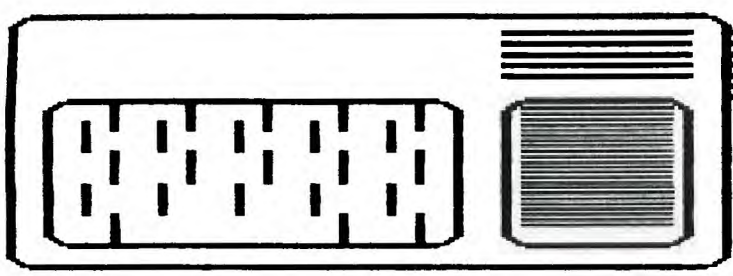


(014) 8802



THE
DATA
BUS

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( . . . . . )
( Issue : )
( VOL. 6 )
( NO. 1 )
( - - - )
( FEB. )
( 1988 )
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THE DELAWARE VALLEY USERS GROUP

P.O. BOX 6240 STANTON BRANCH, WILMINGTON DE 19804-9998
DEDICATED TO THE TI AND COMPATIBLE HOME COMPUTER FAMILY

WELCOME NEW DVUG MEMBERS:

Larry, Carol, Geoff and Genny Knerr (New Castle, Delaware)
Rev. Gregory and Christine Miller (Ventnor, New Jersey)

RENEWING DURING JANUARY:

Larry Friar and Jack Shattuck (DE); Neal Goldsborough (PA)

DVUG DEPTFORD, N.J. GROUP GROWN BACK TO FULL STRENGTH;
WILL RESUME FORMER INDEPENDENT STATUS AS TI COMPUTER CLUB.

On February 15, both DVUG's President Tom August and President-elect Jack Shattuck attended Deptford's meeting. Tony DiFebbo announced that the members there had voted to resume a separate identity, and would be issuing their own newsletter and collecting separate dues in the future.

By Summer of 1985, approximately 11 N.J. TI owners were regularly attending DVUG's Christiana meetings, after a dissolution of the former 9900 Users Group, which had been based in Southwest New Jersey. At those individuals' requests, DVUG wrote Deptford's municipal offices, noting that DVUG was a long-standing non-profit group, seeking a rent-free meeting place for those Jersey TI owners. It was granted.

All affiliating members got the DVUG monthly 10-page newsletter. DVUG's entire Software Library was turned over to the group, and TIBBS software and Mail List files also were made available. Subsequent Disk-of-the-Month mailings were provided without charge. Upon request of the Deptford group, DVUG's constitution and by-laws were revised, and a 1/3 dues rebate was issued for local use by that group, in its site approximately one hour from Christiana Mall where the main body of DVUG meets (see graph, page 10). All DVUG publicity in the last two years has prominently mentioned Deptford's meetings and Bulletin Board.

We're pleased to have been able to support those N.J. owners as we did; both DVUG and Deptford meetings remain open to all TI users regardless of local affiliations.

This issue of THE DATA BUS was delayed as a result of this late-breaking information but had the newsletter been fully revised, it would have been impossibly overdue.

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Converting GRAPHX Fonts to TI ARTIST Form Pages 4-5
"Super Extended Basic" Substitute Routines Pages 8-9

FEBRUARY/MARCH MEETINGS OF DVUG AFFILIATED GROUPS:

CHRISTIANA, February 25 - Tim O'Neill will demonstrate the CorComp WriterEase word processor, as well as a Light Pen constructed from info in December's DATA BUS. (See page 2) The March meeting will be on the 24th of the month.

SCULLVILLE - March 3rd at 7:30; DOVER - March 14th at 7:00

NOTICE TO ALL C.ITOH OR NEC PRINTER OWNERS

At request of members, we've been emphasizing program and equipment compatibility situations in DVUG articles. Art Byers refers (Page 8) to a Super Extended Basic module from MG (sold by Triton) that includes Draw 'N Plot, using 32K and XB from Quality 99 Software. Triton's ads say the cartridge combo requires an Epson-compatible printer. That may be true for that cartridge, but Draw 'N Plot itself IS available for C.Itoh Prowriter & NEC 8023A printers, as is ALL Quality 99 Software. (Triton may only carry the Epson-compatible version; Tenex's catalogue has both.)

C.Itoh and NEC owners are invited to contact THE DATA BUS Editor, to determine interest in a separate Prowriter-compatible Special Interest Group newsletter/disk letter.

DVUG EXECUTIVE OFFICERS FOR 1988

PRESIDENT..Jack Shattuck....302-764-8619
 V. PRES....Jim Davis.....302-478-7529
 SECRETARY..James Dreibelbis.215-623-8772
 TREASURER..Norm Sellers.....215-353-0475
 SGTatARMS..Bill McLean.....302-366-1721
 DOVER.....Oscar Dawson.....302-697-6343
 DEPTFORD...Tony DiFebbo.....609-881-7132
 SCULLVILLE.Harvey Adams.....609-641-2105

For general DVUG information, contact:

TOM KLEIN Pennsylvania (215) 494-1372
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 JIM ENGLAND So. Delaware (302) 674-9256
 JIM HIGGINS S.W. N.J. (609) 829-4271
 GUY LEWIS S.E. N.J. (609) 927-5601

ELECTIONS FOR 1988 OFFICERS:

The annual meeting at Christiana on January 28th resulted in DVUG's incoming officers no longer dominated by Du Pont employees, a break with DVUG's history. Although outgoing Sgt. at Arms Jim Folz received nomination for President from the floor, the proposed slate presented by the nominating committee carried the day. Names and phone numbers of the new officers are listed at left. Only our indefatigable Vice President and Program Chairman, Jim Davis, continues in office for another year.

A Delaware Valley Users Group membership includes monthly newsletter, library and software privileges, plus other special benefits. Annual membership rate: \$15.

The Delmarva Chapter in Dover gave a slight twist to its officers, choosing Oscar Dawson as Chairman, Chuck Bower as Vice President, Bob Edwards as Secretary and Al Freischmidt for Treasurer in '88.

NORMAL MEETING SCHEDULES

SCULLVILLE,NJ 1st Thurs. 7:30-9:00
 DOVER,DE 2nd Monday 7:00-9:00
 DEPTFORD,NJ 3rd Monday 6:45-9:00
 CHRISTIANA,DE 4th Thurs. 6:30-9:30

Articles appearing in THE DATA BUS may be reproduced on BBS, disk or newsletter as long as DVUG source is acknowledged; unsigned work is by THE DATA BUS Editor. DVUG encourages exchange newsletters.

AND MEETING PLACES ...

(See Page 1 article regarding Deptford)

CHRISTIANA: Delaware's Christiana Mall on Rte. 7 at I-95, Exit 4-S, Community Room. Enter inside Mall, between J.C. Penney and Liberty Travel.

DELMARVA CHAPTER: Kent County Courthouse, Basement Conference Rm. #25, The Green and State Street, Dover, Delaware. Use entrance on The Green side.

SO.JERSEY CHAPTER: Deptford Municipal Building, Cooper Ave. and Delsea Drive (Rtes. 534 & 47), in Gloucester County, N.J. Enter and park in rear of building.

SHORE CHAPTER: Scullville Firehouse #1 County Rte. 559 (on left, between mile markers 4 and 3), in Atlantic County, NJ. Ignore Station #2 on right en route.

ADVERTISING RATES IN 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

Over in New Jersey, the So. Jersey Deptford group continued its incumbents for another year, and our newest chapter in Scullville, outside Atlantic City, is still within its first year, waiting for later to hold another election.

THE DATA BUS goes to over 110 local DVUG families, and over 65 other User Groups.

Paid-up DVUG members may place a short notice of their used computer equipment for sale in THE DATA BUS without charge.

Both Dover and Deptford will change their BBS locations/numbers in the next two months.

TRANSMIT YOUR NEWSLETTER COPY TO EDITOR Jack Shattuck, (302)764-8619 or reach us at the DVUG mailing address, as shown on Page One of this newsletter. NEWSLETTER COPY WILL NOT BE ACCEPTED FOR AN ISSUE AFTER THE 2ND THURSDAY OF EACH MONTH.

Sorry about the 322-3999 BBS! There was a purge of inactive users; a few old timers will have to log in anew.

An annual index appears in February each year. Back copies of THE DATA BUS are available at \$1 each, by writing to the Editor at DVUG's mailing address, with a check made payable to DVUG.

LIGHT PEN PROGRAM, Revisited (Again!):

Tim O'Neill reports that in just a few minutes and with \$4 in parts, his son Shawn, 14, completed the Light Pen described in December's DATA BUS. Tim made the following corrections to the program listing in January's issue and it runs just fine. He'll demo it this February 25th at Christiana's meeting.

620 CALL SPRITE(#1,96,16,92, 124)

680 CALL SPRITE(#1,96,16,INT (RND*110)+1,INT(RND*210)+10)

770 FOR Z=1 TO 100

DVUG BULLETIN BOARD SYSTEMS (BBS)

No. Delaware: (302) 322-3999 24 Hrs.
 So. Delaware: (302) 674-1449 24 Hrs.

S.W. New Jersey: (609) 429-7792

Weekdays: Mon.-Thurs. 3:00 pm - 7:00 am
 Weekends: Fri. 3:00 pm - Mon. 7:00 am

So. Delaware runs 300 Baud; others run both 300 and 1200 Baud.

NOTICE TO OTHER USER GROUPS, ON MAILINGS TO THE DELAWARE VALLEY USERS GROUP:

We ask that you use the P.O. Box on THE DATA BUS mast to reach us. In past years, mail sent to changing individuals in the organization provided undesirable delays in reaching others. Thank you.

THIS CHAIR SQUEAKS: Personal Comment by Jack Shattuck

This issue of THE DATA BUS offers a rare opportunity for me to make some personal comment as incoming President rather than in my other hat as newsletter Editor.

I've been with our DVUG group since 1982. For any of our newer members joining at this point, I believe certain paybacks should be immediately forthcoming. Among the most essential elements are accessibility to both Constitution and Bylaws of DVUG, defining our purposes and procedures. DVUG exists to provide exchange of information about our TI 99/4A computer family (that includes Myarc's 9640), and opportunities for broader use of its capabilities. Members should be provided an immediate software catalog of DVUG's available public domain and fairware resources, and also a means of accessing them. For Bulletin Board users, that should mean modem software (you can use TI's TE II to call the Board, but you can't download files with it, including Fast-Term!) and necessary documentation. A dependable DVUG newsletter addressing other currently available resources is part of that information exchange -- admittedly a tough mixture to satisfactorily attain, considering the plethora of hardware, software programming areas, and languages now available. What do we cover in ten pages, what not?

I suggest it would not be inappropriate, indeed, most desirable, to have us offer an initial disk of software as an instant (free) return on new membership, with at least some key programs included; a disk manager/catalog/loader, file reader, modem software, listing of some significant software resources, printer accessories (setup and screen dump) and other utilities - a systems disk, as it were.

Meetings should be heralded in advance and summarized afterward. In some cases, it's possible to announce future presentations. Key committee reports should be prepared in advance, not having the presiding officer guess if others are there, then bypass those subjects due to an absence. Certainly, the Treasurer's report should be available at each meeting (and published in these pages).

On the topic of the Treasury, I suggest that we adopt an annual budget, to anticipate how DVUG resources will be spent. Expenses can be planned in certain key areas, such as BBS (phone charges, utility expenses, disks and printer paper); newsletter (mail labels, ribbons, stamps, staples and paper) - even if we're able to save on printing costs, there are still ongoing expenses; plus a few reasonable subscriptions to access information sources in such areas. Likewise, Software Library disk needs could be fairly well predicted, as can mailing exchanges of disks or letter for correspondence within or without our User Group.

This planning of anticipated expenses (there are also a few others) would permit us to broaden outreach in the publicity arena - using recorded messages, newspaper items and participation in Computer Fairs, for instance. Each of our areas have such occasions - TICOFF, the Trenton and Delaware State College Fairs, local vendor shows or flea markets, etc. We might project our resources to strengthen those areas with LESS visible activity, not necessarily in the opposite direction. Anyway, our chapters should know better what support they'll have in this regard all year.

Dover and Scullville continue to grow, and Deptford is developing an extra newsletter for its close-to-3-dozen members. It was a lack of communication which brought that area TI users into DVUG originally; additional attempts at improved information, their continued development of Disk-of-the-month programs, and other increased support should only be applauded.

In the past we used to survey our members frequently, as to equipment owned, interests shared, capabilities to advise others. We used to ask if DVUG members would permit names and addresses to be released to vendors (e.g., at an event like TICOFF, clearly targeted to TI users) to offer better prospects of getting TI product mailings. THIS WILL BE DONE AGAIN.

Of course, we have members using IBM equipment, often at home as a result of work. But the emphasis for which I and my fellow members have invested hundreds or thousands of dollars is toward how our TI systems can provide us an interface to broader worlds - IBM compatibility, or change in TI compatible hardware, especially Myarc's Geneve, or a myriad of console modifications, screen display, Extended Basic, RAMdisk and hard or floppy drive attachments, etc. To address these, we'll be using more national BBS items, and reference some of the other sources available. And we still owe an obligation to provide support to those with a more basic TI system. At this stage of events, that means a minimal P-Box configuration: XB, 32K, disk drive, RS232 interface (printer if not modem). We will do our best to give assistance to tape users, but we've moved beyond that over the past 5 years. (A catalog of tape items is still a need for some members, however.)

My task is to preside, It's OUR club. Thus I'll need YOUR input. I open the DVUG mailbox weekly; write me there or call me via BBS (302)322-3999 or home at (302)764-8619.

Finally, a few words on DVUG's DATA BUS newsletter. We'd like to be printing more of YOUR articles, addressing DVUG needs, not only the compilations of others. And as a stack of newsletters accumulate, I'd appreciate some aid in typing some of the more helpful items into a DV/80 disk file to be disseminated to you, as well. Let me know when you're available, please, to help ME, and ultimately, you.

A GRAPHIC DILEMMA ... SOLVED!

Converting Fonts from GRAPHX to TI-ARTIST Mode

From Western N.Y. 99'ers, as printed in the Cin-Day News

I recently purchased a new set of fonts and clips from Asgard Software called COMPANION III. This package of new artwork was, of course, intended for use with Asgard's fantastic GRAPHX. I, like most people however, split my time between Graphx and TI-ARTIST because both have features that the other lacks. I really need BOTH to turn out good graphic work for the Interface [newsletter].

Generally, this is no problem because Artist allows me to convert pictures from Graphx and Alphabet fonts from CGSD [Dave Rose's Character Sets & Graphic Designs]. Unfortunately there is no way to convert a font from Graphx to Artist, and I prefer Artist for font work (usually). I presented the problem to Bob Coffey and, after much contemplation and a sleepless night, he got back to me with the solution. I felt that many people may be wishing for the answer to this transfer problem and asked Bob to document it. It's not as hard as it sounds so give the following a try:

+++++

TI-ARTIST FONT FORMAT - by Robert Coffey Jr.

When you load a TI-Artist font style into the TI-Writer editor, you will see a basic pattern which is very similar to the format of an Artist Instance:

INSTANCE	FONT:
	n
A,B	A,B,E
0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0
0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0
0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0

A and B refer to the (8*8) blocks that will define the Instance or Font letter. A will be how many blocks across, and B will be how many blocks down!

n equals the character being defined in the font (A; B; C etc).

E is equal to the number of pixels wide the character is, plus a pixel of space between the font letters.

A*B will equal how many lines it will take to define the character or Instance. Each definition line (the lines that show as "0"'s here) contains 8 numbers, ranging from 0 - 255.

ARTIST Font Design

For the sake of time and space we will assume that you have already either drawn a full font as an Artist picture or have converted a font picture from Graphx to Artist.

(1) When you set your letters in the picture, leave 5-7 pixels on the bottom and right side of your letters! You may separate letters with the Move feature of Enhancement if you didn't leave enough space between them.

(2) After you've done this, find d your largest and widest character. Write down the pixel height and width. Also write down the WIDTH plus one (1), of ALL the characters. The extra pixel is for space between the characters. If you don't have eagle eyes, use the Zoom feature to count them.

(3) Save all your characters in 1 picture if possible else give them sequential names like PIC1, PIC2.

(4) Copy your reference pictures to a clean disk! Things will get VERY MESSY if you don't!

(5) Go into Enhancement and press [S] for the Slides section. Next press 7 to save an Instance.

(6) Use a file name that fits whatever character type you may be working on, such as: a number 1,2,3 ... UPPER case UA,UB,UC... lowercase LA,LB,LC... SYMBOLS !,/,\$...

Once the file is named, you will be returned to your picture.

(7) Now use the joystick and get to the upper left-hand corner of your character. When you start to increase the size of the Instance box, the top line of the box should cross over the top-most pixel(s) of your character, same for the left-most pixel(s). Remember, whatever is UNDER the box line will be included!

(8) The box will increase by 8 pixels at a time. Increase the box so that it covers the entire character. (If you find that the box also covers a part of another character, then go back and move it so it doesn't.) Use the least amount of space as possible to cover the letter.

(9) When you have covered the entire letter, hit the fire button. The letter will automatically be saved under the entered name.

(10) REPEAT STEPS 6-9 until you have saved all the characters that you want to use in your font style!
That's it for Artist for a while. (Cont'd. next page)

A GRAPHIC DILEMMA (Continued from preceding page)
Assembling the Font

(1) You will now start to assemble your font file. USE THE EDIT SECTION OF TI-WRITER. Place the character of whatever on you are going to load in first (probably "A") on line 0001; note the line you are at.

(2) Hit Function 9 (BACK), so that you are now are back in the command mode of the editor.

(3) Type the LF command (Load File), then using this format below, load the first character Instance:

```
[xxx DSKx.A.1]
  |      |
  |      |
  |      |
```

line numbers you put the font char on Instance file

This will load the character Instance into memory after line xxx. Using the LF command this way will allow you to load D/V 80 files (Instances!) without disturbing the data that you have in the editor already!

(4) After you have loaded in the instance at the end of your file (line xxx), you will need to add a number to the line that has only 2 numbers on it! It will look something like this: 2,3

After the second number in that line, type a comma and the WIDTH number that you wrote down for the character you are working on. Say the number is 9, it will look something like this: 2,3,9

(5) Go back to step (2) until you have finished loading and altering all your characters for your font style.

WARNING * WARNING: If you are doing it right, you are working WITHOUT carriage returns. You DON'T WANT THEM! So for Pete's sake and your own ... DON'T EVER HIT REFORMAT!

NOTE: It is a good idea to ALWAYS include a space character in every font you do. To do this put a blank line at the end of your assembled file (don't erase this one!) and load any character Instance after that blank line. Take the width of your widest character and add it to the 2 number line (like we did before). Now change those other lines that loaded in to all 0's. Keep the same number of numbers, but change them to 0's.

(6) You will then go through your file and make sure that there are NO BLANK LINES (except the space character) or C/R's at the end of lines. Also, double check that those lines that had 2 numbers now have 3!

(7) Now that you've double checked everything, hit Function 9 (BACK). Type the PF command (Print File). Type the filename that you would like to call your font. Use this format: DSKx.nnnnnn_F

(Remember, you do not want to SAVE FILE, you want to PRINT FILE to disk.)

You now have created your very own font! Now go into the Enhancement part of TI-Artist, and load your font, and see how good it looks. You may need to alter some of your characters. If everything doesn't look satisfactory, then continue to step (8).

(8) Go into the Enhancement section of TI-Artist and load your font. Get all your characters onto the screen.

There should be 1 pixel spacing between your characters. If your characters touch, the one on the left may have been defined incorrectly when you saved it as an Instance.

(9) Go into the [S] Slides section and re-save that character, making sure that the left side of the box goes over the left-most pixel of the character.

(10) If your characters are not level, then you may need to see which characters are too high. Write down all the characters that need to be lowered.

(11) Go back into Enhancement, and re-save those characters as Instances, and make sure that you start 1 (or more) pixel higher than last time when you re-save it! Keep doing this until you've corrected all the faulty characters.

(12) After you have re-saved all the characters that were not right, go back to the Editor in TI-Writer. Load your Font file and Scan through the file until you find the character that you want to correct.

(13) Delete the Definition lines below the 3 number line. Note the line that the 3 number line is at! Load your saved Instance using the same format as before:
xxxx DSKn.xxxxxx.I

(14) Delete the line that has been loaded that only has 2 numbers on it.

You now have (hopefully!) corrected that character; if not, do it again. Lower case characters and symbols can cause you problems on centering, etc., so a little experience may be necessary to get things right, but a little common sense will prevail.

Learning to do this could open the door to a lot of possibilities ... who says a font has to look like an alphabet?!

INDEX TO "THE DATA BUS", VOLUME 5

The Delaware Valley Users Group has been issuing a newsletter since February 1983. Each volume year for THE DATA BUS runs from February through January.

Vol. 5 (Feb.1987 - Jan.1988) had 11 issues; index to Volume 5 appears below. Reference to 3:4 indicates (Vol. 5) Issue No. 3, Page 4. References found in parentheses (11:4) indicate an updating to data found in a prior reference.

Send \$1 to DVUG for each back issue requested. Many items are on disk also. Please allow copying and mailing time.

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- **THE DELAWARE VALLEY USERS GROUP (DVUG),**
P.O. Box 6240 Stanton Branch
Wilmington, Delaware 19804-9998

"SUPER EXTENDED BASIC" SUBSTITUTE:

[The following is a direct download of Art's Delphi file, provided by a member of our TIBBS subcommittee to the Editor]

from The Bit Bucket #7, CALL SOUNDS 1/1/88: by Art Byers, SYSOP Delphi TINET

At the November '87 meeting of the Central Westchester 99'ers, Bob Cataldo gave us a very fine demonstration of the new module Super Extended Basic. I own three regular Extended Basic modules and am not about to spend for a 4th, even tho' it does have many nice features. Besides, practically every "advanced" feature has been kicking around the 99/4A community for years, either as an assembly language routine or as a CALLED SUB program in TI Extended Basic.

I do not know if it was Barry Traver or Jim Peterson who first published the GOTO(n), GOSUB(n), RESTORE(n), and RUNPROG("device.filename") [alternate RUNPROG(F\$)]. Thanks to BOTH!!!! The Smart Programmer and the Genial Traveler have also published PEEKVdp and POKEVdp sub programs. A fine "CLOCK" Subprogram for Lo Memory was published by the Smart Programmer, and Barry's GT recently published a one line program that enables you to circumvent the auto LOAD boot of XB - but that too has been around for years!

Furthermore, in many years of programming in TI XB, I have never really had the need to use GOSUB(n), RESTORE(n) or GOTO(n) and considered those subprograms interesting but not very vital. The RUNPROG(F\$) -IS- a very important feature.

The end result is that at the January meeting of the C.W. 99'ers, a disk was given out that will enable members to have a high degree of compatibility with the new Super Extended Basic, using only their regular XB Module. In addition, any member of this club that finds a SUPER XB Module program that will not run using the merge SUB programs on this disk can bring me a copy and I will rewrite it so as they CAN use it. Obviously, I cannot afford to buy the QUALITY SOFT "Draw 'n Plot" disk for all the club. If they want more complete compatibility, they will have to buy that for themselves.

I am still searching for the proper

CALL LOADs and CALL PEEKs that will enable me to duplicate a few subprograms in the Super XB Module. The subprograms not included below because of this are: SUB CLKOFF, SUB CLOCK, SUB CTRL, SUB FCTN, SUB SCROFF, and SUB SCRON.

Here is the documentation for the disk, plus a printout of most of the CALL SUB programs:

SUPERXB*V1 - Documentation

This disk contains a series of TI Extended Basic CALL SUBprograms that attempt to make the TI Extended Basic module mostly compatible with the new Super Extended Basic Module.

The New Super Extended Basic module will load QUALITYSOFT's Draw 'n Plot routines into low memory. To obtain them to use with the TI XB module, you must buy them from QualitySoft and preload them into low memory. Complete documentation and instructions come with the purchase.

The PEEKVdp ram and POKEVdp ram routines are built into the new Super XB module. The only way you can use these calls with the regular XB module is to preload assembly language routines, such as those that appeared in the SMART PROGRAMMER or those available by subscribing to the GENIAL TRAVELER. These routines will reside in low memory and be accessed by CALL LINKs. You may have to rewrite the SUB PEEKV and SUB POKEV subprograms to conform with the requirements of those assembly programs. Also, they cannot be used if "Draw 'n Plot" is in low memory, as they will overwrite those sub programs.

Similarly, the clock programs are in the Super XB module. To simulate this, you will have to preload an assembly language clock routine such as the one that appeared in the August 1984 issue of the Smart Programmer. Again, if the Draw 'n Plot subprograms are in low memory, these will overwrite them and probably cause lockup.

What is obvious from the above is that you cannot be 100% compatible with a program written for the new Super XB module if it makes use of all the above calls in the same program. However, most programs do not use all these subprograms. In addition, the Super XB programs provided are all very useful

and can be used in your own regular XB programs.

The SUB programs are provided in MERGE form, consecutively numbered. MERGE in only those you wish to run or are planning to write. See the TI Extended Basic reference Guide for the proper way to use CALL SUB programs.

[Ed. note - If you have a RAMDisk, back it up before you do Call Loads!]

This disk [Ed. - i.e. this file] contains the following CALLs which are 100% compatible with the CALLs built into the new Super XB module:

CALL ALL(numeric expression)

This call fills the screen with the character of the ASCII number in the parentheses, i.e., CALL ALL(32) fills the screen with blanks, just like CALL CLEAR. CALL ALL(36) fills the screen with dollar signs \$-.

CALL BEEP sounds a beep tone.

CALL BYE is the same as the immediate comand BYE except that it is used in a program.

CALL CHIMES sounds a single chime. Although it is possible to duplicate the chimes provided in the Editoe Assembler Manual, I have chosen to use a chime from one of Jim Peterson's Tips from the TIGERCUB. Jim is the undisputed KING of XB CALL SUB programs, and this was included as a tribute to him. You can buy over 300 useful CALL subs in merge form on his three Nuts and Bolts disks - and get a real education on how to program in XB.

CALL CLOCK will only work if you have the clock routine preloaded into Low memory.

CALL COLORS(foreground,background).

This call sets the foreground and background colors fr all Character sets except set 0. Therefore it does not set the border colors. These can be done by the standard CALL SCREEN(). By setting the background color to TRANSPARENT -i- in CALL COLORS, the color called by CALL SCREEN() will become the background color.

CALL GOSPRT starts all sprites moving after they have been stopped with CALL STSPRT.

(Article continued on next page)

(Continued from previous page)

WARNING: only ONE of the following can be used in any program as the last line of the CALL SUBXXXX(n) absolutely MUST be the last line of the program. Therefore, they all use the same line numbers, ending in 32767, and will overwrite each other: GOSUB(n), GOTO(n), RESTORE(n), RUNPROG("device.filename").

CALL GOSUB(n) allows you to use a variable with GOSUB. However, remember when you RESequence line numbers, (n) will not be resequenced. Also remember that a call to a non-existing line number will crash your program.

CALL GOTO(n) same as above but is a GOTO instead of a GOSUB.

CALL RESTORE(n) allows the use of a variable instead of a fixed line number with the same cautions as in GOSUB(n).

CALL RUNPROG("device.filename") circumvents TI XB's disallowance of RUN "DSK1.A\$" or RUN A\$ where A\$ might be "DSK3.MYPROGRAM".

CALL HONK sounds a warning honk.

CALL KEYS("keylist",numeric variable) allows validation of the keys listed by either a predefined string (A\$) or listed in between the quotes, i.e., "1234ABC" and returns a numeric variable. If the key A was pressed the variable would be 5 as A is the fifth in the sequence shown. If a key other than those defined is pressed, a honk is sounded and the program awaits a correct key press. IMPORTANT: CALL HONK must be merged along with SUB KEYS(1). I consider this to be among the most useful of all the subprograms on this disk.

CALL NEW is the same as the immediate comand NEW but can be used in a program.

CALL PEEKV(vdp address, value list) and CALL POKEV(vdp address, value list) are explained above.

CALL QUITOFF disables the quit key, FCTN=.

CALL QUITON enables the quit key, FCTN=.

CALL STSPRT stops all sprite motion. To restart use CALL GOSRPT.

 SUB PROGRAMS and documentation written and donated to the public domain by ART BYERS. SYSOP TINET special interest group on DELPHI. 12/16/87.

```

30000 SUB ALL(N)
30001 CALL VCHAR(1,1,N,768):: SUBEND

30002 SUB BEEP
30003 CALL SOUND(220,880,1):: SUBEND

30004 SUB BYE
30005 CALL LOAD(-31962,32):: SUBEND

30006 SUB CHIMES
30007 FOR N=0 TO 25 STEP 5 :: CALL
SOUND(-999,1047,N,784,N,659,N):: NEXT N
:: FOR N=26 TO 30 :: CALL
SOUND(-999,1047,N,784,N,659,N):: NEXT N
:: SUBEND

30008 SUB COLORS(F,B)
30009 FOR N=1 TO 14 :: CALL COLOR(N,F,B)
:: NEXT N :: SUBEND

30010 SUB GOSRPT
30011 CALL LOAD(-31806,0):: SUBEND

30012 SUB HONK
30013 CALL SOUND(220,220,1):: SUBEND
30014 SUB KEYS(A$,P)
30015 CALL KEY(O,K,S):: IF S=0 THEN
30015
30016 P=POS(A$,CHR$(K),1):: IF P>0 THEN
30017 ELSE CALL HONK :: GOTO 30015
30017 SUBEND

30018 SUB NEW
30019 CALL LOAD(-31952,255,231,255,231)
:: SUBEND

30020 SUB QUITOFF
30021 CALL LOAD(-31806,16) :: SUBEND

30022 SUB QUITON
30023 CALL LOAD(-31806,0):: SUBEND

30024 SUB STSPRT
30025 CALL LOAD(-31806,64):: SUBEND

30026 SUB CLOCK
30027 CALL CLEAR :: CALL LINK("CLOCK")
30028 DISPLAY AT(12,1):"TIME?000000" ::
ACCEPT AT(12,6)SIZE(-6)BEEP
VALIDATE(DIGIT):TIME$ :: CALL
LINK("SETCLK",TIME$):: SUBEND

32762 SUB GOSUB(N)
32763 CALL PEEK(-31952,[,]):: CALL
PEEK([*256+]-65534,[,])
32764 DEF L1(N)=INT(N/256)
32765 DEF L2(N)=N-256*(INT(N/256))
32766 N=1000*N :: CALL
LOAD([*256+]-65534,L1(N),L2(N))
32767 GOSUB 12345 :: SUBEND

32762 SUB GOTO(N)
32763 CALL PEEK(-31952,[,]):: CALL
PEEK([*256+]-65534,[,])
32764 DEF L1(N)=INT(N/256)

```

```

32765 DEF L2(N)=N-256*(INT(N/256))
32766 N=1000*N :: CALL
LOAD([*256+]-65534,L1(N),L2(N))
32767 GOTO 12345 :: SUBEND

32762 SUB RESTORE(N)
32763 CALL PEEK(-31952,[,]):: CALL
PEEK([*256+]-65534,[,])
32764 DEF L1(N)=INT(N/256)
32765 DEF L2(N)=N-256*(INT(N/256))
32766 N=1000*N :: CALL
LOAD([*256+]-65534,L1(N),L2(N))
32767 RESTORE 12345 :: SUBEND

32762 SUB RUNPROG(FN$)
32763 REM THANKS TO BARRY TRAYER
32764 DISPLAY AT(24,1)ERASE ALL:"
Loading ";FN$
32765 CALL PEEK(-31952,[,]):: CALL
PEEK([*256+]-65534,[,])::
?=[*256+]-65534 :: D$=FN$ :: CALL
LOAD(?,LEN(D$))
32766 FOR I=1 TO LEN(D$):: CALL
LOAD(?[I,ASC(SEG$(D$,I,1)):: NEXT I ::
CALL LOAD(?[I,0)
32767 RUN "DSK1.FILENAME" :: SUBEND

```

MINUTES FROM DVUG, SCULLVILLE - So. Jersey
 TI Computer Club Meeting, Feb. 4, 1988:

Meeting was called to order by President Harvey Adams at 7:40 p.m.

At the roll call of officers, President Harvey Adams, Vice President Brady Moore, Treasurer Randy Reeves and the Secretary, Maurice Tremblay, were all present.

No correspondence or bills had been received, and the President had nothing special to report. The Treasurer's report gave a balance of \$71.56.

Brian Bennecoff noted that the Library is now in full working order. Brady Moore reported for the Membership and Advertising Committee, indicating no new response for this month to his advertising.

Under new business, Gus Lewis suggested resurrecting the sell-and-buy board idea. Anyone who wishes to sell or buy something for their computer can list the item with their name and phone number each month on the board. The board will be brought to the meeting each month, and its contents will be sent to THE DATA BUS.

Under Good and Welfare, Brady won the evening's 50-50 event. Gus made the motion to adjourn and Brian seconded. After the official meeting ended, Brian's demonstration of the Disk of the Month offered a good tool for a programmer to use.

