Wilmington, Delaware.
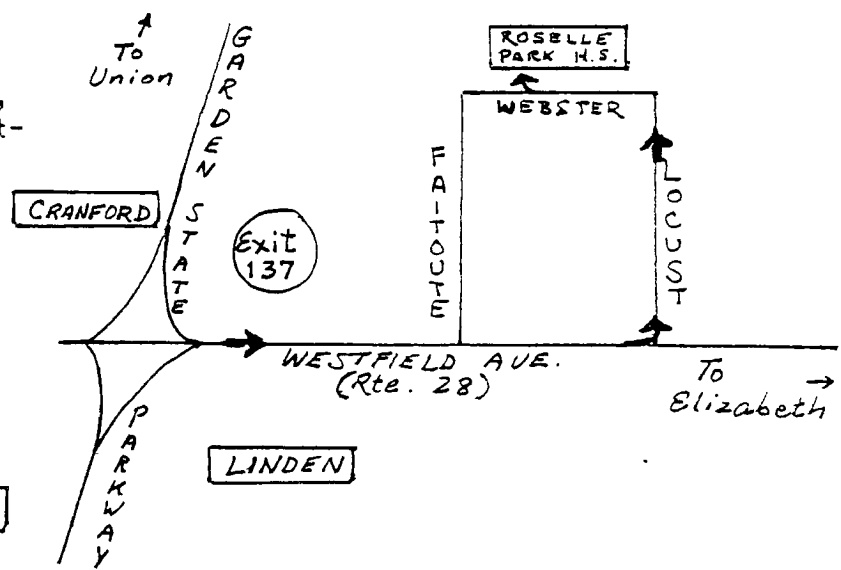
[Ed. note: Information provided below was not published previously in MICROpendium. The DVUG condones piracy by NONE of its 250 members; this Editor is a past J&KH customer.]

"MARKETING HASSELS" RESPONSE

By Jim Hollender, President of J & K H Software

The following excerpt is taken from the "Marketing Hassels" column in the January issue of The Data Bus:

> "MICROpendium's December issue has mixed commentary of approval/disapproval on Free/ Fairware by different authors of the stuff. DVUG's Steve Lawless received slow response first, but considerably better reaction later. Bill Knecht and Danny Michaels have been quite pleased. On the other hand, Robt. Wessler wants his Trivia 99'er removed from circulation. *Jim Hollender suggests that but one copy sold of SXB at a recent UG (DVUG?) meeting meant everyone was pirating. We think he overestimated appeal of a language vs. a program.*"

This is a good example of one person passing on a story to a second . . . and the second person passing it onto a third. It seems to get more mangled in each step.

To set the record straight, the information that was passed onto MICROpendium was that there were several examples which lead us to believe that many *(not all)* users group members were pirating software. The first was that we (J & K H Software) offered a special price on Super Cataloger to all the then (almost 100) officially recognized TI users groups throughout the country shortly after it received a rave review in the then 99'er Magazine. The only stipulation was that a minimum of three copies be purchased. A month and a half of lead time was given. *Not one user group responded.* The second was that we offered a special price on SXB to a few selected user groups with no restrictions. *Not one response to date.*

As to the implication that we sold a copy of SXB at the DVUG meeting attended last year—there was no sale of SXB. But we did have two members openly admit that they had pirated copies of SXB.

We were also informed by a member of the Washington D.C. TI Users Group (who also happens to be a minister) that, while making a trip around the country visiting TI user groups, he found many people who admitted to having pirated copies of SXB—but in almost every case, they did not have a copy of the documentation.

It is hard to imagine with the many hundreds of SXB customers, many of which write back proclaiming how great our product is, that you think we overestimated the appeal of this product. I thing it is a clear case of explicit damage done to our product because of pirates who are badmouthing SXB because they don't know how to use it. This is easy to understand if they have the program but no documentation. I can well imagine that *TI Extended Basic would have gotten a similar reviews had it been made available on disk instead of cartridge format.*

The damage has already been done. There is no way SXB will be profitable enough to warrant J & K H Software producing such an extensive product again—unless, of course, there were no way for the product to be pirated.

This brings us to the current situation. J & K H Software is now shifting its emphasis from producing software (which we will continue to do on a very limited scale) to offering a service—*something which cannot be pirated!* We are now beginning what we call AAAA$_{(4A)}$ Laser Services wherein persons who would like to produce typesetting with their TI 99-4/A Home Computer can do so inexpensively by sending us their text files with imbedded typesetting codes (on single or double sided, single density disk in variable 80 format). We then transfer the files to our extensive Macintosh system, make some minor modifications and finally produce the typeset output on our $6,000 LaserWriter Printer *(90,000 dots per square inch resolution)*. The cost will be $1.00 per thousand characters with a $5.00 minimum, plus shipping & handling. The output is actually better than can be produced with most Macintosh programs on the market in that you have more precise control over the desired output. How's that for making your TI still worthwhile.

A booklet containing instructions on how to prepare your data files can be obtained by sending $5.00 to:

J & K H SOFTWARE — AAAA$_{(4A)}$ LASER SERVICES
4911 South 31st Street — Arlington, Virginia 22206
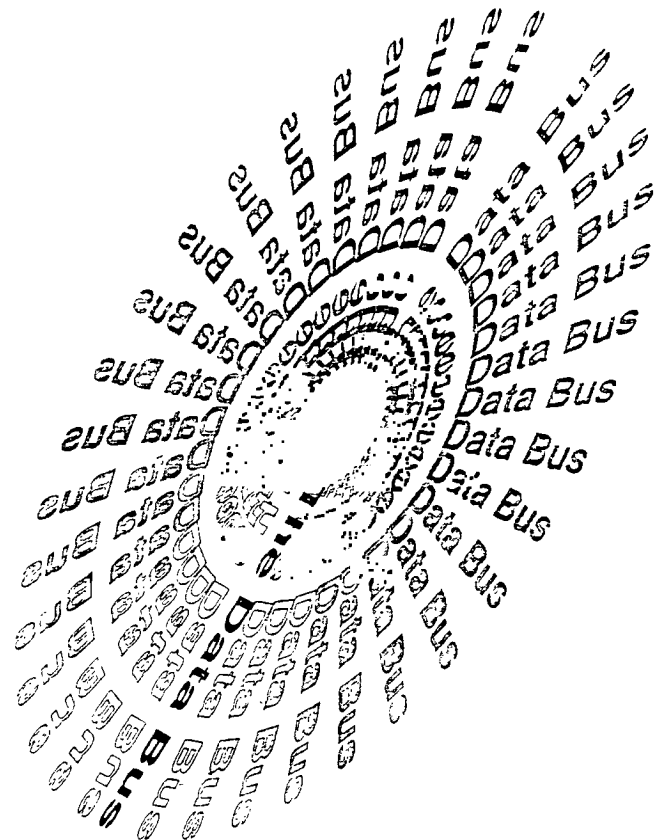
TEX-COMP ON DM-1000:

Tex-Comp's Vice President Jerry Price sent THE DATA BUS Editor a letter giving his viewpoint of the DM-1000 controversy discussed in January's issue, p. 4. For member edification and for fair comment, an excerpt of his remarks follow:

"The true facts are that this program was provided to Tex-Comp by a Canadian customer early last summer with the request that it be 'freely distributed'. Notwithstanding the request that the program be 'freely distributed', we also confirmed that [it] had been placed into the public domain by the author which means absolutely no claim of copyright or any other proprietary right can legally be made nor can the program be reclaimed from the public domain at a later date. At the time we received this program, it was being handed out and passed around at just about every user group meeting or gathering in the country and also appeared for free down loading on many local and national boards. In fact I am informed that even ...the Compuserve board had it on at one time or another.

"Apparently the fact that we started giving it away upset a small group of individuals who feel that they have the right to dictate and control who can freely distribute this public domain program. Since [it] is public domain, the attempt to control, limit or monopolize its distribution by letters falsely implying the violation of non-existent legal rights or relationship of Tex-Comp with its customers, prospective customers and its suppliers, is a clear and willful violation of the United States Anti-Trust Laws which contain appropriate criminal and civil sanctions. Tex-Comp, with the help of many of its customers and user groups in both the U.S. and Canada, has identified the culpable parties, and the matter is currently in the hands of our legal counsel for appropriate action.

"There has also been false infrences [sic] made that Tex-Comp removed the name of the author and his group on the version it is freely distributing. Please check this out with any copy [a local retailer] has in stock or any copy any of your members have purchased from us and you will see that this assertion, like the others, is simply untrue. We also have written proof that many of our customers did in fact send contributions to the Canadian group. Unlike DM-1000, there are a number of so-called freeware programs, such as Fast Term and Mass Copy, that make a legitimate claim of copyright which would enable the author or owner to make a legal claim of unauthorized use.

. . .

"Mr. Boone, the Canadian who ... has been actively engaged in a smear campaign against Tex-Comp in an attempt to limit and control the distribution of DM-1000, ... attacked this free distribution of a public domain software by Tex-Comp ostensibly on the grounds that Tex-Comp is a dealer as opposed to a user group. It should be pointed out however, that Mr. Boone is listed in the current Millers Graphics Catalog as a Canadian Dealer.

. . .

"Thank you for your anticipated cooperation in presenting our position in this matter. Your group can count on Tex-Comp for support in the TI-99/4A marketplace and we thank you for making 1985 a very successful year for a firm supporting a computer that has not been made for almost two and a half years."

[Ed. note: Readers may wish to review March's COMPUTER SHOPPER, p. 174, for an article on legitimate Copyright notices. U.S. and Canadian circumstances differ. THE DATA BUS has raised copyright issues in the past, and will do so as relevant.
[Several additional items were raised in Jerry Price's 4-page letter regarding issues of Tex-Comp marketing reputation, which have been raised in other forums. A copy of the Tex-Comp letter in full is being provided to both South Jersey and Delmarva chapter chairpersons for their members' convenience. A copy also will be available at DVUG's Feb. 27 meeting, along with a new 1986 TEX-COMP catalog.]

TIPS FROM THE TIGERCUB

#30

Copyright 1986

TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

Over 130 original programs in Basic and Extended Basic, available on casette or disk, only $3.00 each plus $1.50 per order for PPM. Entertainment, education, programmer's utilities. Descriptive catalog $1.00, deductable from your first order.

Tips from The Tigercub, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 50 original programs and files, just $15 postpaid.

Tips from the Tigercub Vol. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just $15 postpaid. Or, both for $27 postpaid.

Nuts & Bolts (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms, and 5 pages of documentation with an example of the use of each subprogram. All for just $19.95 postpaid.

Nuts & Bolts No. 2, another full disk of 100 utility subprograms in merge format, all new and fully compatible with the last, and with 10 pages of documentation and examples. Also $19.95

postpaid, or both Nuts Bolts disks for $37 postpaid.

Tigercub Full Disk Collections, just $12 postpaid! Each of these contains either 5 or 6 of my regular $3 catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - my own programs on these disks are greatly discounted from their usual price, and the public domain is a FREE bonus!

TIGERCUB'S BEST
PROGRAMMING TUTOR
PROGRAMMER'S UTILITIES
BRAIN GAMES
BRAIN TEASERS
BRAIN BUSTERS!
MANEUVERING GAMES
ACTION GAMES
REFLEX AND CONCENTRATION
TWO-PLAYER GAMES
KID'S GAMES
MORE GAMES
WORD GAMES
ELEMENTARY-MATH
MIDDLE/HIGH SCHOOL MATH
VOCABULARY AND READING
MUSICAL EDUCATION
KALEIDOSCOPES AND DISPLAYS

For descriptions of these send a dollar for my catalog!

I goofed again! if you tried the Quickloader in Tips #29 with a disk containing more than 20 programs, you may have already noticed that line 140 should go to 160, not 155.

Here's another Tigercub Challenge - can you run this and get these results?
>LIST
100 PRINT PI
110 PRINT MAX
120 PRINT PI .
130 PRINT MAX
>RUN
0
0
3.141592654

* SYNTAX ERROR IN 130

Some of you sharp-eyed newsletter editors may have noticed that this text is being hyphenated to avoid some of those gaping blanks that occur when only a few long words will fit on a right-justified line. The only way that I have found to accomplish this is to set the TI-Writer right tab for the actual column width to be printed and then, whenever a word is hyphenated, backspace and replace the blanks on that line with carets, adding enough extra carets to justify the line - like this -

whenever^a^word^^is^^hyphen-

It helps to go into fixed mode with CTRL 0 when you are inserting extra carets.

When using this method, it is also necessary to set the paragraph indentation with IN 0 on the command line; if indentations are desired, they can be filled with caret signs, like this:
^^When using this method,

I am told that my old 3D Sprite Routine made it to the Golden Quickies section of CompuServe, so here is an updated version. I have found that sprites can be controlled much more easily (although not moved as rapidly) with CALL LOCATE, rather than turning them loose with CALL MOTION and then trying to catch up with them!
100 CALL CLEAR :: CALL SCREEN(5):: FOR SET=2 TO 8 :: CALL COLOR(SET,8,5):: NEXT SET :: DISPLAY AT(3,12):"3-D SPRITE DEMO"
110 DISPLAY AT(22,1):"BY TIGERCUB" :: CALL CHAR(40,"FFB1818181818181FFB18181818181FFFF818181818181FF818181818181 81FF")
120 CALL CHAR(36,RPT$("F",64)):: CALL MAGNIFY(4):: FOR X

=2 TO 22 STEP 2 :: CALL SPRITE(#X,36,X/2+1-(X>7)-(X>13), 32+X*6,40+X*6):: NEXT X
130 S=1 :: CALL SPRITE(#S,40,16,46,7):: FOR C=6 TO 42 STEP 2 :: CALL LOCATE(#S,46,C):: NEXT C :: FC=44 :: FR=46 :: Y=0
140 FOR C=FC TO FC+44 STEP 2 :: CALL LOCATE(#S,FR,C):: NEXT C :: FC=FC+44 :: CALL SPRITE(#S+2,40,16,FR,FC):: CALL DELSPRITE(#S):: TC=FC-32
150 FOR C=FC TO TC STEP -2 :: CALL LOCATE(#S+2,FR,C):: NEXT C :: TR=FR+34 :: FOR R=FR TO TR STEP 2 :: CALL LOCATE(#S+2,R,TC):: NEXT R
160 CALL SPRITE(#S,40,16,TR,TC):: CALL DELSPRITE(#S+2):: FR=TR :: TR=FR-72 :: FOR R=FR TO TR STEP -2 :: CALL LOCATE(#S,R,TC):: NEXT R
170 CALL SPRITE(#S+2,40,16,TR,TC):: CALL DELSPRITE(#S):: FR=TR :: TR=FR+50 :: FOR R=FR TO TR STEP 2 :: CALL LOCATE(#S+2,R,TC):: NEXT R
180 Y=Y+1 :: IF Y=11 THEN CALL DELSPRITE(#S+2):: GOTO 130 ELSE S=S+2 :: FC=TC :: FR=TR :: GOTO 140

Ian Swales in Belgium can write some of the most intricate routines, and pull them into the tightest knot. I had searched everywhere for a sorting routine for 2-dimensional arrays, and invented some ridiculous ones, before Ian sent me this jewel.

100 !DEMO of two-dimensional sorting routine
110 !Set up array to be sorted
120 CALL CLEAR :: DIM A$(20, 4)::.RANDOMIZE :: DEF I$=CHR$(26*RND+65)
130 FOR J=1 TO 20 :: A$(J,1)=I$&I$&I$ :: A$(J,2)=STR$(INT(100*RND+1)):: A$(J,3)=I$&STR$(INT(10*RND)):: A$(J,4)=INT(10*RND))&X$ :: NEXT J
140 INPUT "SORT BY?(1-4)":K
150 J=20 !2-dimensional array sorting routine by Ian Swales

```
160 DIM Q(20):: FOR X=1 TO 2
0 :: Q(X)=X :: NEXT X
170 M=0
180 FOR X=1 TO J-1 :: IF A$(
Q(X),K)<=A$(Q(X+1),K)THEN 21
0
190 M=-1
200 T=Q(X):: Q(X)=Q(X+1):: Q
(X+1)=T
210 NEXT X
220 IF M THEN 170
230 FOR X=1 TO 20 :: FOR L=1
TO 4 :: PRINT A$(Q(X),L);"
";:: NEXT L :: PRINT :: NEXT
X :: GOTO 140
```

Did you ever need a routine
that would accept either a
string or a numeric value?
Try this -

```
100 N=0 :: ON ERROR 110 :: A
CCEPT M$ :: N=VAL(M$):: GOTO
120
110 ON ERROR STOP :: RETURN
120
120 ON (N=0)+2 GOTO 130,140
130 PRINT M$ :: GOTO 100
140 PRINT N :: GOTO 100
```

A useful tip from Stephen
Shaw in England - if you
have a long program which
wil run only in Basic, and
which will load from disk
with CALL FILES(1) but runs
out of memory when you try
to run it; and if you have
the MiniMemory module -
Insert MiniMemory module,
select Basic, enter CALL
FILES(1), Enter NEW, enter
OLD DSK1.(filename). When
loaded, enter SAVE EXPMEM2.
When SAVEd, enter CALL
LOAD(-31888,63,255), enter
NEW, enter OLD EXPMEM2, and
enter RUN. That is still a
lot faster than loading a
long program from tape!

Another reason for never
using the default mode of
so-called UPDATE when open-
ing a file (without specify-
ying INPUT or OUTPUT) is
that you will get an I/O
ERROR #1 if the file is
write-protected.

Has anyone found a way to go
from Extended Basic to Basic
without losing the program
in memory, or at least foul-
ing it up?
CALL LOAD(-32116,4) has been
published in many news-
letters as a way to do this,
but has anyone actually made
it work?

If you are printing out of
TI-Writer Editor, finish
your letter with CTRL U,
SHIFT L, CTRL U and when it
is printed the paper will
automatically feed to the
top of the next sheet.

To make a note to yourself
while programming, just type
1! and whatever you want to
make note of, then LIST
"PIO":1, and then type 1 and
enter to delete the line.

TI-Writer puts an extra
space after every period
that is followed by a space.
If you don't want this extra
space after abbreviations
such as "Mr." or St.", use a
caret sign ^ instead of a
space after the period,
Mr.^Jones. But TI-Writer
puts only one space after ?
or ! so if you want two, put
a caret after the symbol !^

One of the very best tips
for this month comes from
Paul A. Meadows, in the
September 85 newsletter of
T.I.N.S. (Nova Scotia,
Canada) -
How to print up to 132
characters in a line
(condensed print, of course)
out of TI-Writer! Just
prepare your file as usual
but in line 0001 put
formatter commands such as
.LM 10;RM 132; IN +5;FI;AD .
The Fill and Adjust are
necessary, the Indent is up
to you, as are the left and
right margins - but notice
that right margin set way
over at 132?
Now, instead of saving the

file with SF, type PF and
then C DSK1.(filename) to
print to the disk. This not
only strips out the control
C characters, it also erases
the TI-Writer tab line that
was applied to the last line
of the file.
So now, with your printer
opened and initialized for
condensed print, go into the
TI-Writer formatter mode and
print your file!

I have made the following
changes to my working copy
of the Tigercub Menuloader.
This sets up my Gemini
printer to skip over the
perforations and print full
page width in elite print
with a wide left margin for
ring-binder punching. Other
printers may need changes in
these codes.
```
620 DISPLAY AT(12,1)ERASE AL
L:"PRINTER? PIO" :: ACCEPT A
T(12,10)SIZE(-10):P$ :: GOSU
B 895 :: PP=3
840 DISPLAY AT(24,1):"PRINTE
R NAME? PIO" :: ACCEPT AT(24
,15)SIZE(-14):PP$ :: GOSUB 8
95 :: PRINT #2:SEG$(D$,1,4)&
" - Diskname= "&N$
895 OPEN #3:P$,VARIABLE 132
:: PRINT #3:CHR$(27);"B";CHR
$(2);CHR$(27);"M";CHR$(10);C
HR$(27);"N";CHR$(6):: RETURN
```

I always keep a backup of
everything, on the flipped
side of another disk, and I
often want to verify that
the backup has everything
that is on the master, and
vice versa.
```
100 DISPLAY AT(3,6)ERASE ALL
:"TIGERCUB DOUBLECAT": :" To
compare the contents of": :
"a disk with a backup." !by
Jim Peterson
110 DISPLAY AT(12,1):"INSERT
MASTER DISK": :"PRESS ENTER
"
120 CALL KEY(0,K,S):: IF S=0
THEN 120
130 DATA DF,DV,IF,IV,P
140 RESTORE :: FOR I=1 TO 5
:: READ T$(I):: NEXT I
150 DIM F$(127):: OPEN #1:"D
```

```
SK1.",INPUT ,RELATIVE,INTERN
AL :: INPUT #1:A$,J,J,K :: F
$(0)=A$&" "&STR$(K)
160 X=X+1 :: INPUT #1:F$(X),
I,J,K :: IF F$(X)="" THEN 17
0 :: F$(X)=F$(X)&" "&T$(ABS(
I)):: GOTO 160
170 X=X-1 :: CLOSE #1 :: DIS
PLAY AT(12,1)ERASE ALL:"REMO
VE MASTER DISK": :"INSERT BA
CKUP DISK": :"PRESS ENTER"
180 CALL KEY(0,K,S):: IF S=0
THEN 180
190 OPEN #1:"DSK1.",INPUT ,R
ELATIVE,INTERNAL :: INPUT #1
:A$,J,J,K :: DISPLAY AT(1,1)
ERASE ALL:F$(0);:: DISPLAY A
T(1,15):A$&" "&STR$(K);
200 Y=Y+1 :: R=R+1 :: GOSUB
290 :: INPUT #1:A$,I,J,K ::
IF A$="" THEN 260 :: K$=A$&"
"&T$(ABS(I))
210 IF K$=F$(Y)THEN DISPLAY
AT(R+1,1):F$(Y);:: DISPLAY A
T(R+1,15):K$;:: GOTO 250
220 IF K$<F$(Y)THEN DISPLAY
AT(R+1,15):K$;:: Y=Y-1 :: GO
TO 250
230 DISPLAY AT(R+1,1):F$(Y);
:: R=R+1 :: GOSUB 290 :: Y=Y
+1
240 IF K$=F$(Y)THEN 210 ELSE
IF K$<F$(Y)THEN 220 ELSE IF
Y<X THEN 230 ELSE DISPLAY A
T(R,15):K$;
250 GOTO 200
260 IF Y>X THEN 280
270 R=R+1 :: GOSUB 290 :: FO
R J=Y TO X :: DISPLAY AT(R,1
):F$(J):: R=R+1 :: GOSUB 290
:: NEXT J
280 DISPLAY AT(24,1):"    P
RESS ANY KEY" :: CALL KEY(0,
K,S):: IF S=0 THEN 280 ELSE
CLOSE #1 :: END
290 IF R<23 THEN RETURN
300 DISPLAY AT(24,1):"PRESS
ANY KEY" :: DISPLAY AT(24,1)
:" " :: CALL KEY(0,K,S):: IF
S=0 THEN 300
310 CALL CLEAR :: R=1 :: RET
URN
```

And that is just about

MEMORY FULL!

Jim Peterson

MYARC XB "SOME ASSEMBLY REQUIRED"

On January 30th we received the Myarc Extended Basic cartridge we'd ordered in October from Triton, at the combo price with the Myarc 128K card for $249.95. At first Triton had declined to mail a 128K RAMDisk (so-called due to its speed and operating procedure) without the XBasic component, but after another month, they relented. FTC rules require book-keeping followup for long delays, so they chose to avoid the hassle and shipped what was on hand. Two months following, Myarc had delivered to Triton so now I received my XBasic, as well.

Or did I? Better take some notes...

First, I wasn't billed for the XBasic until it was shipped. That helped. When I opened the package, the Myarc manual's cover described the product as a 128K.OS [Operating System] Extended Basic Level IV. The module, pictures and text call the product Extended BASIC II; we'll use "Myarc XB" in these columns.

The manual is in looseleaf version, a helpful difference from the TI XB Manual which allows updates, corrections or any user notes to be inserted. You'll have to get your own binder, however; it was not included in order to keep cost down. Happy Harry's Discount Drugs had one for $2.19. Pages are 8-1/2" high by 6" wide with three large holes 2-3/4" apart.

We'll review the contents of that new manual a little later in another column.

Surprise, INSTALLATION INSTRUCTIONS. No "insert in cartridge slot, choose XB" either. "Your new MYARC Extended BASIC II kit includes one of each as follows:"
MYARC XB Command Module
MYARC XB Floppy Diskette
MYARC XB EPROM Semiconductor (IC)
MYARC XB Instruction Manual (240 pp)

The "IC" (Integrated Circuit) never gets explained, but that's the least of your worries. There's no floppy disk or EPROM chip included.

Reading on, you see that the EPROM is the most essential component. It holds the software to run the XB routines, and "must be installed as firmware" onto the

Myarc 128/512K Card, replacing whatever EPROM currently resides thereon. Myarc asks you to return the old EPROM so they can "maintain our present prices". Since costs have fallen, it seems Myarc's use of free chips should effect a price CUT for their customers, but they equate the price to the replacement EPROM chip they will ship you (without extra charge).

Apparently procedural changes emerged along the way, as a supplemental sheet asks you merely to send an enclosed post card to Myarc with the EPROM number that you'll find after opening up the RAMDisk casing. Then they'll send you the EPROM replacement, and the floppy disk at that time. Then you mail back the first one.

Of course, you will have to dump any resident programs from RAMDisk first; in the case of a 512K card, that means 1598 sectors you may have to backup. Now, and a second time when you change the EPROM.

Changing an EPROM chip isn't quite in the same vein as unplugging the printer interface connector. A bit of hardware to remove first (open P-Box and RAMDisk casing) and with a little less leeway to avoid bending or snapping a pin, as the instructions note.

If the process makes you nervous, you can send Myarc the entire RAMDisk card. (Did you keep the TI 32K Expanded Memory card as backup or did you sell it to pay for your update?) I had a friend install my 512K upgrade chips (available cheap from Computer Shopper, at Hamfests, or from some User Groups; the New Horizon group in Ohio is placing bulk orders for members). I wanted someone who felt more comfortable than I in poking inside. He bent one pin, and a 96K bank thus became unavailable until a replacement could be obtained.

Whenever you finally do get the disk, with the EPROM, hope that'll be the last update. During Christmas week, Myarc's Lou Phillips advised that the first disk issuances had left out four routines, in order to speed up getting most essential operations out to the field. Then he was anticipating that an updated disk would be provided in exchange upon request. As the vaporware comes to fruition, perhaps that shift will no longer be necessary.

INDEX TO "THE DATA BUS", VOLUME 3

All references are to issues in Volume 3 (February,1985-January,1986). E.g., 5:4 indicates Vol.3, No. 5, Page 4. Pages in parentheses (8:5) indicate a correction to data listed earlier.

INDEX TO "THE DATA BUS", VOLUME 3
- CONTINUED -